CREDIT SUISSE GROUP AG
Form 20-F
March 22, 2019
As filed with the Securities and Exchange Commission on March 22, 2019
UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934
ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2018
TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
Commission file number: 001-15244
Credit Suisse Group AG
(Exact name of Registrant as specified in its charter)
Canton of Zurich, Switzerland
(Jurisdiction of incorporation or organization)
Paradeplatz 8, CH 8001 Zurich, Switzerland
(Address of principal executive offices)
David R. Mathers
Chief Financial Officer
Paradeplatz 8, CH 8001 Zurich, Switzerland
david.mathers@credit-suisse.com
Telephone: +41 44 333 1111 (Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Commission file number: 001-33434
Credit Suisse AG
(Exact name of Registrant as specified in its charter)
Canton of Zurich, Switzerland
(Jurisdiction of incorporation or organization)
Paradeplatz 8, CH 8001 Zurich, Switzerland
(Address of principal executive offices)
David R. Mathers
Chief Financial Officer
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david.mathers@credit-suisse.com
Telephone: +41 44 333 1111 (Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

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Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class of securities	Name of each exchange on which registered
Credit Suisse Group AG	
American Depositary Shares each representing one Share	New York Stock Exchange
Shares par value CHF 0.04 *	New York Stock Exchange *
Credit Suisse AG	
Credit Suisse FI Large Cap Growth Enhanced ETNs due June 13, 2019 Linked to the Russell 1000® Growth Index Total Return	NYSE Arca
VelocityShares™ VIX Short Term ETNs Linked to the S&P 500 VIX Short-Term Futures™ Index due December 4, 2030	The Nasdaq Stock Market
VelocityShares™ Daily 2x VIX Short Term ETNs Linked to the S&P 500 VIX Short-Term Futures™ Index due December 4, 2030	The Nasdaq Stock Market
VelocityShares™ Daily Inverse VIX Medium Term ETNs Linked to the S&P 500 VIX Mid-Term Futures™ Index due December 4, 2030	The Nasdaq Stock Market
VelocityShares™ 3x Long Gold ETNs Linked to the S&P GSCI® Gold Index ER due October 14, 2031	The Nasdaq Stock Market
VelocityShares™ 3x Long Silver ETNs Linked to the S&P GSCI® Silver Index ER due October 14, 2031	The Nasdaq Stock Market
VelocityShares™ 3x Inverse Gold ETNs Linked to the S&P GSCI® Gold Index ER due October 14, 2031	The Nasdaq Stock Market
VelocityShares™ 3x Inverse Silver ETNs Linked to the S&P GSCI® Silver Index ER due October 14, 2031	The Nasdaq Stock Market
VelocityShares™ 3x Long Natural Gas ETNs Linked to the S&P GSCI® Natural Gas Index ER due February 9, 2032	NYSE Arca
VelocityShares™ 3x Inverse Natural Gas ETNs Linked to the S&P GSCI® Natural Gas Index ER due February 9, 2032	NYSE Arca
Credit Suisse X-Links® Gold Shares Covered Call ETNs due February 2, 2033	The Nasdaq Stock Market
Credit Suisse X-Links® Silver Shares Covered Call ETNs due April 21, 2033	The Nasdaq Stock Market
Credit Suisse S&P MLP Index ETNs due December 4, 2034 Linked to the S&P MLP Index	NYSE Arca
Credit Suisse X-Links® Multi-Asset High Income ETNs due September 28, 2035	NYSE Arca
Credit Suisse X-Links® Monthly Pay 2xLeveraged Alerian MLP Index ETNs due May 16, 2036	NYSE Arca
Credit Suisse X-Links® Monthly Pay 2xLeveraged Mortgage REIT ETNs due July 11, 2036	NYSE Arca
Credit Suisse X-Links® Crude Oil Shares Covered Call ETNs due April 24, 2037	The Nasdaq Stock Market
Credit Suisse FI Enhanced Europe 50 Exchange Traded Notes (ETNs) due May 11, 2028 Linked to the STOXX® Europe 50 USD (Gross Return) Index	NYSE Arca

*
Not for trading, but only in connection with the registration of the American Depositary Shares

Securities registered or to be registered pursuant to Section 12(g) of the Act:
None
Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**
Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of December 31, 2018: 2,550,584,029 shares of Credit Suisse Group AG
Indicate by check mark if the Registrants are well-known seasoned issuers, as defined in Rule 405 of the Securities Act.
Yes No
If this report is an annual or transition report, indicate by check mark if the Registrants are not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.
Yes No
Indicate by check mark whether the Registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrants were required to file such reports) and (2) have been subject to such filing requirements for the past 90 days.
Yes No
Indicate by check mark whether Registrants have submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (paragraph 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).
Yes No
Indicate by check mark whether the Registrants are large accelerated filers, accelerated filers, non-accelerated filers, or emerging growth companies. See definitions of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Exchange Act.
Large accelerated filers Accelerated filers
Non-accelerated filers Emerging growth companies
If emerging growth companies that prepare their financial statements in accordance with U.S. GAAP, indicate by check mark if the Registrants have elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.
Indicate by check mark which basis of accounting the Registrants have used to prepare the financial statements included in this filing:
U.S. GAAP International Other
Financial Reporting Standards
as issued by the
International Accounting Standards Board
If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow.
Item 17 Item 18
If this is an annual report, indicate by check mark whether the Registrants are shell companies
(as defined in Rule 12b-2 of the Exchange Act)
Yes No

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Definitions

For the purposes of this Form 20-F and the attached Annual Report 2018, unless the context otherwise requires, the terms “Credit Suisse Group,” “Credit Suisse,” the “Group,” “we,” “us” and “our” mean Credit Suisse Group AG and its consolidated subsidiaries. The business of Credit Suisse AG, the direct bank subsidiary of the Group, is substantially similar to the Group, and we use these terms to refer to both when the subject is the same or substantially similar. We use the term the “Bank” when we are referring only to Credit Suisse AG and its consolidated subsidiaries.

Abbreviations and selected terms are explained in the List of abbreviations and the Glossary in the back of the Annual Report 2018.

Sources

Throughout this Form 20-F and the attached Annual Report 2018, we describe the position and ranking of our various businesses in certain industry and geographic markets. The sources for such descriptions come from a variety of conventional publications generally accepted as relevant business indicators by members of the financial services industry. These sources include: Standard & Poor’s, Dealogic, Institutional Investor, Lipper, Moody’s Investors Service and Fitch Ratings.

Cautionary statement regarding forward-looking information

For Credit Suisse and the Bank, please see Cautionary statement regarding forward-looking information on the inside page of the back cover of the attached Annual Report 2018.

Explanatory note

For the avoidance of doubt, the information appearing on pages 4 to 12, 232 to 236 and A-4 to A-12 of the attached Annual Report 2018 is not included in Credit Suisse’s and the Bank’s Form 20-F for the fiscal year ended December 31, 2018.

Part I

Item 1. Identity of directors, senior management and advisers.

Not required because this Form 20-F is filed as an annual report.

Item 2. Offer statistics and expected timetable.

Not required because this Form 20-F is filed as an annual report.

Item 3. Key information.

A – Selected financial data.

For Credit Suisse and the Bank, please see Appendix – Selected five-year information – Group on page A-2 and – Bank on page A-3 of the attached Annual Report 2018.

B – Capitalization and indebtedness.

Not required because this Form 20-F is filed as an annual report.

C – Reasons for the offer and use of proceeds.

Not required because this Form 20-F is filed as an annual report.

D – Risk factors.

For Credit Suisse and the Bank, please see I – Information on the company – Risk factors on pages 46 to 56 of the attached Annual Report 2018.

Item 4. Information on the company.

A – History and development of the company.

For Credit Suisse and the Bank, please see I – Information on the company – Credit Suisse at a glance on pages 14 to 15 and – Strategy on pages 16 to 21 and IV – Corporate Governance – Overview – Corporate governance framework – Company details on page 190 of the attached Annual Report 2018. In addition, for Credit Suisse, please see Note 3 – Business developments, significant shareholders and subsequent events and Note 4 – Segment information in VI – Consolidated financial statements – Credit Suisse Group on pages 288 to 290 of the attached Annual Report 2018 and, for the Bank, please see Note 3 – Business developments, significant shareholders and subsequent events and Note 4 – Segment information in VIII – Consolidated financial statements – Credit Suisse (Bank) on pages 444 to 445 of the attached Annual Report 2018. For additional information on Credit Suisse and the Bank, please see Item 10.H of this Form 20-F regarding documents on display.

B – Business overview.

For Credit Suisse and the Bank, please see I – Information on the company – Divisions on pages 22 to 30 of the attached Annual Report 2018. In addition, for Credit Suisse, please see Note 4 – Segment information in VI – Consolidated financial statements – Credit Suisse Group on pages 289 to 290 of the attached Annual Report 2018 and, for the Bank, please see Note 4 – Segment information in VIII – Consolidated financial statements – Credit Suisse (Bank) on page 445 of the attached Annual Report 2018.

C – Organizational structure.

For Credit Suisse and the Bank, please see I – Information on the company – Credit Suisse at a glance on pages 14 to 15, – Strategy on pages 16 to 21 and II – Operating and financial review – Credit Suisse – Group and Bank differences on page 71 of the attached Annual Report 2018. For a list of Credit Suisse's significant subsidiaries, please see Note 40 – Significant subsidiaries and equity method investments in VI – Consolidated financial statements – Credit Suisse Group on pages 400 to 402 of the attached Annual Report 2018 and, for a list of the Bank's significant subsidiaries, please see Note 39 – Significant subsidiaries and equity method investments in VIII – Consolidated financial statements – Credit Suisse (Bank) on pages 511 to 513 of the attached Annual Report 2018.

D – Property, plant and equipment.

For Credit Suisse and the Bank, please see X – Additional information – Other information – Property and equipment on page 576 of the attached Annual Report 2018.

Information Required by Industry Guide 3.
For Credit Suisse and the Bank, please see X – Additional information – Statistical information on pages 560 to 571 of the attached Annual Report 2018. In addition, for both Credit Suisse and the Bank, please see III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk review and results – Credit risk review – Loans and irrevocable loan commitments on page 174 of the attached Annual Report 2018. For Credit Suisse, please see Appendix – Selected five-year information – Group on page A-2 of the attached Annual Report 2018.
Disclosure pursuant to Section 13(r) of the Securities Exchange Act of 1934
During 2018, Credit Suisse AG processed a small number of de minimis payments related to the operation of Iranian diplomatic missions in Switzerland and related to fees for ministerial government functions such as issuing passports and visas. Processing these payments is permitted under Swiss law and is performed with the consent of Swiss authorities, and Credit Suisse AG intends to continue processing such payments. Revenues and profits from these activities are not calculated but would be negligible.
Credit Suisse AG also continued to hold funds from two wire transfers to non-Iranian customers which were blocked pursuant to Swiss sanctions laws because Iranian government-owned entities had initiated the transfers. Such funds, in a total amount of EUR 4,460, were maintained in blocked accounts opened in accordance with Swiss sanctions laws and, in September 2018, released to the non-Iranian customers after Switzerland had lifted its sanctions against the relevant Iranian government-owned entities. Credit Suisse AG derived no revenues or profits from maintenance of these previously blocked accounts or the release of the funds.
Item 4A. Unresolved staff comments.
None.
Item 5. Operating and financial review and prospects.
A – Operating results.
For Credit Suisse and the Bank, please see II – Operating and financial review on pages 57 to 112 of the attached Annual Report 2018. In addition, for both Credit Suisse and the Bank, please see I – Information on the company – Regulation and supervision on pages 31 to 45 of the attached Annual Report 2018, III – Treasury, Risk, Balance sheet and Off-balance sheet – Liquidity and funding management – Funding management – Interest rate management on page 120 and – Capital management – Shareholders' equity – Foreign exchange exposure on page 139 of the attached Annual Report 2018.
B – Liquidity and capital resources.
For Credit Suisse and the Bank, please see III – Treasury, Risk, Balance sheet and Off-balance sheet – Liquidity and funding management and – Capital management on pages 114 to 141 of the attached Annual Report 2018. In addition, for Credit Suisse, please see Note 25 – Long-term debt in VI – Consolidated financial statements – Credit Suisse Group on pages 310 to 311 and Note 37 – Capital adequacy in VI – Consolidated financial statements – Credit Suisse Group on pages 387 to 388 of the attached Annual Report 2018 and, for the Bank, please see Note 24 – Long-term debt in VIII – Consolidated financial statements – Credit Suisse (Bank) on page 459 and Note 36 – Capital adequacy in VIII – Consolidated financial statements – Credit Suisse (Bank) on page 509 of the attached Annual Report 2018.
C – Research and development, patents and licenses, etc.
Not applicable.
D – Trend information.
For Credit Suisse and the Bank, please see Item 5.A of this Form 20-F. In addition, for Credit Suisse and the Bank, please see I – Information on the company – Divisions on pages 22 to 30 of the attached Annual Report 2018.
E – Off-balance sheet arrangements.
For Credit Suisse and the Bank, please see III – Treasury, Risk, Balance sheet and Off-balance sheet – Balance sheet and off-balance sheet on pages 183 to 186 of the attached Annual Report 2018. In addition, for Credit Suisse, please see Note 32 – Derivatives and hedging activities, Note 33 – Guarantees and commitments and Note 34 – Transfers of financial assets and variable interest entities in VI – Consolidated financial statements – Credit Suisse Group on pages 339 to 358 of the attached Annual Report 2018 and, for the Bank, please see Note 31 – Derivatives and hedging activities, Note 32 – Guarantees and commitments, Note 33 – Transfers of financial assets and variable interest entities in VIII – Consolidated financial statements – Credit Suisse (Bank) on pages 478 to 489, and Note 13 – Derivative financial instruments in IX – Parent company financial statements – Credit Suisse (Bank) on pages 544 to 546 of the attached Annual Report 2018.

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F – Tabular disclosure of contractual obligations.

For Credit Suisse and the Bank, please see III – Treasury, Risk, Balance sheet and Off-balance sheet – Balance sheet and off-balance sheet – Contractual obligations and other commercial commitments on page 185 of the attached Annual Report 2018.

Item 6. Directors, senior management and employees.

A – Directors and senior management.

For Credit Suisse and the Bank, please see IV – Corporate Governance – Board of Directors, – Board Committees, – Biographies of the Board members, – Executive Board and – Biographies of the Executive Board members on pages 197 to 226 of the attached Annual Report 2018.

B – Compensation.

For Credit Suisse and the Bank, please see V – Compensation on pages 237 to 264 of the attached Annual Report 2018. In addition, for Credit Suisse, please see Note 10 – Compensation and benefits in VI – Consolidated financial statements – Credit Suisse Group on page 292, Note 29 – Employee deferred compensation in VI – Consolidated financial statements – Credit Suisse Group on pages 322 to 326, Note 31 – Pension and other post-retirement benefits in VI – Consolidated financial statements – Credit Suisse Group on pages 329 to 338, Note 6 – Personnel expenses in VII – Parent company financial statements – Credit Suisse Group on page 424 and Note 22 – Shareholdings in VII – Parent company financial statements – Credit Suisse Group on pages 430 to 431 of the attached Annual Report 2018. For the Bank, please see Note 10 – Compensation and benefits in VIII – Consolidated financial statements – Credit Suisse (Bank) on page 446, Note 28 – Employee deferred compensation in VIII – Consolidated financial statements – Credit Suisse (Bank) on pages 467 to 469, Note 30 – Pension and other post-retirement benefits in VIII – Consolidated financial statements – Credit Suisse (Bank) on pages 471 to 477, Note 6 – Personnel expenses in IX – Parent company financial statements – Credit Suisse (Bank) on page 540, Note 17 – Pension plans in IX – Parent company financial statements – Credit Suisse (Bank) on page 548 and Note 23 – Shareholdings of the Board of Directors, Executive Board and employees and information on compensation plans in IX – Parent company financial statements – Credit Suisse (Bank) on pages 552 to 553 of the attached Annual Report 2018.

C – Board practices.

For Credit Suisse and the Bank, please see IV – Corporate Governance on pages 187 to 230 of the attached Annual Report 2018.

D – Employees.

For Credit Suisse and the Bank, please see IV – Corporate Governance – Overview – Corporate Governance framework – Employee relations on page 191 of the attached Annual Report 2018. In addition, for both Credit Suisse and the Bank, please see II – Operating and financial review – Credit Suisse – Employees and other headcount on page 68 of the attached Annual Report 2018.

E – Share ownership.

For Credit Suisse and the Bank, please see V – Compensation on pages 237 to 264 of the attached Annual Report 2018. In addition, for Credit Suisse, please see Note 29 – Employee deferred compensation in VI – Consolidated financial statements – Credit Suisse Group on pages 322 to 326, and Note 22 – Shareholdings in VII – Parent company financial statements – Credit Suisse Group on pages 430 to 431 of the attached Annual Report 2018. For the Bank, please see Note 28 – Employee deferred compensation in VIII – Consolidated financial statements – Credit Suisse (Bank) on pages 467 to 469, and Note 23 – Shareholdings of the Board of Directors, Executive Board and employees and information on compensation plans in IX – Parent company financial statements – Credit Suisse (Bank) on pages 552 to 553 of the attached Annual Report 2018.

Item 7. Major shareholders and related party transactions.

A – Major shareholders.

For Credit Suisse, please see IV – Corporate Governance – Shareholders on pages 192 to 196 of the attached Annual Report 2018. In addition, for Credit Suisse, please see Note 3 – Business developments, significant shareholders and subsequent events in VI – Consolidated financial statements – Credit Suisse Group on page 288, Note 16 – Credit Suisse Group shares held by subsidiaries in VII – Parent company financial statements – Credit Suisse Group on page 427, Note 17 – Purchases and sales of treasury shares in VII – Parent company financial statements – Credit Suisse Group on page 428 and Note 18 – Significant shareholders in VII – Parent company financial statements – Credit Suisse Group on page 428 of the attached Annual Report 2018. Credit Suisse's major shareholders do not have different voting rights.

The Bank has 4,399,680,200 shares outstanding and is a wholly owned subsidiary of Credit Suisse. See Note 22 – Significant shareholders and groups of shareholders in IX – Parent company financial statements – Credit Suisse (Bank) on page 551 of the attached Annual Report 2018.

B – Related party transactions.
For Credit Suisse and the Bank, please see V – Compensation on pages 237 to 264 and IV – Corporate Governance – Additional information – Banking relationships with Board and Executive Board members and related party transactions on page 227 of the attached Annual Report 2018. In addition, for Credit Suisse, please see Note 30 – Related parties in VI – Consolidated financial statements – Credit Suisse Group on pages 327 to 328 and Note 20 – Assets and liabilities with related parties in VII – Parent company financial statements – Credit Suisse Group on page 429 of the attached Annual Report 2018. For the Bank, please see Note 29 – Related parties in VIII – Consolidated financial statements – Credit Suisse (Bank) on page 470 and Note 24 – Amounts receivable from and amounts payable to related parties in IX – Parent company financial statements – Credit Suisse (Bank) on page 554 of the attached Annual Report 2018.
C – Interests of experts and counsel.
Not applicable because this Form 20-F is filed as an annual report.
Item 8. Financial information.
A – Consolidated statements and other financial information.
Please see Item 18 of this Form 20-F.
For a description of Credit Suisse's legal and arbitration proceedings, please see Note 39 – Litigation in VI – Consolidated financial statements – Credit Suisse Group on pages 389 to 399 of the attached Annual Report 2018. For a description of the Bank's legal and arbitration proceedings, please see Note 38 – Litigation in VIII – Consolidated financial statements – Credit Suisse (Bank) on page 510 of the attached Annual Report 2018.
For a description of Credit Suisse's policy on dividend distributions, please see III – Treasury, Risk, Balance sheet and Off-balance sheet – Capital management – Dividends and dividend policy on pages 140 to 141 of the attached Annual Report 2018.
B – Significant changes.
None.
Item 9. The offer and listing.
A – Offer and listing details, C – Markets.
For information regarding the price history of Credit Suisse Group shares and the stock exchanges and other regulated markets on which they are listed or traded, please see X – Additional information – Other information – Listing details on page 576 of the attached Annual Report 2018. Shares of the Bank are not listed.
B – Plan of distribution, D – Selling shareholders, E – Dilution, F – Expenses of the issue.
Not required because this Form 20-F is filed as an annual report.
Item 10. Additional information.
A – Share capital.
Not required because this Form 20-F is filed as an annual report.
B – Memorandum and Articles of Association.
For Credit Suisse, please see IV – Corporate Governance – Overview – Corporate Governance framework, – Shareholders and – Board of Directors on pages 192 to 203 of the attached Annual Report 2018. In addition, for Credit Suisse, please see X – Additional information – Other information – Exchange controls and – American Depositary Shares on page 572 of the attached Annual Report 2018. Shares of the Bank are not listed.
C – Material contracts.
Neither Credit Suisse nor the Bank has any contract that would constitute a material contract for the two years immediately preceding the date of this Form 20-F.
D – Exchange controls.
For Credit Suisse and the Bank, please see X – Additional information – Other information – Exchange controls on page 572 of the attached Annual Report 2018.

E – Taxation.

For Credit Suisse, please see X – Additional information – Other information – Taxation on pages 572 to 575 of the attached Annual Report 2018. The Bank does not have any public shareholders.

F – Dividends and paying agents.

Not required because this Form 20-F is filed as an annual report.

G – Statement by experts.

Not required because this Form 20-F is filed as an annual report.

H – Documents on display.

Credit Suisse and the Bank file annual reports on Form 20-F and furnish or file quarterly and other reports on Form 6-K and other information with the SEC pursuant to the requirements of the Securities Exchange Act of 1934, as amended. These materials are available to the public over the Internet at the SEC's website at www.sec.gov, which contains reports, proxy and information statements and other information regarding issuers that file electronically with the SEC. Further, our reports on Form 20-F, Form 6-K and certain other materials are available on the Credit Suisse website at www.credit-suisse.com. Information contained on our website and apps is not incorporated by reference into this Form 20-F.

In addition, Credit Suisse's parent company financial statements, together with the notes thereto, are set forth on pages 417 to 432 of the attached Annual Report 2018 and incorporated by reference herein. The Bank's parent company financial statements, together with the notes thereto, are set forth on pages 517 to 558 of the attached Annual Report 2018 and incorporated by reference herein.

I – Subsidiary information.

Not applicable.

Item 11. Quantitative and qualitative disclosures about market risk.

For Credit Suisse and the Bank, please see I – Information on the company – Risk factors on pages 46 to 56 and III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management on pages 142 to 182 of the attached Annual Report 2018.

Item 12. Description of securities other than equity securities.

A – Debt Securities, B – Warrants and Rights, C – Other Securities.

Not required because this Form 20-F is filed as an annual report.

D – American Depositary Shares.

For Credit Suisse, please see IV – Corporate Governance – Additional information – Other information – Fees and charges for holders of ADS on page 229 of the attached Annual Report 2018. Shares of the Bank are not listed.

Part II

Item 13. Defaults, dividend arrearages and delinquencies.

None.

Item 14. Material modifications to the rights of security holders and use of proceeds.

None.

Item 15. Controls and procedures.

For Credit Suisse's management report and the related report from the Group's independent auditors, please see Controls and procedures and Report of the Independent Registered Public Accounting Firm in VI – Consolidated financial statements – Credit Suisse Group on pages 414 to 416 of the attached Annual Report 2018. For the Bank's management report and the related report from the Bank's independent auditors, please see Controls and procedures and Report of the Independent Registered Public Accounting Firm in VIII – Consolidated financial statements – Credit Suisse (Bank) on pages 514 to 516 of the attached Annual Report 2018.

Item 16A. Audit committee financial expert.

For Credit Suisse and the Bank, please see IV – Corporate Governance – Board of Directors – Board committees – Audit Committee on page 205 of the attached Annual Report 2018.

Item 16B. Code of ethics.

For Credit Suisse and the Bank, please see IV – Corporate Governance – Overview – Corporate governance framework on pages 188 to 191 of the attached Annual Report 2018.

Item 16C. Principal accountant fees and services.

For Credit Suisse and the Bank, please see IV – Corporate Governance – Additional information – External audit on pages 227 to 228 of the attached Annual Report 2018.

Item 16D. Exemptions from the listing standards for audit committee.

None.

Item 16E. Purchases of equity securities by the issuer and affiliated purchasers.

For Credit Suisse, please see III – Treasury, Risk, Balance sheet and Off-balance sheet – Capital management – Share repurchases on page 140 of the attached Annual Report 2018. The Bank does not have any class of equity securities registered pursuant to Section 12 of the Exchange Act.

Item 16F. Change in registrants' certifying accountant.

None.

Item 16G. Corporate governance.

For Credit Suisse, please see IV – Corporate Governance – Additional Information – Other information – Complying with rules and regulations on pages 228 to 229 of the attached Annual Report 2018. Shares of the Bank are not listed.

Item 16H. Mine Safety Disclosure.

None.

Part III

Item 17. Financial statements.

Not applicable.

Item 18. Financial statements.

Credit Suisse's consolidated financial statements, together with the notes thereto and the Report of the Independent Registered Public Accounting Firm thereon, are set forth on pages 265 to 416 of the attached Annual Report 2018 and incorporated by reference herein. The Bank's consolidated financial statements, together with the notes thereto (and any notes or portions thereof in the consolidated financial statements of Credit Suisse Group referred to therein) and the Report of the Independent Registered Public Accounting Firm thereon, are set forth on pages 433 to 516 of the attached Annual Report 2018 and incorporated by reference herein.

Item 19. Exhibits.

1.1 Articles of association (Statuten) of Credit Suisse Group AG as of June 6, 2017 (incorporated by reference to Exhibit 3.1 of Credit Suisse Group AG's registration statement on Form F-3 (No. 333-218604) filed on June 8, 2017). https://www.sec.gov/Archives/edgar/data/29646/000104746917003893/a2231913zex-3_1.htm

1.2 Articles of association (Statuten) of Credit Suisse AG as of September 4, 2014 (incorporated by reference to Exhibit 1.2 of Credit Suisse Group AG's and Credit Suisse AG's annual report on Form 20-F for the year ended December 31, 2014 filed on March 20, 2015).
https://www.sec.gov/Archives/edgar/data/1053092/000137036815000028/a140320ar-ex1_2.htm

1.3 Organizational Guidelines and Regulations of Credit Suisse Group AG and Credit Suisse AG as of February 7, 2019.

2.1 Pursuant to the requirement of this item, we agree to furnish to the SEC upon request a copy of any instrument defining the rights of holders of long-term debt of us or of our subsidiaries for which consolidated or unconsolidated financial statements are required to be filed.

4.1 Agreement, dated February 13, 2011, among Competrol Establishment, Credit Suisse Group (Guernsey) II Limited and Credit Suisse Group AG (incorporated by reference to Exhibit 99.1 of Credit Suisse Group AG's and Credit Suisse AG's current report on Form 6-K filed on March 12, 2013).
https://www.sec.gov/Archives/edgar/data/1053092/000110465913019700/a13-7039_1ex99d1.htm

4.2 Agreement, dated February 13, 2011, among Qatar Holding LLC, Credit Suisse Group (Guernsey) II Limited and Credit Suisse Group AG (incorporated by reference to Exhibit 99.2 of Credit Suisse Group AG's and Credit Suisse AG's current report on Form 6-K filed on March 12, 2013).
https://www.sec.gov/Archives/edgar/data/1053092/000110465913019700/a13-7039_1ex99d2.htm

4.3 Amendment Agreement, dated July 18, 2012, among Competrol Establishment, Credit Suisse Group (Guernsey) II Limited, Credit Suisse Group AG and Credit Suisse AG, acting through its Guernsey Branch (incorporated by reference to Exhibit 99.3 of Credit Suisse Group AG's and Credit Suisse AG's current report on Form 6-K filed on March 12, 2013). https://www.sec.gov/Archives/edgar/data/1053092/000110465913019700/a13-7039_1ex99d3.htm

4.4 Purchase and Underwriting Agreement, dated as of July 17, 2012, between Credit Suisse AG and Competrol Establishment (incorporated by reference to Exhibit 4.4 of Credit Suisse Group AG's and Credit Suisse AG's annual report on Form 20-F for the year ended December 31, 2012 filed on March 22, 2013).
https://www.sec.gov/Archives/edgar/data/1053092/000137036813000020/a130322ar-ex4_4.htm

4.5 Purchase and Underwriting Agreement, dated as of July 18, 2012, between Credit Suisse AG and Qatar Holding LLC (incorporated by reference to Exhibit 4.5 of Credit Suisse Group AG's and Credit Suisse AG's annual report on Form 20-F for the year ended December 31, 2012 filed on March 22, 2013).
https://www.sec.gov/Archives/edgar/data/1053092/000137036813000020/a130322ar-ex4_5.htm

4.6 Agreement, dated October 10, 2013, among Qatar Holding LLC, Credit Suisse Group (Guernsey) II Limited, Credit Suisse Group AG and Credit Suisse AG, acting through its Guernsey Branch (incorporated by reference to Exhibit 4.6 of Credit Suisse Group AG's and Credit Suisse AG's annual report on Form 20-F for the year ended December 31, 2013 filed on April 3, 2014).
https://www.sec.gov/Archives/edgar/data/1053092/000137036814000030/a140403ar-ex4_6.htm

8.1 Significant subsidiaries of Credit Suisse are set forth in Note 40 – Significant subsidiaries and equity method investments in VI – Consolidated financial statements – Credit Suisse Group on pages 400 to 402, and significant subsidiaries of the Bank are set forth in Note 39 – Significant subsidiaries and equity method investments in VIII – Consolidated financial statements – Credit Suisse (Bank) on pages 511 to 513 of the attached Annual Report 2018 and incorporated by reference herein.

9.1 Consent of KPMG AG, Zurich with respect to Credit Suisse Group AG consolidated financial statements.

9.2 Consent of KPMG AG, Zurich with respect to the Credit Suisse AG consolidated financial statements.

12.1 Rule 13a-14(a) certification of the Chief Executive Officer of Credit Suisse Group AG and Credit Suisse AG, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

12.2 Rule 13a-14(a) certification of the Chief Financial Officer of Credit Suisse Group AG and Credit Suisse AG, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.

13.1 Certifications pursuant to 18 U.S.C. Section 1350, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 for Credit Suisse Group AG and Credit Suisse AG.

101.1 Interactive Data Files (XBRL-Related Documents).

SIGNATURES

Each of the registrants hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

CREDIT SUISSE GROUP AG
(Registrant)
Date: March 22, 2019

/s/ Tidjane Thiam	/s/ David R. Mathers
Name: Tidjane Thiam	Name: David R. Mathers
Title: Chief Executive Officer	Title: Chief Financial Officer

CREDIT SUISSE AG
(Registrant)
Date: March 22, 2019

/s/ Tidjane Thiam	/s/ David R. Mathers
Name: Tidjane Thiam	Name: David R. Mathers
Title: Chief Executive Officer	Title: Chief Financial Officer

20-F/15

Key metrics

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Credit Suisse (CHF million)					
Net income/(loss) attributable to shareholders	2,024	(983)	(2,710)	–	(64)
Basic earnings/(loss) per share (CHF)	0.79	(0.41)	(1.27)	–	(68)
Diluted earnings/(loss) per share (CHF)	0.77	(0.41)	(1.27)	–	(68)
Return on equity (%)	4.7	(2.3)	(6.1)	–	–
Return on tangible equity (%)	5.4	(2.6)	(6.9)	–	–
Effective tax rate (%)	40.4	152.9	(19.5)	–	–
Core Results (CHF million)					
Net revenues	21,628	21,786	21,594	(1)	1
Provision for credit losses	244	178	141	37	26
Total operating expenses	16,631	17,680	17,960	(6)	(2)
Income before taxes	4,753	3,928	3,493	21	12
Cost/income ratio (%)	76.9	81.2	83.2	–	–
Assets under management and net new assets (CHF billion)					
Assets under management	1,347.3	1,376.1	1,251.1	(2.1)	10.0
Net new assets	56.5	37.8	26.8	49.5	41.0
Balance sheet statistics (CHF million)					
Total assets	768,916	796,289	819,861	(3)	(3)
Net loans	287,581	279,149	275,976	3	1
Total shareholders' equity	43,922	41,902	41,897	5	0
Tangible shareholders' equity	38,937	36,937	36,771	5	0
Basel III regulatory capital and leverage statistics (%)					
CET1 ratio	12.6	13.5	13.5	–	–
Look-through CET1 ratio	12.6	12.8	11.5	–	–
Look-through CET1 leverage ratio	4.1	3.8	3.2	–	–
Look-through tier 1 leverage ratio	5.2	5.2	4.4	–	–
Share information					
Shares outstanding (million)	2,550.6	2,550.3	2,089.9	0	22
of which common shares issued	2,556.0	2,556.0	2,089.9	0	22
of which treasury shares	(5.4)	(5.7)	0.0	(5)	–
Book value per share (CHF)	17.22	16.43	20.05	5	(18)
Tangible book value per share (CHF)	15.27	14.48	17.59	5	(18)
Market capitalization (CHF million)	27,605	44,475	30,533	(38)	46
Dividend per share (CHF)	0.2625	0.25	0.70	–	–
Number of employees (full-time equivalents)					
Number of employees	45,680	46,840	47,170	(2)	(1)

See relevant tables for additional information on these metrics.

For the purposes of this report, unless the context otherwise requires, the terms “Credit Suisse Group”, “Credit Suisse”, the “Group”, “we”, “us” and “our” mean Credit Suisse Group AG and its consolidated subsidiaries. The business of Credit Suisse AG, the direct bank subsidiary of the Group, is substantially similar to the Group, and we use these terms to refer to both when the subject is the same or substantially similar. We use the term the “Bank” when we are referring only to Credit Suisse AG and its consolidated subsidiaries. Abbreviations and selected terms are explained in the List of abbreviations and the Glossary in the back of this report. Publications referenced in this report, whether via website links or otherwise, are not incorporated into this report. The English language version of this report is the controlling version. In various tables, use of “–” indicates not meaningful or not applicable.

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Message from the Chairman and the Chief Executive Officer

2018 was the year we successfully completed our restructuring and achieved our first annual post-tax profit since 2014, with CHF 2.02 billion of net income attributable to shareholders. We have delivered on the strategy we defined in 2015 of creating a leading wealth manager with strong investment banking capabilities.

Dear shareholders, clients and colleagues

When we launched our restructuring program three years ago, our objective was to become a leading, resilient wealth manager with strong investment banking capabilities. We are pleased to report that we have delivered on the goals we set ourselves in 2015.

Our restructuring was aimed at taking advantage of the growing global wealth by profitably growing our wealth management activities as well as making the Group more resilient by reducing risks, cutting costs and strengthening our capital base. We wanted to grow our Wealth Management-related revenues, and within that category, our recurring income streams. We wanted to establish a culture of generating profitable, sustainable, compliant growth. We also set out to right-size our Global Markets (GM) business. Last but not least, we wanted to deal resolutely with our key legacy issues. These objectives have broadly been achieved, and our performance in 2018, in a challenging market environment, with severe stresses particularly in the final quarter of the year, illustrates the progress we have made since 2015.

In our Wealth Management-related businesses, we intend to continue to follow a balanced approach between mature and emerging markets and focus on ultra-high net worth (UHNW), high net worth (HNW) and entrepreneur clients in our core markets. We will serve these clients' private wealth and business financial needs across our suite of products and services, working to deliver an integrated offering and delivering bespoke solutions in our efforts to help them grow and protect their wealth and business needs. Having both strong wealth management skills and strong investment banking capabilities is therefore crucial for us and key to the success of our strategy.

A strategy that delivers

During 2018, we continued to deliver on our objectives in spite of significant market volatility during the year. In the first half of 2018, markets were favorable, and we experienced strong client activity. In the second half of the year, we faced more challenging market conditions and a significant drop in client activity resulting from a combination of factors, including increasing trade tensions, concern about the potential impact of higher US interest rates and a rise in geopolitical uncertainty. Despite these challenges, we operated profitably in every quarter on both a reported and adjusted basis, including the fourth quarter, which saw quite extreme market conditions not seen in many years. We achieved the highest fourth quarter adjusted* income before taxes since 2013 in the fourth quarter of 2018, our ninth consecutive quarter of year-on-year growth. Income before taxes for 2018 was CHF 3.37 billion, up 88% year on year, and on an adjusted* basis, income before taxes rose 52% year on year to CHF 4.19 billion.

Our performance in 2018 is a testament to the actions we have taken during our restructuring to create a Group that should now be more resilient in the face of market turbulence. By dealing with legacy issues effectively, reallocating capital towards our more stable, capital-efficient and profitable Wealth Management-related and Investment Banking & Capital Markets (IBCM) businesses and right sizing our GM activities, we have built what we had set out to create: a leading wealth manager with strong investment banking capabilities.

We reported net income attributable to shareholders of CHF 2.02 billion for 2018. This was our first annual post-tax profit since 2014, despite a higher than expected effective tax rate of 40% for the year.

Driving profitable, compliant growth

We have made substantial progress in rebalancing the allocation of our capital towards our Wealth Management-related and Investment Banking & Capital Markets businesses. In 2015, we were faced with a more market-dependent business that delivered volatile revenues and had high fixed costs combined with high and rising capital needs. We have since transformed the business. We sought to gear the Group towards more recurring revenues from our Wealth Management-related businesses. We did this by allocating more capital to the Swiss Universal Bank (SUB), International Wealth Management (IWM) and Asia Pacific Wealth Management & Connected (APAC WM&C). We also focused on increasing collaboration across divisions; a prime example of which is our International Trading Solutions (ITS) business that brings together talent from across GM, IWM and SUB to deliver bespoke, institutional quality solutions to our UHNW and HNW clients. Since the start of this reshaping of our business, our Wealth Management-related adjusted* net revenues have grown at a 5% compound annual growth rate since 2015, an industry leading performance in a period marked by several successive, severe market dislocations, such as in the last

quarter of 2015 and in the last quarter of 2018.

Urs Rohner, Chairman of the Board of Directors (left) and Tidjane Thiam, Chief Executive Officer.

The outlook for continued growth in wealth management remains attractive. The global pool of wealth has nearly doubled over the last ten years and as it continues to grow, we are seeing positive momentum across our Wealth Management-related businesses, where thanks to our disciplined approach to growth, risk, capital and costs, we have been able to produce higher profits and higher returns on capital since 2015. In 2018, we reported strong Wealth Management net new assets of CHF 34.4 billion, the result of net inflows in every quarter. Importantly, approximately 75% of these net new assets came from UHNW clients compared to approximately 50% in 2015. Across the Group, we attracted total net new assets of CHF 56.5 billion, up 49% year on year. The Group has grown healthily throughout its restructuring: since 2015, we have attracted more than CHF 120 billion of net new assets. At the end of 2018, we reached a total of CHF 1.35 trillion in assets under management.

In our home market here in Switzerland, we made strong progress in SUB delivering an adjusted* income before taxes of CHF 2.2 billion, up 18% year on year. Both Private Clients and Corporate & Institutional Clients delivered improved adjusted* income before taxes in 2018, reflecting strong revenues and rigorous cost discipline. SUB's increased full-year profitability was the result of both an increase in adjusted* net revenues to CHF 5.5 billion, with increased recurring commissions and fees and net interest income, and cost reductions.

In IWM, we had a successful year with adjusted* income before taxes up 21% year on year, reaching our target of CHF 1.8 billion. This step change in profitability was achieved in a challenging environment. IWM achieved adjusted* net revenues of CHF 5.4 billion in 2018, growing 4% year on year. In Private Banking, adjusted* income before taxes was up 24% at CHF 1.4 billion, driven by 7% revenue growth, with higher revenues across all major categories, and in Asset Management, adjusted* income before taxes grew by 12% to CHF 427 million.

In APAC, we generated adjusted* income before taxes of CHF 804 million in 2018, slightly higher than the prior year. Our performance in the division reflects the resilience of our wealth management strategy and our leading business franchises within the region as 2018 was marked by significant market dislocation across Asia, reporting the worst fourth quarter for Asian equity markets since 2008. APAC WM&C's adjusted* income before taxes of CHF 797 million in 2018 was down 3%. APAC Markets reported an adjusted* income before taxes of CHF 7 million in 2018, an improvement from the adjusted* loss before taxes of CHF 28 million in 2017, despite market conditions.

In IBCM, we delivered 4% year on year growth with adjusted* income before taxes of CHF 429 million in 2018. This result was driven by a 2% increase in net revenues, resulting from strong performance in advisory, particularly M&A, which was partially offset by lower financing activity, in line with the Street[1]. Total global advisory and underwriting revenues for 2018 were USD 4.0 billion, down 2% year on year, but outperforming the Street[2] in a challenging market environment.

In GM, we demonstrated strict resource and risk discipline in a challenging operating environment characterized by high levels of volatility and widening credit spreads. GM was profitable in 2018 with an adjusted* income before taxes of CHF 406 million. We maintained a dynamic approach to capital management and decreased our leverage exposure by 13%. Additionally, our adjusted* total operating expenses decreased by 7% year on year to CHF 4.6 billion.

Delivering value to our shareholders post-restructuring

At our Investor Day in December 2018, we announced our intention to distribute at least 50% of net income to shareholders in 2019 and 2020.

We also announced that the Board of Directors approved a buyback of Group ordinary shares of up to CHF 1.5 billion for 2019 and that we anticipate to buy back at least CHF 1 billion of shares this year, subject to market and economic conditions. In addition, we said that we would expect a similar buyback program in 2020, subject to approval by the Board of Directors. We are pleased to inform you that we have effectively started our buyback program for 2019. As of March 7, 2019, we repurchased 21.3 million shares, worth CHF 261 million.

Finally, at the same 2018 Investor Day, we informed you, our shareholders, that we expect to generate a sustainable ordinary dividend and to increase it by at least 5% per annum. At the presentation of our full year and fourth quarter 2018 results in February 2019, we told the market that the Board of Directors will propose to shareholders at our Annual General Meeting on April 26, 2019 a distribution of CHF 0.2625 per share out of capital contribution reserves for the financial year 2018. The distribution will be free of Swiss withholding tax and will not be subject to income tax for Swiss resident individuals holding the shares as a private investment. The distribution will be payable in cash.

We are pleased that the Group is now on a strong footing and in a position to deliver tangible returns to our shareholders through the return of capital, following the completion of our restructuring and the continued execution of our successful strategy.

With a much reduced cost base, focusing now on productivity gains and investment

Thanks to our focus on costs and on our strategic approach to cost management, we were able to exceed our target for the reduction of our adjusted* operating cost base, which stood at CHF 16.5 billion in 2018, at the end our restructuring program, CHF 0.5 billion below our target of less than CHF 17 billion. Since the end of 2015 we have recorded cumulative net cost savings of CHF 4.6 billion, exceeding our target of a reduction of greater than CHF 4.2 billion. All these costs are measured at constant foreign exchange rates fixed at the end of 2015 to provide transparency and to allow our shareholders to monitor the effectiveness of our cost program during the Group's restructuring. A significant proportion of our sustainable cost savings was achieved through strategic decisions about our portfolio of businesses, a number of which were exited or reduced in scale. At the same time we have made substantial investments, focusing in particular on risk and compliance, within our corporate functions, as well as rebuilding our equities franchise with a number of senior hires. Talent management has remained an essential focus during the restructuring as a part of our efforts to ensure we have the right people in the right roles across our business.

As we said at our 2018 Investor Day, we have effectively transformed our cost base, and we are pleased with the gains we have made in returning the Group to efficiency.

We expect to continue operating efficiently in 2019 and beyond, as is standard practice for any business. We will continue to allocate capital to the divisions that we expect will deliver recurring revenues by seeking to invest in talent, subject to market and economic conditions, and further transforming our technology through digitalization,

robotics and automation.

Stronger capital position with significantly lower risk

We substantially strengthened our capital position in 2018 as we exceeded our targets for common equity tier 1 (CET1) and leverage ratios. We delivered a CET1 ratio of 12.6% and a Tier 1 leverage ratio of 5.2%

These capital and leverage ratios are already above the levels prescribed by the Swiss requirements that enter into force in 2020. In addition, and most importantly, we have strengthened our business by significantly reducing the Group's risk management value-at-risk since 2015.

Also, our US intermediate holding company completed its first public Comprehensive Capital Analysis and Review stress test in 2018, with the Board of Governors of the Federal Reserve System not objecting to the company's 2018 capital plan.

Given the uncertain macro-economic environment over the last three years, these achievements underscore both the balance and resilience of our new operating model.
Completed the wind down of legacy assets
At the same time as growing our revenues and reducing costs, we have reduced the overall level of risk at Credit Suisse and dealt effectively with our key legacy issues.
The Strategic Resolution Unit (SRU), which we set up in 2015 to help us dispose of and de-risk our legacy positions, closed on schedule at the end of 2018. It recorded an adjusted* loss before taxes of CHF 1.2 billion for the year, down from CHF 2.9 billion in 2016. The residual portfolio has been transferred to the Asset Resolution Unit and will be separately disclosed within the Corporate Center as of January 1, 2019. The closure of the SRU was a key milestone in the completion of our restructuring program.
Embedding a culture of compliance
One of the key goals we set ourselves at the start of the restructuring program was to significantly upgrade our risk and compliance controls and improve our culture. Regulation has changed the face of banking over the last decade and we believe in these changes and embrace them fully. We have aligned ourselves, as an organization, to the rules and regulations across the jurisdictions in which we operate, making our operations more resilient and our business stronger. In September 2018, FINMA said it had identified deficiencies in Credit Suisse AG's anti-money laundering due diligence obligations as well as shortcomings in our control mechanisms and risk management. We have continuously enhanced our compliance and control framework over the last three years – independent of this review. FINMA acknowledged the numerous proactive measures we have adopted since the end of 2015 to strengthen our compliance procedures. As a further measure, the Group took a decisive step in the fourth quarter of 2018 to enhance its compliance oversight at the Board level through the establishment of a new Board committee. The Conduct and Financial Crime Control Committee became effective in early 2019 and assumes responsibility for the supervision of the Group's financial crime compliance programs and related conduct and ethics initiatives. We believe the set-up of this new Board committee, combined with the many improvements implemented and continuous efforts by management, firmly signals the Group's commitment to rigorously address financial crime risk and ensure that the highest standards of conduct and vigilance are maintained throughout the Group.
In February 2019, we made a series of changes to our Group Executive Board to reflect the quality of talent available at Credit Suisse. Among these was the appointment of Lara Warner to the role of Group Chief Risk Officer. Lara was previously the Group's Chief Compliance & Regulatory Officer, a position that was created in 2015 when we set up our Compliance and Regulatory Affairs function. Lara's contribution to the Executive Board and Group over the past three years has been outstanding, as she has overseen the development of industry leading compliance capabilities in an area crucial to our growth strategy. She has created a modern, technology-enabled compliance organization with cutting-edge tools that aim to identify and detect threats across our entire platform while also engaging in efforts to strengthen relationships with our key regulators around the world.
We also announced that Lydie Hudson has been appointed to the role of Chief Compliance Officer, joining the Group Executive Board. Lydie has been with the firm for eleven years, serving most recently as Chief Operating Officer of GM; she has been instrumental in reshaping of the division during the restructuring period. At the same time, Antoinette Poschung was appointed as Global Head of Human Resources, joining the Group Executive Board. Since joining Credit Suisse in 2008, Antoinette has played a key role in talent development across the organization as well as heading a number of Human Resources functions for the Group.
Our compliance and regulatory affairs function has now been split given the growing importance of our relationship with regulators. Regulatory Affairs has been integrated into the CEO office, and the Global Head of Regulatory Affairs will continue maintaining close interaction with our key regulators around the world.
Finally, as part of our restructuring program, we have invested significantly in upgrading our compliance and control frameworks. We increased our headcount in compliance by over 40% over the last three years. We also completed a significant review of over 30,000 legacy clients and over 10,000 control issues and improvements were implemented across the Group. We used cutting edge technology, as previously mentioned, to move from 12 legacy platforms to one strategic platform. Since late 2015, we have rolled out new compliance tools Group-wide, including our Single Client View which now covers 99% of our wealth management clients. Additionally, we rolled out Trader Holistic Surveillance covering all traders globally and Relationship Manager Holistic Surveillance covering approximately 80% of relationship managers.

Banks propel global economic activity

Throughout our restructuring, we remained acutely conscious of our purpose and role as a global financial services group. Banks play an integral role in the local, regional and global economies. We are where people should turn to for safety, trust and reliability. We are meant to offer individuals and companies the comfort of depositing savings safely, to manage their payments securely and to act as financial intermediaries, connectors across markets and economies, bringing borrowers and lenders together, being the catalysts for opportunity and growth.

As banks, we have a duty to our communities and societies as our businesses and activities are often intertwined, even deeply rooted, in the prosperity of others. As a result, Credit Suisse always strives to carry out all its activities in accordance with clear principles and values – particularly our commitment to operating responsibly and with integrity in the interests of our stakeholders.

In 2017, we announced the establishment of Impact Advisory and Finance (IAF), a department that aims to facilitate projects and initiatives for clients that have a positive economic and social impact, while generating a financial return. IAF is generating significant momentum across both wealth management as well as corporate and investment banking. The department has successfully helped seed impact investing funds in several parts of the world, partnered with the world's leading international organizations working on furthering investment in this space, and continues to drive our international green finance underwriting efforts.

Outlook

We experienced widespread volatility and lower client activity levels across the market in 2018, particularly in the second half. Looking at 2019, while sentiment did improve slightly at the start of the year, as signs of normalization returned to both equity and debt markets, investor concerns continue to weigh on the environment and a cautious approach to investing prevails.

The uncertain political climate in a number of major world economies as well as potential disruptions to world trade continue to be clear concerns. However, with our lower cost base, the reduction of our exposure to risk, our flexible and diversified model and the benefits flowing from the closure of our SRU, we expect to remain resilient in the face of strong headwinds and believe we are well positioned to take advantage of any potential upside.

Looking to the future of Credit Suisse in 2019 and beyond, we believe that the Group will benefit greatly from its position post-restructuring and from its strategic focus on wealth management combined with strong investment banking capabilities. Our target is to achieve a Group reported return on tangible equity of between 10% and 11% for 2019 and between 11% and 12% for 2020, assuming a flat revenue environment and capitalizing on factors under our control. We aim to achieve higher returns with –continued revenue growth in our Wealth Management-related businesses and IBCM, cost efficiencies and lower funding costs, as well as by select strategic investments, subject to market conditions.

We are now, more than ever before, well positioned to take advantage of a number of macro trends that we believe will remain supportive over the long term. We believe that global wealth will continue to grow; entrepreneurs will continue to require the services of our leading investment banking franchise; Switzerland will remain an attractive banking market; sales and trading revenue pools will continue to stagnate or decline worldwide; and both emerging and mature markets will offer attractive growth dynamics over the long term.

At the conclusion of our restructuring, we would like to thank our team of close to 46,000 employees worldwide for their hard work and commitment throughout this period of transformation. We could not have delivered on our goals and objectives without their dedication, effort and time. We would also like to express our thanks to our clients and shareholders for their continued trust and support over the last three years and into the future.

Best regards

Urs Rohner	Tidjane Thiam
Chairman of the Board of Directors	Chief Executive Officer

March 2019

1 Source: Dealogic data (Americas and EMEA) for the period ending December 31, 2018.

2 Source: Dealogic data (Global) for the period ending December 31, 2018.

Important Information

* Adjusted results are non-GAAP financial measures that exclude certain items included in our reported results. Refer to "Reconciliation of adjusted results" in I – Information on the –company – Strategy and II – Operating and financial review – Credit Suisse for a reconciliation of the adjusted results to the most directly comparable US GAAP measures and to "–Financial goals" in I – Information on the company – Strategy for further information on estimates and targets that are non-GAAP financial measures.

References to Wealth Management mean Private Clients within Swiss Universal Bank, Private Banking within International Wealth Management, and Private Banking within Wealth –Management & Connected in Asia Pacific or their combined results. References to Wealth Management-related mean Swiss Universal Bank, International Wealth Management and Asia Pacific Wealth Management & Connected or their combined results.

For further details on capital-related information, see "Capital Management-Regulatory Capital Framework" in III-Treasury, Risk, Balance sheet and Off-balance sheet.

We may not achieve all of the expected benefits of our strategic initiatives. Factors beyond our control, including but not limited to the market and economic conditions, changes in laws, rules or regulations and other challenges discussed in our public filings, could limit our ability to achieve some or all of the expected benefits of these initiatives.

This document contains forward-looking statements that involve inherent risks and uncertainties, and we might not be able to achieve the predictions, forecasts, projections and other outcomes we describe or imply in forward-looking statements. A number of important factors could cause results to differ materially from the plans, objectives, expectations, estimates and intentions we express in these forward-looking statements, including those we identify in "Risk factors" and in the "Cautionary statement regarding forward-looking information" in our Annual Report on Form 20-F for the fiscal year ended December 31, 2018 filed with the US Securities and Exchange Commission and other public filings and press releases. We do not intend to update these forward-looking statements.

Interview with the Chairman and the Chief Executive Officer

How satisfied are you with the progress achieved by Credit Suisse since the start of the restructuring?

Chairman: We have come a very long way since we began transforming the bank in late 2015 on the basis of our newly developed strategy. Together with Tidjane Thiam who assembled a new management team, we embarked on an ambitious plan to fundamentally alter the structure and activities of Credit Suisse – right down to the individual businesses. As a global bank with more than 48,000 employees in 2015 and operations in over 50 countries, that was no small undertaking. I think we have every reason to be satisfied with what we have achieved over the last few years. Credit Suisse is today a very different bank to when we started that journey and is certainly a great deal more resilient.

CEO: I am pleased for our colleagues as they are now starting to see the tangible results of their hard work. The last few years were an intense period for us all, and we faced many headwinds along the way. At the start of the restructuring process in 2015, we identified the most pressing problems we had to tackle. We wanted to achieve sustainable, compliant and profitable growth – shifting our focus to wealth management and leveraging our strong investment banking capabilities. It was also imperative for us to reduce both risks and costs as well as substantially strengthen our balance sheet. We had significant legacy issues to address, and we needed to upgrade our risk and compliance capabilities. We can say that, after three years of continuous effort, we have broadly achieved these objectives. That is a satisfying outcome for all of us at the bank, not to mention our clients and shareholders.

Credit Suisse recently announced new appointments to the Executive Board and senior leadership team. Can you explain the reasons for these changes – and why they are being made at this point in time?

CEO: The organisational structure we established in 2015 has worked well, producing strong results in our three regionally-focused businesses – Swiss Universal Bank (SUB), International Wealth Management (IWM) and Asia Pacific Wealth Management & Connected – in terms of revenue and profit growth, with approximately CHF 100 billion of Wealth Management net new assets acquired over three years. With the transformation of Credit Suisse now complete, we are ready to move into the next phase of our development and are taking the necessary steps to prepare for it. In February 2019, we made a number of new appointments to functional roles on the Executive Board and in our senior leadership team. It is very important for us to be successful in this post restructuring phase we are entering, and we want to ensure that our Group corporate functions are well aligned with our model as they support and interact with our divisions both in terms of effectiveness and efficiency. The recent changes will ensure we continue to make progress on that journey of improvement.

Chairman: The Board of Directors approved these appointments and fully supports the organizational changes, which should allow us to make continued progress on our journey of improvement. In particular, they are designed to ensure that key Group corporate functions – Risk, Compliance, Human Resources, Regulatory Affairs and Investor Relations, Corporate Communications, Marketing & Branding – are better aligned with our strategic model so they can interact with the businesses and support them as efficiently and effectively as possible. Overall, the Group corporate functions are instrumental in helping us to make the right decision for our business as we work towards our long-term goals.

How would you rate Credit Suisse's performance in 2018? Which areas of the business did especially well?

CEO: We performed well in 2018. With CHF 3.37 billion of Group reported pre-tax income in 2018, our income rose by 88% year on year. Net income attributable to shareholders was CHF 2.02 billion – marking our first annual post-tax profit since 2014. Many of our businesses are achieving strong, profitable, compliant growth, especially in our wealth management-focused divisions SUB, IWM and Asia Pacific (APAC). We attracted CHF 34.4 billion of Wealth Management net new assets in 2018 alone, with net inflows reported each quarter. SUB saw a further acceleration in its profitability in 2018, with adjusted* pre-tax income growth of 18% to CHF 2.2 billion. In IWM, we outperformed our closest peers in all our markets, exceeding our adjusted pre-tax income target of CHF 1.8 billion. I was satisfied with the results of our APAC division, given the significant market dislocation we saw towards the end of the year. Our performance in that region shows all the value of our innovative integrated model delivering private banking, investment banking and financing services to our clients. We also made considerable progress in Investment Banking & Capital Markets (IBCM), and in Global Markets (GM), which has demonstrated strict resource and risk discipline in a challenging environment.

How do you explain the disappointing performance of the Credit Suisse share price over the past 12 months? Do you view this as part of a broader trend affecting European financials?

Chairman:

Indeed, our share price and the banking sector as a whole have suffered major losses. Of course, this is anything but pleasing, whether for shareholders, the management team or other employees who would like to see their performance reflected in the value of the company and who are also partly paid in shares. However, we must bear in mind that our share price was impacted by a number of forces which were prevalent across the European banking landscape, and markets as a whole, for most of 2018. With the improvements in profitability management has achieved, we are confident that returns for the Group can continue to improve in 2019 and in the future, subject to market conditions, and should be reflected in a higher share price over time. We expect that in 2019, our shareholders should begin to see the benefits of the restructuring – both through the anticipated return of capital and aimed increase in tangible book value per share as capital generation strengthens.

On the subject of returning capital to shareholders, can you explain the reason for the buyback you announced in December 2018?

CEO: At the end of last year, the Board of Directors approved a share buyback programme of Group ordinary shares of up to CHF 1.5 billion in 2019 because we are committed to returning capital to our shareholders. Credit Suisse began repurchasing shares in January, and we expect to repurchase at least CHF 1.0 billion this year, subject to market and economic conditions. Buybacks are core to satisfying our commitment to shareholders. Our focus is on generating capital and then to distribute at least 50% of net income to shareholders. The reason we favour share buybacks over dividends is they give the company greater flexibility and will allow us to reduce some of the dilution that occurred due to previous capital increases, which were indispensable to eliminate our legacy issues, restructure the Group and return to growth, but were costly for shareholders.

Is your Swiss home market still as important for Credit Suisse in 2019 as it was in the past? How Swiss is today's Credit Suisse?

Chairman: Yes, absolutely. Switzerland is our home. Our Swiss roots are reflected in our name, and they are just as important today as they were when Alfred Escher established the bank more than 160 years ago. Our decision to create the Swiss Universal Bank division back in 2015 underscores our strong commitment to this market, and it is today the largest contributor to our profits. If you consider that around one in five people and over 100,000 businesses in Switzerland bank with Credit Suisse, and we have more than CHF 160 billion of loans outstanding to Swiss clients, it shows the close ties between our bank and the Swiss economy. Let's not forget that we are also one of the country's largest employers, with 15,840 members of our workforce based here. I would also say that compared to other international companies based in Switzerland, Credit Suisse is a very Swiss institution. One-third of the members of our Executive Board are Swiss and a significant proportion of them reside here in Switzerland. We have always made sure that overall, the Board of Directors retains its Swiss nature. In short, our strategy and our ambitions for our Swiss home market remain unchanged.

CEO: I have always believed that in business, like in sport, it is crucially important to be able to 'win at home'. Creating our Swiss Universal Bank and emphasising the importance of Switzerland was an integral part of my vision for Credit Suisse. Being named 'Best Bank in Switzerland' both by 'The Banker' magazine and by Euromoney is something we set out to achieve and of which we are all very proud.

At the start of the restructuring, you underscored the scale of the wealth management opportunity in Asia. Do you still believe the region offers the same potential?

CEO: I actually underscored the scale of the opportunity both in mature economies like Switzerland, where we have effectively been able to grow since 2015, and in emerging economies in general, which includes Asia, yes, but also Latin America, the Middle East and Eastern Europe. Focusing on Asia for a moment, it is worth noting that in 2018, the Asia region had around 800 billionaires, an increase of around one-third from the prior year. That is a staggering pace of growth – and yet the private banking market in Asia is still in its infancy. The total volume of wealth in our target segment – ultra-high-net worth clients and entrepreneurs – is estimated at around USD 5,000 billion. At present, as demonstrated by our 2018 results, Credit Suisse is a leader in wealth management in Asia, ranking third in Asia in terms of assets under management, but we still have only a small percentage of the potential market. I see three ways of growing our business in the region. First, our existing clients are becoming ever wealthier, which means our recurring revenue from managing their assets should increase. Second, we can grow our market share with each client – often by offering them solutions to specific opportunities they see or challenges they face. And third, we hope that a good proportion of these new billionaires that are emerging will be attracted by what Credit Suisse can do for them. That's not to say that we didn't see challenges across the Asian markets in 2018, with trade tensions and other macro issues impacting client sentiment and risk appetite. However, we continue to believe in the long term attractiveness of the region.

You recently proposed the election of a new Board member from Asia, Shan Li. What kind of insights into the Asia region do you hope to gain from him? And with regard to the second new Board member, Christian Gellerstad, where do you seek to leverage his expertise and experience?

Chairman: I believe both Board members will ideally complement the strengths of the Board with their excellent capabilities and will contribute their expertise to the future development of our strategy. Shan Li has an excellent track record in the financial services industry – especially in the Chinese market, which is of key importance for Credit Suisse. In China, the focus is shifting from industry and manufacturing goods to consumption and services. The

healthcare and Information Technology sectors are booming, and we can see plenty of potential for our strategy of being the global “Bank for Entrepreneurs” for our onshore China clients. We are positioning our franchise for an eventual full China market opening, and we expect Shan Li’s experience will be a significant benefit as we move towards this goal. Christian Gellerstad is a well-recognized wealth management expert. His more than two decades of industry experience and leadership expertise in running a private banking business in mature and developing markets should make him ideally positioned to support our growth initiatives in wealth management.

What would you describe as the key ingredients of a successful client relationship? How is this changing as a result of digitalization?

Chairman: I think trust is the most vital ingredient for a successful client relationship. In fact, our entire business works on the basis of trust. Our clients entrust us with their assets and turn to us for advice because they have confidence in our financial expertise and our ability to deliver good performance, as well as in our financial solidity and resilience as a bank. At the same time, we know that for many of our clients, reputation is as important as performance in their choice of financial partner. We therefore work according to clear conduct and ethics standards and expect our employees to act responsibly and with integrity under any circumstances. Last year, Credit Suisse attracted over CHF 56 billion of net new assets. I see that as clear evidence of the trust that clients around the globe place in Credit Suisse.

CEO: I agree that we must earn our clients' trust day after day to build strong relationships with them. I also believe that we must strive to be a professional and reliable partner and deliver our full range of expertise to them – whether it is by providing the best possible investment advice, ensuring best execution of their transactions or protecting and growing their assets. Naturally, we also have to keep pace with their changing needs. With the advance of technology, we are seeing a tectonic shift in what individual clients want and expect from us. For example, millennials drastically differ from previous generations of clients in their consumer behavior. They are technology natives and are purpose-driven. They are demanding faster and more convenient access to our services via their preferred channels, and they want banking to be truly mobile. In response, we are continuing to develop and expand our digital offering along the client lifecycle and are creating user interfaces and consumer touch points that make sense for them. Anticipating and acting on our clients' changing needs is unquestionably a key part of being a successful financial partner.

Credit Suisse has underscored its efforts to resolve legacy issues and to implement a robust compliance and control framework, as well as bringing about a change of culture within the Group. Which concrete steps have you taken? What role does the Board of Directors play in influencing our corporate culture?

Chairman: Resolving legacy issues and upgrading our compliance and control framework with enhanced processes were integral parts of the restructuring process. We also said that we wanted to transform the Group's culture. We have delivered on these objectives through a series of targeted measures. Let me give you a couple of examples: First, to build a culture of integrity and fairness, we recognized the need to have a single set of values for employees across all our businesses and regions. We therefore launched our Group-wide Conduct and Ethics Standards, which promote a shared understanding and expectations in terms of our values and conduct. Naturally, our Code of Conduct, which is endorsed by the Board of Directors and Executive Board, and is binding for all employees as well as Board members, is of key importance in this context. Second, in terms of reinforcing compliance, Credit Suisse fully embraced the regulatory and legislative changes that were introduced over the last decade to remedy the industry's shortcomings. Today, our Compliance unit operates as an independent Executive Board-level function, underscoring its high level of importance within Credit Suisse. As part of the organizational changes I mentioned before, the Regulatory Affairs function now reports directly to the CEO – reflecting the growing importance of our relationship with regulators. In addition, in early 2019, the Board of Directors established the Conduct and Financial Crime Control Committee to monitor and assess the effectiveness of our financial crime compliance programs and initiatives that are focused on further improving conduct and vigilance as part of our efforts to combat financial crime and firmly embed a strong compliance culture in the Group.

Credit Suisse is today placing a strong emphasis on sustainable finance and impact investing – why is this area so important to you?

CEO: Because it is simply the right thing to do. It is therefore not surprising that there has been a notable increase in the demand for sustainable and impact investing products in recent years as more and more investors seek ways of using their capital to have a positive impact on the world while also producing a financial return. Credit Suisse has been active in this space for more than a decade, and we are working hard to meet this growing demand. In 2017, I established the Impact Advisory & Finance (IAF) department, which reports directly to me. It aims to facilitate projects and initiatives for clients that have a positive economic and social impact while delivering financial returns. IAF generated significant momentum across both wealth management and corporate and investment banking in 2018. It is also playing a part in codifying this relatively new but rapidly growing sector. Through these activities, we can contribute to the development of the global economy and support social progress and environmental sustainability.

These are topics that are important to me.

Technology has already transformed much of what Credit Suisse does. In which areas do you expect to see the greatest technological benefits in the coming years? What are the main cyber risks facing the industry and what steps are you taking to protect Credit Suisse and its clients?

Chairman: Technology catalyzes disruptive change and drives progress in our industry. That is why, in 2015, the Board established an Innovation and Technology Committee, an interdisciplinary advisory group to discuss the progress we are making at Credit Suisse in terms of innovation and technology initiatives as well as to consider industry-wide technology trends. The Group's leadership regularly examines the role that innovation and technology will play in the future of banking, and how we can most effectively deploy them across our divisions. In the coming years, I expect

to see an uptick in the use of technological innovations in banking, leveraging amongst much else the cloud, distributed ledger, automation, robotics and machine-learning as well as data science more generally. Of course, rapid technological development also brings new challenges, for example in the field of cybersecurity, which will be a serious concern across our industry for the foreseeable future. Regulators and companies are working to understand how best to protect banks' data and the integrity of the financial services ecosystem. We continue to invest significantly in our information and cybersecurity programs, and we regularly assess the effectiveness of our key controls. In addition, we routinely conduct employee training to embed a mature cyber risk management culture within the organization.

2019 marks the 200th anniversary of the birth of Credit Suisse's founder Alfred Escher. What do you find most inspiring about him? To what extent is his vision of entrepreneurship still relevant today?

Chairman: What I find most inspiring about Alfred Escher is his incredible entrepreneurial spirit and his desire to bring about lasting change – benefiting the economy and society. In the 19th century, Escher almost single-handedly developed part of the infrastructure of modern Switzerland, including its rail network and the famous Gotthard tunnel. And of course, he founded Credit Suisse in 1856 to raise capital for his infrastructure projects. I am inspired by the courage he showed in pursuing his vision at a time when many of his ideas were met with skepticism. He was relentless in his efforts to drive progress and prosperity. Today, Escher still inspires us with his foresight and determination to make things happen. What we can learn from his vision of entrepreneurship is the importance of anticipating future trends, having the courage of your convictions and thinking creatively to formulate innovative solutions. A portrait of our founder hangs in the boardroom here at our head office in Zurich and is a constant reminder of his great legacy.

What do you expect to be the greatest challenges for Credit Suisse in 2019?

CEO: I believe the main headwinds we will face in 2019 relate to heightened global geopolitical and macroeconomic uncertainties. These include the potential disruptions to world trade due to tensions between the US and China and other uncertainties in the world whether it is the situation in the Middle East in general, the UK's anticipated withdrawal from the EU or the impact of the situation in Venezuela on Latin America, to name a few. These developments are especially challenging due to their potential adverse impact on investor confidence and client activity levels. The continuation of the ultra-low interest rate environment in many countries also places a burden on our business. Nevertheless, I am confident that Credit Suisse can remain resilient in the face of these pressures thanks to our lower cost base, reduced risk exposures, our flexible and diversified business model and the benefits flowing from the closure of our Strategic Resolution Unit. And, of course, we are well positioned to take advantage of any potential upside going forward.

* Adjusted results are non-GAAP financial measures that exclude certain items included in our reported results. For further information relating to this and other descriptions in this interview, please refer to the endnotes in the "Message from the Chairman and the Chief Executive Officer".

I – Information on the company
Credit Suisse at a glance
Strategy
Divisions
Regulation and supervision
Risk factors

Credit Suisse at a glance

Credit Suisse

Our strategy builds on Credit Suisse's core strengths: its position as a leading global wealth manager, its specialist investment banking capabilities and its strong presence in our home market of Switzerland. We seek to follow a balanced approach with our wealth management activities, aiming to capitalize on both the large pool of wealth within mature markets as well as the significant growth in wealth in Asia Pacific and other emerging markets. Founded in 1856, we today have a global reach with operations in about 50 countries and 45,680 employees from over 150 different nations. Our broad footprint helps us to generate a –geographically –balanced stream of revenues and net new assets and allows us to capture growth opportunities around the world. We serve our clients through three regionally focused divisions: Swiss Universal Bank, International Wealth Management and Asia Pacific. These regional businesses are supported by two other divisions specializing in investment banking capabilities: Global –Markets and –Investment –Banking & Capital Markets. The Strategic Resolution Unit consolidated the remaining portfolios from the former non-–strategic units plus additional businesses and positions that did not fit with our strategic direction. Our business divisions cooperate closely to provide holistic financial solutions, including innovative products and specially tailored advice.

Swiss Universal Bank

The Swiss Universal Bank division offers comprehensive advice and a wide range of financial solutions to private, corporate and institutional clients primarily domiciled in our home market Switzerland, which offers attractive growth opportunities and where we can build on a strong market position across our key businesses. Our Private –Clients business has a leading franchise in our Swiss home market and serves ultra-high-net-worth individual, high-net-worth individual, affluent and retail clients. Our Corporate & Institutional Clients business serves large corporate clients, small and medium-sized enterprises, institutional clients, external asset managers, financial institutions and commodity traders.

–International Wealth Management

The International Wealth Management division through its Private Banking business offers comprehensive advisory services and tailored investment and financing solutions to wealthy private clients and external asset managers in Europe, the Middle East, Africa and Latin America, utilizing comprehensive access to the broad spectrum of Credit Suisse's global resources and capabilities as well as a wide range of proprietary and third-party products and services. Our Asset Management business offers investment solutions and services globally to a broad range of clients, including pension funds, governments, foundations and endowments, corporations and individuals.

Asia Pacific

In the Asia Pacific division, our wealth management, financing and underwriting and advisory teams work closely together to deliver integrated advisory services and solutions to our target ultra-high-net-worth, entrepreneur and corporate clients. Our Wealth Management & Connected business combines our activities in wealth management with our financing, underwriting and advisory activities. Our Markets business represents our equities and fixed income sales and trading businesses, which support our wealth management activities, but also deals extensively with a broader range of institutional clients.

Global Markets

The Global Markets division offers a broad range of financial products and services to client-driven businesses and also supports Credit Suisse's global wealth management businesses and their clients. Our suite of products and services includes global securities sales, trading and execution, prime brokerage and comprehensive investment research. Our clients include financial institutions, corporations, governments, institutional investors, such as pension funds and hedge funds, and private individuals around the world.

Investment Banking & Capital Markets

The Investment Banking & Capital Markets division offers a broad range of investment banking services to corporations, financial institutions, financial sponsors and ultra-high-net-worth individuals and sovereign clients. Our range of products and services includes advisory services related to mergers and acquisitions, divestitures, takeover defense mandates, business restructurings and spin-offs. The division also engages in debt and equity underwriting of public securities offerings and private placements.

Strategic Resolution Unit

The Strategic Resolution Unit was –created to facilitate the immediate right-sizing of our business divisions from a capital perspective and included remaining portfolios from former non-strategic units plus transfers of additional exposures from the business divisions. The unit's primary focus was on facilitating the rapid wind-down of capital usage and costs to reduce the negative impact on the Group's performance. Repositioned as a separate division, this provided clearer accountability, governance and reporting. Beginning in 2019, the Strategic –Resolution Unit has ceased to exist as a separate division of the Group.

Strategy

Credit Suisse strategy

Our strategy is to be a leading wealth manager with strong investment banking capabilities.

We believe wealth management is one of the most attractive segments in banking. Global wealth has grown significantly over the last ten years and is projected to continue to grow faster than GDP over the next several years, with both emerging markets and mature markets offering attractive growth opportunities. We seek to follow a balanced approach with our wealth management activities, aiming to capitalize on both the large pool of wealth within mature markets as well as the significant growth in wealth in Asia Pacific and other emerging markets.

In the wealth management sector, we expect that emerging markets will account for nearly 60% of the growth in global wealth in the coming years, with more than 60% of that additional wealth expected to be created in Asia Pacific. Wealth is highly concentrated in emerging markets, with wealth creation mostly tied to first and second generation entrepreneurs. We believe that positioning ourselves as the “Bank for Entrepreneurs” by leveraging our strengths in wealth management and investment banking will provide us with key competitive advantages to succeed in these markets as we provide clients with a range of services to protect and grow their wealth and offer an integrated approach across their private and corporate financial needs. We are scaling up our wealth management franchise in emerging markets by recruiting and retaining high-quality relationship managers while prudently managing our lending exposure, building on our strong investment and advisory offering and global investment banking capabilities. At the same time we are investing in our risk management and compliance functions.

Despite slower growth, mature markets are still expected to remain important and account for more than half of global wealth by 2022. We plan to capitalize on opportunities in markets such as Western Europe, with a focused approach to building scale given the highly competitive environment.

Switzerland, as our home market, provides compelling opportunities for Credit Suisse. Switzerland remains the country with the highest average wealth and highest density of affluent clients globally. Switzerland benefits from its highly developed and traditionally resilient economy, where many entrepreneurial small and medium-sized enterprises continue to drive strong export performance. We provide a full range of services to private, corporate and institutional clients with a specific focus on becoming the “Bank for Entrepreneurs” and plan to further expand our strong position with Swiss private, corporate and institutional clients as well as take advantage of opportunities arising from consolidation.

We have simplified and de-risked our Global Markets business model, reducing complexity and cost while continuing to support our core institutional client franchises and maintaining strong positions in our core franchises. We aim to further strengthen our International Trading Solutions business, our product manufacturing and distribution platform relating to our Global Markets, Swiss Universal Bank and International Wealth Management divisions. We have right-sized our operations and reduced risk in a focused way by exiting or downsizing selected businesses consistent with our return on capital objectives and lower risk profile.

In our Investment Banking & Capital Markets division, we have focused on rebalancing our product mix towards advisory and equity underwriting while maintaining our leading leveraged finance franchise. Our objective is to align, and selectively invest in, our coverage and capital resources with the largest growth opportunities and where our franchise is well-positioned. We believe this will help us to strengthen our market position, contribute to a revenue mix that is more diversified and less volatile through the market cycle and achieve returns in excess of our cost of capital. We will continue to leverage Investment Banking & Capital Markets’ global connectivity with our other divisions and its platform to drive opportunities for the Group.

We intend to continue with a disciplined approach to cost management across the Group, focusing on continuous productivity improvements that can release resources for growth investments while maintaining a strong operating leverage.

Completion of the three-year restructuring plan

We have successfully completed our ambitious three-year restructuring plan outlined at the Investor Day on October 21, 2015.

Delivered profitable growth

Over the last three years we have rebalanced the allocation of capital towards our high-quality and high-returning Wealth Management-related and Investment Banking & Capital Markets businesses. This has led to a significant shift in our business mix with more than two-thirds of our capital, excluding the Corporate Center and the Strategic

Resolution Unit, allocated to our Wealth Management-related and Investment Banking & Capital Markets businesses. References to our Wealth Management-related businesses mean our Swiss Universal Bank division, our International Wealth Management division and our Wealth Management & Connected business within our Asia Pacific division or their combined results.

Since 2015, we have attracted CHF 100.9 billion of net new assets in Wealth Management, leading to assets under management of CHF 757.2 billion. Our balanced approach in Wealth Management has contributed to positive inflows in mature markets as well as strong inflows in emerging markets. Our focus on growing our entrepreneur and ultra-high-net-worth (UHNW) franchise has been successful with Wealth Management net new assets of CHF 34.4 billion in 2018, an increase of 90% since 2015. References to Wealth Management in connection with net new assets or assets under management measures mean the Private Clients business within Swiss Universal Bank, the Private Banking business within International Wealth Management

and the Wealth Management & Connected business within Asia Pacific or their combined results.
In Investment Banking & Capital Markets, we have made notable progress in the execution of our targeted plans for investment grade corporates, non-investment grade corporates and financial sponsors and have improved share of wallet across all of these client segments since 2015.
Our strategic actions have led to strong growth in our Wealth Management-related and Investment Banking & Capital Markets businesses. We have grown our Wealth Management-related and Investment Banking & Capital Markets revenues by CHF 2.0 billion since 2015, which represents a compound annual growth rate of 5%. Our focus on delivering positive operating leverage has continuously driven returns higher in our Wealth Management-related and Investment Banking & Capital Markets businesses as we have achieved an income before taxes of CHF 4.9 billion in 2018, an increase of 159% since 2015 and adjusted income before taxes of CHF 5.2 billion in 2018, an increase of 75% since 2015.
> Refer to “Wealth Management-related businesses and Investment Banking & Capital Markets – Reconciliation of adjusted results” for further information.
Improved the resilience of our business model
A key focus of our strategy has been to make the bank more resilient in challenging market conditions while preserving our ability to benefit when markets are more favorable.
Over the last three years we have significantly lowered the breakeven point of the Group. In 2015, we announced our strategic cost transformation program with the aim of reducing our adjusted operating cost base measured at constant 2015 foreign exchange rates to below CHF 17 billion, in order to achieve net savings of more than CHF 4.2 billion. We successfully completed the program at the end of this year, achieving reported total operating expenses of CHF 17.3 billion and an adjusted operating cost base of CHF 16.5 billion.
> Refer to “Operating cost base – Reconciliation of adjusted results” for further information.
Since 2015, we have substantially lowered the risk profile of our business activities. On a Group level we have reduced average Value-at-Risk by 41% and reduced level 3 assets by 50%. In our Global Markets business we have successfully restructured our business portfolio while maintaining our core franchise strengths and reducing risk-weighted assets and leverage exposure since the third quarter of 2015.
We have significantly strengthened our capital position since the third quarter of 2015 with look-through common equity tier 1 (CET1) capital of CHF 35.9 billion and Tier 1 capital of CHF 46.1 billion as of year-end 2018. Our look-through CET1 ratio has increased from 10.2% in the third quarter of 2015 to 12.6% at year-end 2018 and our look-through Tier 1 leverage ratio has increased from 3.9% in the third quarter of 2015 to 5.2% as of year-end 2018.
In addition we have established a dedicated compliance function in 2015 and made sizeable investments to upgrade our compliance and control frameworks as well as strengthened our risk management function.
Resolved legacy issues and wound-down our Strategic Resolution Unit
Over the last three years, we have resolved major litigation issues including the US Department of Justice (DOJ) residential mortgage-backed securities (RMBS) matter.
At year-end 2018 the Strategic Resolution Unit was wound down as a separate division. We achieved the targets we set for the Strategic Resolution Unit in 2015, releasing significant capital for the Group and substantially reducing the negative impact on income before taxes. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit (ARU) and will be separately disclosed within the Corporate Center.

Reconciliation of adjusted results

Adjusted results referred to in this document are non-GAAP financial measures that exclude certain items included in our reported results. Management believes that adjusted results provide a useful presentation of our operating results for purposes of assessing our Group and divisional performance consistently over time, on a basis that excludes items that management does not consider representative of our underlying performance.

The adjusted operating cost base at constant foreign exchange rates from 2015 includes adjustments as made in all our disclosures for restructuring expenses, major litigation provisions, expenses related to business sales and a goodwill impairment taken in the fourth quarter of 2015 as well as adjustments for debit valuation adjustments (DVA) related volatility, foreign exchange impacts and for certain accounting changes which had not been in place at the launch of the cost savings program. Adjustments for certain accounting changes have been restated to reflect grossed up expenses in the Corporate Center and, starting in the first quarter of 2018, also include adjustments for changes from ASU 2014-09 “Revenue from Contracts with Customers”. Adjustments for foreign exchange apply unweighted currency exchange rates, i.e., a straight line average of monthly rates, consistently for the periods under review.

Wealth Management-related businesses and Investment Banking & Capital Markets –

Reconciliation of adjusted results

	Wealth Management-related businesses			Investment Banking & Capital Markets		Total	
in	2018	2017	2015	2018	2015	2018	2015
Adjusted results (CHF million)							
Net revenues	**13,268**	**12,829**	**11,631**[1]	**2,177**	**1,787**	**15,445**	**13,418**
Real estate gains	(23)	0	(95)	0	0	(23)	(95)
(Gains)/losses on business sales	(92)	28	(34)	0	0	(92)	(34)
Adjusted net revenues	**13,153**	**12,857**	**11,502**	**2,177**	**1,787**	**15,330**	**13,289**
Provision for credit losses	**186**	**117**	**174**	**24**	**0**	**210**	**174**
Total operating expenses	**8,561**	**8,797**	**9,252**[2]	**1,809**	**2,101**	**10,370**	**11,353**
Goodwill impairment	0	0	(446)	0	(380)	0	(826)
Restructuring expenses	(243)	(150)	(79)	(84)	(22)	(327)	(101)
Major litigation provisions	(116)	(97)	(299)	(1)	0	(117)	(299)
Expenses related to business sales	(47)	0	0	0	0	(47)	0
Adjusted total operating expenses	**8,155**	**8,550**	**8,428**	**1,724**	**1,699**	**9,879**	**10,127**
Income/(loss) before taxes	**4,521**	**3,915**	**2,205**	**344**	**(314)**	**4,865**	**1,891**
Total adjustments	291	275	695	85	402	376	1,097
Adjusted income before taxes	**4,812**	**4,190**	**2,900**	**429**	**88**	**5,241**	**2,988**

1 Excludes net revenues of CHF 148 million for Swisscard.

2 Excludes operating expenses of CHF 123 million for Swisscard.

Operating cost base - Reconciliation of adjusted results

in	2018	2017	2016	2015
Adjusted results (CHF million)				
Total operating expenses	**17,303**	**18,897**	**22,337**	**25,895**
Goodwill impairment	0	0	0	(3,797)
Restructuring expenses	(626)	(455)	(540)	(355)

Major litigation provisions	(244)	(493)	(2,707)	(820)
Expenses related to business sales	(51)	(8)	0	0
Debit valuation adjustments (DVA)	46	(83)	0	0
Certain accounting changes	(228)	(234)	(70)	(58)
Operating cost base before foreign exchange adjustment	**16,200**	**17,624**	**19,020**	**20,865**
Foreign exchange adjustment [1]	334	326	291	310
Adjusted operating cost base	**16,534**	**17,950**	**19,311**	**21,175**

1 Calculated at constant 2015 foreign exchange rates.

Financial goals

At the Investor Day on December 12, 2018, we communicated our return on tangible equity (RoTE) targets for the Group. We confirmed our RoTE target of 10 – 11% for 2019 and 11 – 12% for 2020 and announced a target of above 12% beyond 2020.

For 2019 and 2020, we plan to distribute at least 50% of net income to shareholders, primarily through share buybacks and the distribution of a sustainable ordinary dividend, which dividend amount we expect to increase by at least 5% per annum. For 2019, the Board of Directors of the Group approved a share buyback program of Group ordinary shares of up to CHF 1.5 billion. We expect to buy back at least CHF 1.0 billion in 2019, subject to market and economic conditions. For 2020, we expect a similar share buyback program as in 2019, subject to approval by the Board of Directors. The level of the share buyback for 2020 will be set in light of our capital plans and will be subject to prevailing market conditions, but is expected to be in line with our intention to distribute at least 50% of net income. We commenced the share buyback program on January 14, 2019.

Our estimates and targets often include metrics that are non-GAAP financial measures and are unaudited. A reconciliation of these estimates and targets to the nearest GAAP measures is unavailable without unreasonable efforts. Adjusted results exclude goodwill impairment, major litigation charges, real estate gains and other revenue and expense items included in our reported results, which are unavailable on a prospective basis. RoTE is based on tangible shareholders' equity, a non-GAAP financial measure, which is calculated by deducting goodwill and other intangible assets from total shareholders' equity as presented in our balance sheet, both of which are unavailable on a prospective basis. Such estimates and targets are calculated in a manner that is consistent with the accounting policies applied by us in preparing our financial statements.

Organizational structure

Our organizational structure consists of three regionally focused divisions: Swiss Universal Bank, International Wealth Management and Asia Pacific. These regional businesses are supported by two other divisions specialized in investment banking capabilities: Global Markets and Investment Banking & Capital Markets. Our organization is designed to drive stronger client focus and provide better alignment with regulatory requirements, with decentralization increasing the speed of decision-making, accountability and cost competiveness across the Group. Our operating businesses are supported by focused corporate functions at the Group Executive Board level, consisting of: Chief Financial Officer, Chief Operating Officer, Chief Risk Officer, Chief Compliance Officer, General Counsel and Global Head of Human Resources.

Evolution of legal entity structure

The execution of the program evolving the Group's legal entity structure to support the realization of our strategic objectives, increase the resilience of the Group and meet developing and future regulatory requirements has substantially concluded. The legal entity program was prepared in discussion with the Swiss Financial Market Supervisory Authority FINMA (FINMA), our primary regulator, and other regulators and addressed regulations in Switzerland, the US and the UK with respect to requirements for global recovery and resolution planning by systemically relevant banks, such as Credit Suisse, that will facilitate resolution of an institution in the event of a failure. The program was approved by the Board of Directors of the Group and certain elements required final approval by FINMA and other global regulators.

Products and services

Private banking offerings and wealth management solutions

We offer a wide range of private banking and wealth management solutions tailored for our clients in our Swiss Universal Bank, International Wealth Management and Asia Pacific divisions.

Client segment specific value propositions

Our wide range of wealth management solutions is tailored to specific client segments. Close collaboration with our investment banking businesses enables us to offer customized and innovative solutions to our clients, especially in the ultra-high-net-worth individuals (UHNWI) segment, and we have specialized teams offering bespoke and complex solutions predominantly for our sophisticated clients. This distinct value proposition of our integrated bank remains a key strength in our client offerings.

Structured advisory process

We apply a structured approach in our advisory process based on a thorough understanding of our clients' needs, personal circumstances, product knowledge, investment objectives and a comprehensive analysis of their financial

situation to define individual client risk profiles. On this basis, we define an individual investment strategy in collaboration with our clients. This strategy is implemented to help ensure adherence to portfolio quality standards and compliance with suitability and appropriateness standards for all investment instruments. Responsible for the implementation are either the portfolio managers or our relationship managers working together with their advisory clients. Our UHNWI relationship managers are supported by dedicated portfolio managers.

Comprehensive investment services

We offer a comprehensive range of investment advice and discretionary asset management services based on the outcome of our structured advisory process and the global “House View” of our Credit Suisse Investment Committee. We base our advice and services on the analysis and recommendations of our research

and investment strategy teams, which provide a wide range of investment expertise, including macroeconomic, equity, bond, commodity and foreign-exchange analysis, as well as research on the economy. Our investment advice covers a range of services, from portfolio consulting to advising on individual investments. We offer our clients portfolio and risk management solutions, including managed investment products. These are products actively managed and structured by our specialists or third parties, providing private investors with access to investment opportunities that otherwise would not be available to them. For clients with more complex requirements, we offer investment portfolio structuring and the implementation of individual strategies, including a wide range of structured products and alternative investments. Discretionary asset management services are available to clients who wish to delegate the responsibility for investment decisions to Credit Suisse. We are an industry leader in alternative investments and, in close collaboration with our asset management business and investment banking businesses, we offer innovative products with limited correlation to equities and bonds, such as hedge funds, private equity, commodities and real estate investments.

In addition, we offer solutions for a range of private and corporate wealth management needs, which include financial planning, succession planning and trust services.

Financing and lending

We offer a broad range of financing and lending solutions across all of our private client segments, including consumer credit and real estate mortgage lending, real asset lending relating to ship and aviation financing for UHNWI, standard and structured hedging and lombard lending solutions as well as collateral trading services.

Multi-shore platform

With global operations comprising 13 international booking centers in addition to our operations in Switzerland, we are able to offer our clients booking capabilities locally as well as through our international hubs. Our multi-shore offering is designed to serve clients who are focused on geographical risk diversification, have multiple domiciles, seek access to global execution services or are interested in a wider range of products than is available to them locally.

Corporate client and institutional client offerings

In accordance with our ambition to position ourselves as the “Bank for Entrepreneurs”, we provide corporate and institutional clients, predominantly in Switzerland, with a broad range of financial solutions. To meet our clients’ evolving needs, we deliver our offering through an integrated franchise and international presence. Based on this model, we are able to assist our clients in virtually every stage of their business life cycle to cover their banking needs. For corporate clients, we provide a wide spectrum of banking products such as traditional and structured lending, payment services, foreign exchange, capital goods leasing and investment solutions. In addition, we apply our investment banking capabilities to supply customized services in the areas of M&A, syndications and structured finance. For corporations with specific needs for global finance and transaction banking, we provide services in commodity trade finance, trade finance, structured trade finance, export finance and factoring. For our Swiss institutional clients, including pension funds, insurance companies, public sector and UHNWI clients, we offer a wide range of fund solutions and fund-linked services, including fund management and administration, fund design and comprehensive global custody solutions. Our offering also includes ship and aviation finance and a competitive range of services and products for financial institutions such as securities, cash and treasury services.

Asset management offerings

Our traditional investment products provide strategies and comprehensive management across equities, fixed income, and multi-asset products in both fund formation and customized solutions. Stressing investment principles, such as risk management and asset allocation, we take an active and disciplined approach to investing. Alongside our actively managed offerings, we have a suite of passively managed solutions, which provide clients access to a wide variety of investment options for different asset classes in a cost-effective manner.

We also offer institutional and individual clients a range of alternative investment products, including credit investments, hedge fund strategies, real estate and commodities. We are also able to offer access to various asset classes and markets through strategic alliances and key joint ventures with external managers.

Investment banking financial solutions

Equity underwriting

Equity capital markets originates, syndicates and underwrites equity in initial public offerings (IPOs), common and convertible stock issues, acquisition financing and other equity issues.

Debt underwriting

Debt capital markets originates, syndicates and underwrites corporate and sovereign debt.

Advisory services

Advisory services advises clients on all aspects of M&A, corporate sales, restructurings, divestitures, spin-offs and takeover defense strategies.

Equities

Cash equities provides a comprehensive suite of offerings, including: (i) research, analytics and other content-driven products and services (ii) sales trading, responsible for managing the order flow between our clients and the marketplace and providing clients with trading ideas and capital commitments, identifying trends and delivering the most effective trade execution; (iii) high touch and program trading, exchange-traded funds (ETFs) and advanced execution services (AES) platform under our global execution services group, which executes client orders

and makes markets in listed and over-the-counter (OTC) cash securities, ETFs and programs, providing liquidity to the market through both capital commitments and risk management. AES is a sophisticated suite of algorithmic trading strategies, tools and analytics that facilitates global trading across equities, options, futures and foreign exchange. By employing algorithms to execute client orders and limit volatility, AES helps institutions and hedge funds reduce market impact. AES is a recognized leader in its field and provides access to over 100 trading destinations in over 40 countries and six continents.

Prime services offers hedge funds and institutional clients execution, financing, custody, clearing and risk advisory services across various asset classes through prime brokerage, synthetic financing and listed and OTC derivatives. In addition, we partner with the most established fund managers, fast-growing funds and select startups, blending traditional prime brokerage services with innovative financing solutions and comprehensive capital and consulting advisory services, to help funds build durable organizations across their lifecycle.

Equity derivatives provides a full range of equity-related and cross-asset products, including investment options, systematic strategies and financing solutions, as well as sophisticated hedging and risk management expertise and comprehensive execution capabilities to private banking clients, financial institutions, hedge funds, asset managers and corporations.

Convertibles: The convertibles team provides secondary trading and market making of convertible bonds as well as pricing and distribution of Credit Suisse-originated convertible issuances.

Fixed income

Global credit products is a leading, client-focused and accomplished credit franchise, providing expert coverage in credit trading, sales, financing and capital markets. Our strong history of credentials and long-standing record in leveraged finance reflect our unique ability to provide value-added products and solutions to both issuer and investor clients. Our capital markets businesses are responsible for structuring, underwriting and syndicating a full range of products for our issuer clients, including investment grade and leveraged loans, investment grade and high yield bonds and unit transactions. We are also a leading provider of committed acquisition financing, including leveraged loan, bridge finance and mezzanine finance and collateralized loan obligation formation. In sales and trading, we are a leading market maker in private and public debt across the credit spectrum, including leveraged loans as well as high yield and investment grade cash. We are also a market maker in the credit derivatives market, including the credit default swap index (CDX) suite, liquid single-name credit default swaps (CDS), sovereign CDS, credit default swaptions and iBoxx total return swaps. We offer clients a comprehensive range of financing options for credit products including, but not limited to, repurchase agreements, short covering, total return swaps and portfolio lending.

Securitized products is a market leading franchise providing asset based liquidity and financing solutions and products to institutional and wealth management clients. We have experience in a broad range of asset categories including consumer, commercial, residential, commercial real estate, transportation and alternatives. Our finance business focuses on providing asset and portfolio advisory services and financing solutions (warehouse, bridge and acquisition) and originates, structures and executes capital markets transactions for our clients. Our trading platform provides market liquidity across a broad range of loans and securities, including residential mortgage-backed securities (RMBS), asset-backed securities (ABS) and commercial mortgage-backed securities (CMBS). CMBS and RMBS include government- and agency-backed as well as private-label loans. We have a seasoned and dedicated securitized product sales force that distributes our primary and secondary product offerings to our client base. We also offer residential mortgage servicing capabilities through our mortgage servicer Select Portfolio Services.

Macro products includes our global foreign exchange and rates businesses and investment grade capital markets team in Switzerland. Our rates business offers market-making capabilities in US cash and derivatives, European cleared swaps and select bilateral and structured solutions. Our investor products business manufactures credit rates, foreign exchange and commodity based structured products for institutional and private banking clients. In addition, our investor products business includes our benchmark and proprietary commodity index business.

Emerging markets, financing and structured credit includes a range of financing products including cash flow lending, share-backed lending and secured financing transactions and onshore trading in Brazil, Mexico and Russia. In addition, we offer financing solutions and tailored investment products for Latin American, Central and Eastern European, Middle Eastern and African financial institutions and corporate and sovereign clients.

Other

Other products and activities include lending and certain real estate investments. Lending includes senior bank debt in the form of syndicated loans and commitments to extend credit to investment grade and non-investment grade borrowers.

Research and HOLT

Our equity and fixed income businesses are enhanced by the research and HOLT functions. HOLT offers a framework for objectively assessing the performance of over 20,000 companies worldwide, with interactive tools and consulting services that clients use to make informed investment decisions.

Equity and fixed income research uses in-depth analytical frameworks, proprietary methodologies and data sources to analyze approximately 3,000 companies worldwide and provide macroeconomic insights into this constantly changing environment.

Divisions

Swiss Universal Bank

Business profile

Within Swiss Universal Bank, we offer comprehensive advice and a broad range of financial solutions to private, corporate and institutional clients primarily domiciled in Switzerland. We serve our clients through the following four dedicated business areas in order to cater to our Swiss client base: Private & Wealth Management Clients and Premium Clients within the Private Clients business, and Corporate & Investment Banking as well as Institutional Clients within the Corporate & Institutional Clients business.

Our **Private Clients** business has a leading client franchise in Switzerland, serving approximately 1.5 million clients, including UHNWI, high-net-worth individual (HNWI), affluent and retail clients. Our service offering is based on our structured advisory process, distinct client-segment-specific value propositions and coverage models as well as the access to a broad range of comprehensive products and services. Our network includes 1,260 relationship managers in 148 branches, including 26 branches of the Bank's affiliate, Neue Aargauer Bank. Additionally, our consumer finance business BANK-now has 20 branches. Also, we offer our clients the world's leading credit card brands through Swisscard AECS GmbH, an equity method investment jointly owned with American Express.

Our **Corporate & Institutional Clients** business offers expert advice and high-quality services to a wide range of clients, serving the needs of over 100,000 corporations and institutions, including large corporate clients, small and medium-size enterprises, institutional clients, external asset managers, financial institutions and commodity traders. This business also includes our Swiss investment banking business, serving corporate clients and financial institutions in connection with financing transactions in debt and equity capital markets and advising on M&A transactions. Our business includes 520 relationship managers who serve our clients out of 42 locations.

Key data – Swiss Universal Bank

			in / end of
	2018	2017	2016
Key data			
Net revenues (CHF million)	5,564	5,396	5,759
Income before taxes (CHF million)	2,125	1,765	2,025
Assets under management (CHF billion)			
– Private Clients	198.0	208.3	192.2
– Corporate & Institutional Clients	348.7	354.7	339.3
Number of employees	11,950	12,600	13,140

Business environment

The Swiss private banking and wealth management industry remains very attractive and continues to have positive growth prospects. Switzerland has one of the highest millionaire densities worldwide and is expected to continue to have one of the highest average levels of wealth per adult. We remain well-positioned in the Swiss market with strong market shares across our client segments.

The corporate and institutional clients business continues to offer attractive opportunities, supported by the expected steady growth of the Swiss economy. We are a leading provider of banking services to corporate and institutional clients in Switzerland, utilizing our market-leading investment banking capabilities in Switzerland for local execution while leveraging Investment Banking & Capital Markets' international reach and Global Markets' placing power.

Structurally, the industry continues to undergo significant change. Regulatory requirements for investment advisory services continue to increase, including in the areas of suitability and appropriateness of advice, client information and documentation. This is expected to drive further consolidation of smaller banks due to the higher critical size necessary to fulfill business and regulatory requirements. We continue to believe that we are well-positioned to opportunistically take advantage of this potential market consolidation. We have made additional progress in adapting to the changing regulatory environment and are continuing to dedicate significant resources to ensure our business is compliant with regulatory standards.

Business strategy

Switzerland, our home market, has always been and is expected to remain a key market for our Group and is core to our overall strategy. Within Swiss Universal Bank, we combine all the strengths and critical mass of our Swiss retail,

wealth management, corporate, institutional and investment banking activities. The division is well-positioned to meet the needs of our clients, both individual and corporate, with a broad suite of customized products and services.

In order to further cement our standing as a leading Swiss bank, we continue to focus on the following four key priorities:

Bank for Switzerland

We are committed to our Swiss home market and to all our clients in Switzerland – we are a universal bank that serves private, corporate and institutional client segments. We intend to expand our market share and continue to be a responsible partner in Swiss society.

The reduction of management hierarchies and increased scope of control at local market levels, introduced in 2017, were fully realized in 2018. Those measures resulted in more efficient priority-setting and faster decision-making in those markets leading to increased client satisfaction. As a consequence of changing client needs, we opened our first digital advisory branch in Switzerland. Our digital advisory branch format is designed to work without the classic teller function, but with innovative elements such as a digital bar and a lounge area. We continue to see potential in developing the HNWI and the UHNWI business, which are both wealth market segments that are growing significantly and remain highly attractive. Our holistic offering and the collaboration across the division and across the bank are the bases for our efforts to capture further growth in both market segments. Our efforts and commitment to Switzerland have been recognized by Euromoney (Best Bank in Switzerland 2018) and The Banker (Bank of the Year 2018 Switzerland).

Bank for Entrepreneurs

Entrepreneurship has always been important for Credit Suisse, and entrepreneurial thinking is one of our core principles. We have grown and will seek to continue to significantly grow our business with entrepreneurs and their companies across all businesses within Swiss Universal Bank, including by leveraging our international connectivity in investment banking and asset management. It is our ambition to be recognized as the “Bank for Entrepreneurs”.

We strengthened our focus on being recognized as the “Bank for Entrepreneurs” by launching joint client coverage for private and corporate clients in 2015. In this context, we increased the number of Entrepreneurs & Executives relationship managers and now cover the Swiss market with 15 locations. Our broad range of expertise and capabilities enabled us to execute a large number of investment banking transactions in 2018 and we were again recognized as the number one investment bank in Switzerland.

Bank for the Digital World

We are transforming the way we serve and advise our clients in an increasingly digital society and economy. We expect new technologies and business models to emerge and must adapt our efforts to be successful. To this end, we are investing in digital capabilities with a focus on client engagement, self-service capabilities and frontline productivity. Digitalization, automation and data management will be key drivers to continuously improve our cost position and drive our competitiveness with the possibility to fundamentally change the way we work.

During 2018, various digital solutions for private, corporate and institutional clients as well as relationship managers were launched. We enhanced our self-service capabilities including through the introduction of digital client onboarding for corporate clients, which allows those clients to identify themselves and open an account through a computer or mobile device. This offering complements the similar online opening capabilities we launched for private clients in 2017. In 2018 we managed to further improve the productivity of client-facing employees and completed our front-to-back digitalization program, which digitalized approximately 200 processes. The whole program helped us increase our efficiency by reducing manual processes and physical paper forms. Furthermore, we have improved client satisfaction through a significant reduction of transaction processing times.

Bank for the Next Generation

While we are always mindful of the needs of all clients, we particularly aim to support the next generation in Switzerland in achieving their ambitions. Supertrends such as an aging population are expected to fundamentally change our country in coming years and will open opportunities for us to make a difference to our clients across generations. Developing our own young talents in their careers with various programs will complement this process and is part of our long-term commitment to the next generation in Switzerland.

We successfully launched Viva Kids in 2017, a new offering dedicated to our youngest clients. With over 25,000 clients enrolled since its inception, we have exceeded our ambitious expectations. Viva Kids is designed to help parents in the financial education of their children and we believe it will be an important contributor for our future client base.

Awards and market share momentum

Credit Suisse was highly placed in a number of key industry awards in 2018, including:

- Best Bank in Switzerland – *Euromoney Awards for Excellence 2018*
- Best Bank for Wealth Management in Western Europe – *Euromoney Awards for Excellence 2018*
- Best Investment Bank in Switzerland – *Euromoney Awards for Excellence 2018*
- Bank of the Year in Switzerland – *The Banker*
- Best Trade Finance Bank in Switzerland – *Global Finance*

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International Wealth Management

Business profile

In International Wealth Management, we cater to the needs of our private, corporate and institutional clients by offering expert advice and a broad range of financial solutions.

Our **Private Banking** business provides comprehensive advisory services and tailored investment and financing solutions to wealthy private clients and external asset managers in Europe, the Middle East, Africa and Latin America. We serve our clients through 1,110 relationship managers in 43 cities in 25 countries, utilizing comprehensive access to the broad spectrum of Credit Suisse's global resources and capabilities as well as a wide range of proprietary and third-party products and services.

Our **Asset Management** business offers investment solutions and services globally to a broad range of clients, including pension funds, governments, foundations and endowments, corporations and individuals, along with our private banking businesses. Our asset management capabilities span across a diversified range of asset classes, with a focus on traditional and alternative strategies.

Key data – International Wealth Management

			in / end of
	2018	2017	2016
Key data			
Net revenues (CHF million)	5,414	5,111	4,698
Income before taxes (CHF million)	1,705	1,351	1,121
Assets under management (CHF billion)			
– Private Banking	357.5	366.9	323.2
– Asset Management	388.7	385.6	321.6
Number of employees	10,210	10,250	10,300

Business environment

The private banking industry continues to benefit from attractive growth prospects in the European and emerging markets covered by International Wealth Management, where private banking assets are expected to grow by approximately 5% annually through 2022. Regionally, private banking assets are expected to grow by approximately 7% in Russia and Central & Eastern Europe, by approximately 8% in the Middle East & Africa and by approximately 6% in Latin America. This growth is expected to be fueled by an increase in population, entrepreneurial wealth creation and technological advancements. Although wealth is expected to grow at a slower pace in Europe (by approximately 3% annually), this region continues to be of crucial importance, holding around 20% of the world's wealth. In addition, it is expected that demographic developments relating to an aging population, such as funding pressure in the public pension systems and a transfer of wealth to the next generation, will present important opportunities in the European private banking markets.

The asset management industry continues to evolve and grow with positive support from increasing global wealth. At the same time, managers face a number of challenges, including regulatory complexities and revenue and margin compression. The continued rise of passive and low-fee products reflects ongoing fee sensitivity from investors and although fees for alternative strategies have been more resilient, market pressure has led to a need for more innovative products. In this environment, managers must demonstrate differentiating capabilities including not only strong investment performance, but also other value-add capabilities such as risk management and controls, compliance, client reporting, and data security.

For most of 2018 the wealth and asset management industry faced continued uncertainties, in particular in relation to monetary policy tightening and political uncertainties around the anticipated withdrawal of the UK from the European Union. In addition, investors were confronted with a number of unexpected challenges as the US took a more conservative stance on trade relationships and the market generally experienced high volatility as well as increasingly challenging conditions towards the end of the year. While facing structural pressure from industry-specific regulatory changes, the sector saw the continued pursuit of new opportunities and efficiencies arising from digital technology advancements and front-to-back process improvements.

Business strategy

Our private banking and asset management businesses are among the industry's leaders by size and reputation in our target markets and regions. International Wealth Management continues to contribute significantly to Credit Suisse's strategic and financial ambitions. The following three strategic priorities guide our decisions:

Deliver client value

We focus on deploying solutions and products that are tailored to our clients' needs, holistically advising them on their assets and liabilities. We are leveraging our investment strategy and research capabilities, including the Credit Suisse House View, as part of our approach to further optimize the risk/return profiles of our clients' investment portfolios. Our Asset Management business continues to strengthen its partnership with our wealth management businesses to provide customized products and solutions to our clients. We are addressing our clients' sophisticated financing needs by broadening our lending services and leveraging additional resources.

Enhance client proximity

Our focus on enhancing client proximity is intended to capture market share, which we are facilitating by hiring predominantly experienced relationship managers. In addition, we are strengthening and adapting our footprint with technology investments in our key hubs, while selectively investing in onshore locations in markets with attractive growth prospects. To facilitate collaboration and improve the breadth and depth of solutions offered to our targeted strategic UHNWI and entrepreneur clients, we operate a strategic clients business, consisting of senior coverage officers, who are fully embedded in our client coverage organization and highly connected across the Group. Our efforts to enhance client proximity are supported by a regionally empowered business model that aids the acceleration of decision-making and empowers local market management to steer their respective businesses.

Increase client time

We are capturing growth in the lower wealth band client segment by developing a digitally-enabled service model and providing focused coverage and a targeted offering on a multi-channel service platform. We are making additional organizational changes aimed at simplifying structures and are making important investments in the redesign of certain processes, technology and automation efforts aimed at shortening the time-to-market of products and solutions and reducing our relationship managers' administrative tasks, so that they can spend more time with our clients. Finally, we continue to actively manage risk and focus on ensuring compliant business conduct.

Awards and market share momentum

Credit Suisse received a number of key industry awards in 2018, including:

- Best Bank for Wealth Management in Western Europe – *Euromoney Awards for Excellence 2018*
- Best Bank for Wealth Management in Central & Eastern Europe – *Euromoney Awards for Excellence 2018*
- Best Bank for Wealth Management in the Middle East – *Euromoney Awards for Excellence 2018*
- Best Bank for Wealth Management in Latin America – *Euromoney Awards for Excellence 2018*
- Best Private Bank in Russia (sixth consecutive year) and Best Private Bank in the Middle East – Global Private Banking Awards 2018 – *PWM / The Banker*
- Outstanding Private Bank in Eastern Europe and in Western Europe – *Private Banker International Europe 2018*
- Best Private Bank in the Middle East and Best Private Bank Globally for Family Office Services – *Euromoney Private Banking Survey 2019*
- Collateralized Loan Obligation (CLO) Manager of the Year – *Creditflux Manager Awards*
- Best Asset Management Services in Latin America – *Euromoney*

Asia Pacific

Business profile

In the Asia Pacific division, we manage an integrated business to deliver a broad range of advisory services and solutions that meet the private wealth and business needs of our clients. We report our financial performance along two businesses: Wealth Management & Connected, which reflects our activities in private banking, underwriting and advisory and financing; and Markets, which represents our equities and fixed income sales and trading businesses as well as activities that support our wealth management strategy.

Within **Wealth Management & Connected**, we focus on an advisory-led model to deliver holistic solutions to our clients, which primarily include UHNWI, entrepreneurs and corporate clients. Our Private Banking business offers a comprehensive suite of wealth management financial products and solutions. Our underwriting and advisory business provides advisory services related to debt and equity underwriting of public offerings and private placements as well as mergers and acquisitions. Our financing business provides tailored lending solutions. We collaborate closely with our Markets business and with the Group's other businesses to deliver the full breadth of Credit Suisse capabilities to our clients.

Within **Markets**, our equities and fixed income franchises provide a broad range of services, including sales and trading, prime brokerage and investment research to our clients, which include entrepreneurs, corporations, institutional investors, financial institutions and sovereigns. The business collaborates closely with Global Markets to meet the needs of global institutional clients and with the Group's wealth management businesses.

Key data – Asia Pacific

	in / end of		
	2018	2017	2016

Key data			
Net revenues (CHF million)	3,393	3,504	3,597
Income before taxes (CHF million)	664	729	725
Assets under management (CHF billion)			
– Private Banking	201.7	196.8	166.9
Number of employees	7,440	7,230	6,980

Business environment

The fundamentals underpinning long-term, entrepreneur-led wealth creation and growth in business activities for the Asia Pacific region continue to remain positive. According to Credit Suisse Research Institute's Global Wealth Report 2018, in the 12 months to mid-2018, Asia Pacific represented the largest wealth region, with China having the second largest household wealth behind the US. An increase in wealth held by UHNWIs and HNWIs is expected to result in larger capital pools for investment and enhanced opportunities for entrepreneur-led activity, notwithstanding short-term market cyclicality and pressures.

Despite positive long term dynamics, the banking environment in Asia Pacific grew increasingly challenging during the course of 2018 as trade tensions and geopolitical developments led to higher market volatility, generally cautious investor sentiment and lower risk appetite. As a result, asset prices and client transaction activities contracted, particularly in the second half of the year.

Business strategy

Our business strategy remains steadfast despite short term market cyclicality and pressures and is centered on the growth of wealth and financial markets in Asia, as well as on our ambition to be "The Bank for Entrepreneurs in Asia Pacific". Our divisional model and integrated delivery are key differentiators that support our client-centric strategy. Our consistent focus on maintaining a diversified footprint and leading market positions has been critical to meet our clients' needs, attract strong talent and foster a partnership culture that can deliver attractive returns and growth with disciplined risk management.

Despite challenging market conditions during 2018, our business demonstrated resilient performance, supported by strong net new asset generation, higher recurring revenues and a culture of collaboration. Our diversified platform across a mix of clients, countries and products is essential to effectively and sustainably compete in a region as dynamic as Asia Pacific, with its variety of economic, business and client characteristics.

Looking ahead, our strategic focus continues to be on deepening key client relationships, further growing our recurring revenues, maintaining our market leading franchises across Asia Pacific and continuing to enhance our productivity and risk controls.

Significant transactions

We executed a number of significant transactions in 2018, reflecting the diversity and strength of our franchise. Noteworthy transactions include:

In Greater China, we advised CVC Capital Partners on the sale of Linxens to Tsinghua Unigroup Ltd. (financial services) and advised Tsinghua Unigroup Ltd. on bridge financing for its acquisition of Linxens (technology). We also advised on the US IPO of iQiyi, Inc. (online entertainment), a senior unsecured bond offering for S.F. Holding Co., Ltd. (logistics) and convertible bond offerings for China Conch Venture Holdings Limited (energy) and China Evergrande Group (real estate).

In South East Asia, we advised Equis Pte. Ltd. on its sale to Global Infrastructure Partners (energy), Sasseur REIT on its Singapore IPO (real estate), Temasek Holdings Private, Ltd. on a block placement of Celltrion Inc shares (biopharmaceuticals), Digital Telecommunications Infrastructure Fund on a rights offering and primary placement (telecommunications), and United Overseas Bank Limited and Oversea-Chinese Banking Corporation Limited on their respective notes offerings (financial services). We also advised Vinhomes Joint Stock Company on its equity raise, initial equity offering and strategic investment by GIC Private Limited (real estate), Vinfast Trading and Production LLC on a syndicated term loan as well as Export Credit Agency-backed financing (automotive) and Vingroup JSC on a private placement of convertible dividend preference shares to Korea's Hanwha Group (conglomerate).

Elsewhere, in Korea, we advised a consortium including SK hynix Inc. on the acquisition of Toshiba Corporation's memory business (technology) and LG Chem, Ltd. on its dual currency convertible bond offering (chemicals); in Japan, we advised a consortium controlled by The Baupost Group LLC. on its acquisition of shares in Westinghouse Electric Company LLC from Toshiba Corporation (financial services); in India, we advised HDFC Bank Limited on a domestic and US equity offering (financial services) as well as Volcan Investments Limited on a cash offer for Vedanta Resources Plc and associated financing (metals and mining); in Australia, we advised on the sale of Rio Tinto's Australian coal business (mining) and on Beach Energy Limited's acquisition of Lattice Energy Limited (energy).

Awards and market share momentum

We were highly placed in a number of key industry awards in 2018, including:

Best Private Banking Services Overall Asia – *Euromoney Private Banking and Wealth Management Survey 2019*
Best Investment Bank, Asia – *Euromoney*
Derivatives House of the Year, Asia, ex-Japan – *AsiaRisk*
High-Yield Bond House of the Year, Asia Pacific – *IFR Asia*
Structured Equity House of the Year, Asia Pacific – *IFR Asia, IFR Global*
Best Private Bank, UHNW– *Asian Private Banker*

Best Private Bank, Digital Innovation – *Asian Private Banker*

Top three Private Banks by Assets under Management in Asia, ex-China Onshore – *Asian Private Banker*

Top three in Investment Banking Revenues and Share of Wallet in Asia Pacific, ex-Japan and ex-China Onshore – *Dealogic*

Global Markets

Business profile

Global Markets provides a broad range of financial products and services to client-driven businesses and also supports the Group's private banking, Investment Banking & Capital Markets and Asia Pacific businesses and their clients. Our suite of products and services includes global securities sales, trading and execution, prime brokerage and comprehensive investment research. Our clients include financial institutions, corporations, governments, institutional investors, such as pension funds and hedge funds, and private individuals around the world. We deliver our global markets capabilities through regional and local teams based in both major developed and emerging market centers. Our integrated business model enables us to gain a deeper understanding of our clients and deliver creative, high-value, customized solutions based on expertise from across Credit Suisse.

Key data – Global Markets

			in / end of
	2018	2017	2016
Key data			
Net revenues (CHF million)	4,980	5,551	5,497
Income before taxes (CHF million)	154	450	48
Number of employees	11,350	11,740	11,530

Business environment

In 2018, operating conditions were mixed across our businesses. During the year, we experienced higher volatility compared to low levels in 2017, driven by macroeconomic and geopolitical uncertainties. Market conditions were more favorable in 2018 for equity trading, particularly in equity derivatives, as a return of volatility and higher volumes resulted in increased client activity. Credit market conditions were challenging compared to the prior year, characterized by rising interest rates, significant widening of credit spreads and higher volatility, which led to lower client activity, particularly in our securitized products and credit trading and underwriting businesses. In addition, our leveraged finance and investment grade underwriting businesses declined in 2018, reflecting lower issuance activity.

Business strategy

In 2018, we successfully completed our three-year Credit Suisse Group restructuring, creating a more cost efficient and capital light business with a reduced risk profile. We made consistent progress towards our goals of reducing earnings volatility and providing a differentiated platform to our wealth management and institutional clients. While the revenue environment was challenging during the year, we reduced operating expenses significantly compared to 2017 as a result of our continued cost discipline by eliminating duplication across functions and optimizing our New York and London footprint. As a result, we achieved our end-2018 ambition of less than USD 4.8 billion in operating expenses, on an adjusted basis. As of the end of 2018, we also operated under our thresholds of USD 60 billion in risk-weighted assets and USD 290 billion in leverage exposure.

During the year we rationalized part of our macro and emerging markets businesses, which allowed us to continue to invest in our International Trading Solutions (ITS) and equities platforms, as we pivot towards supporting our wealth management clients. In ITS, we began to see the benefits from our investments in the platform as evidenced by an increase in ITS revenues compared to 2017, reflecting improved collaboration. In addition, we maintained strong positions in our credit businesses, which generate high returns and drive profits for the Global Markets division.

Looking ahead, the division continues to focus on further increasing cross-divisional collaboration to drive revenue growth with our core institutional, corporate and wealth management clients, increasing operating leverage with ongoing cost controls and attracting top talent. In addition, we are investing in key talent across the franchise and will remain focused on defending our leading market positions across equities and fixed income products. With regard to costs, we will continue to focus on productivity cost savings, including increasing efficiencies from consolidating redundant platforms and eliminating duplication across functions. We believe that the combination of increased revenues and greater cost controls have the potential to help us support the overall Group return on tangible equity attributable to shareholders target of 10%-11% by year-end 2019.

Investment Banking & Capital Markets

Business profile

The Investment Banking & Capital Markets division offers a broad range of investment banking products and services which include advisory services related to M&A, divestitures, takeover defense strategies, business restructurings and spin-offs, as well as debt and equity underwriting of public offerings and private placements. We also offer derivative transactions related to these activities. Our clients include leading corporations, financial institutions, financial sponsors, UHNWI and sovereign clients.

We deliver our investment banking capabilities through regional and local teams based in both major developed and emerging market centers. Our integrated business model enables us to deliver high value, customized solutions that leverage the expertise offered across Credit Suisse and that help our clients unlock capital and value in order to achieve their strategic goals.

Key data – Investment Banking & Capital Markets

			in / end of
	2018	2017	2016
Key data			
Net revenues (CHF million)	2,177	2,139	1,972
Income before taxes (CHF million)	344	369	261
Number of employees	3,100	3,190	3,090

Business environment

Operating conditions in 2018 were challenging compared to 2017, characterized by geopolitical and macro-economic uncertainties. Persistent geopolitical tensions surrounding global trade and negotiations related to the withdrawal of the UK from the EU had a considerable impact on financial markets. Capital markets slowed down with volatility fueled by an equity markets correction. The underwriting activity across both equity and debt products declined with the industry-wide fee pool down 11% compared to 2017. In contrast, global M&A activity was strong in 2018 with announced volumes up 19% compared to 2017, driven by mega deals across many sectors.

Business strategy

Our strategy focuses on leveraging our global structuring and execution expertise to develop innovative financing and advisory solutions for our clients. Our divisional strategy is designed to generate sustainable, profitable growth and continue delivering returns in excess of our cost of capital. Our key strategic priorities include: achieving a balanced product mix, optimizing the client coverage model and using our global platform to meet our clients' needs for cross-border expertise in developed and emerging markets.

A key element of our strategy is rebalancing our product mix to generate stronger results in M&A advisory and equity underwriting, while maintaining our leading leveraged finance franchise. We expect that refocusing our efforts on these products will not only allow us to better support our clients' strategic goals, but will also contribute to a revenue mix that is more diversified and less volatile through the market cycle.

We continue to optimize our client strategy in order to deliver efficient and effective client coverage. Our strategic objective is to align, and selectively invest in, our coverage and capital resources with the largest growth opportunities and where our franchise is well-positioned. We have made notable progress in the execution of our targeted plans for investment grade corporates, non-investment grade corporates and financial sponsors.

We will continue to leverage Investment Banking & Capital Markets' global connectivity with our other divisions and its platform to drive opportunities for the Group.

Significant transactions

We executed a number of noteworthy transactions in 2018, reflecting the diversity of our franchise.

In M&A, we advised on a number of transformational transactions announced throughout the year, including Dr Pepper Snapple Group's sale to Keurig Green Mountain, Inc. (consumer), BMC Software, Inc.'s sale to KKR & Co. Inc. (technology software), Dominion Energy, Inc.'s acquisition of SCANA Corporation (power), Pinnacle Foods Inc.'s sale to Conagra Brands, Inc. (consumer), Praxair, Inc.'s divestiture of its European assets to Taiyo Nippon Sanso Corporation (chemicals), UBM plc's sale to Informa PLC (media), SS&C Technologies, Inc.'s acquisition of DST Systems, Inc. (technology services), Meridian Health Plan, Inc.'s sale to WellCare Health Plans, Inc. (healthcare services), Brookfield Business Partners L.P.'s acquisition of Johnson Controls International Plc's power solutions

business (industrials) and Encana Corporation's acquisition of Newfield Exploration Company (oil & gas).

In equity capital markets, we executed rights offerings for Bayer AG (life sciences), Banca Piccolo Credito Valtellinese SpA (banks), ARYZTA AG (food & beverage), IPOs for GrafTech International Ltd. (metals/mining), Silver Run Acquisition Corporation II (exploration & production), Grupo Aeroportuario de la Ciudad de México S.A. de C.V. (transportation & logistics), Vista Oil & Gas S.A.B de C.V. (exploration & production), Cactus, Inc. (field equipment & services), Falcon Minerals Corporation (exploration & production), Dufry AG (retail), and follow-ons for SS&C Technologies Holdings, Inc. (technology), International Game Technology (media) and Advance Publications, Inc. (media).

In debt capital markets, we arranged key financings for a diverse set of clients including Bayer AG (life sciences), Campbell Soup Company (food & beverage), DowDuPont Inc. (chemicals), Comcast Corporation (media), Union Pacific Corporation (transportation & logistics), NXP Semiconductors N.V. (semiconductors), AT&T Inc. (telecom), Rabobank Nederland (banks), Atlantia SpA (transportation & logistics), Société Générale Group (banks) and Progressive Corporation (insurance).

Strategic Resolution Unit

Business profile

Beginning in 2019, the Strategic Resolution Unit has ceased to exist as a separate division of the Group. For further information, refer to the Development of the Strategic Resolution Unit section below.

The Strategic Resolution Unit was established to facilitate the effective and rapid wind-down of capital usage and reduce the drag on the Group pre-tax income results through the reduction of costs. The Strategic Resolution Unit included remaining portfolios from former non-strategic units and transfers of additional exposures from the business divisions.

Key data – Strategic Resolution Unit

			in / end of
	2018	2017	2016
Key data			
Net revenues (CHF million)	(708)	(886)	(1,271)
Income/(loss) before taxes (CHF million)	(1,381)	(2,135)	(5,759)
Number of employees	1,320	1,530	1,830

Composition

Our Strategic Resolution Unit contained specific wind-down activities and positions. For reporting purposes, the Strategic Resolution Unit was split into the following categories: restructuring of select onshore businesses which contained the onshore repositioning in select Western European countries and the US; legacy cross-border and small markets businesses which included the repositioning of cross-border businesses; legacy asset management positions which included portfolio divestitures and discontinued operations; legacy investment banking portfolios; and legacy funding costs relating to non-Basel III compliant debt instruments.

Non-controlling interests without significant economic interest were reflected in the Strategic Resolution Unit and included revenues and expenses from the consolidation of certain private equity funds and other entities in which we had non-controlling interests without significant economic interest.

Development of the Strategic Resolution Unit

As part of the Group’s strategy announced in the fourth quarter of 2015, we formed the Strategic Resolution Unit to oversee the effective wind-down of businesses and positions that did not fit our strategic direction in the most efficient manner possible. At that time the Strategic Resolution Unit was created to facilitate the immediate right-sizing of our business divisions from a capital perspective and included remaining portfolios from our former non-strategic units plus additional transfers from the business divisions. The expectation at that time was that the Strategic Resolution Unit’s risk-weighted assets and leverage exposure would be reduced by approximately 80% by 2020, excluding operational risk. In March 2016 we updated our expectation of the timing of the 80% reduction of the division’s risk-weighted assets and leverage exposure to year-end 2019, excluding operational risk. In the first quarter of 2017, we announced an acceleration of the release of capital from the Strategic Resolution Unit and a plan to complete the wind-down of the division by the end of 2018.

At our Investor Day in 2017 we announced that we estimated adjusted operating expenses in the Strategic Resolution Unit would amount to approximately USD 500 million and USD 250 million in 2018 and 2019, respectively. We further announced our adjusted pre-tax loss targets of approximately USD 1,400 million and USD 500 million in 2018 and 2019, respectively. The allocation of costs to the Strategic Resolution Unit was conducted pursuant to a Group-wide allocation methodology, i.e., the Strategic Resolution Unit was subject to the same cost allocation methodology as the strategic divisions; however reductions in service usage during the course of the wind-down of the division reduced allocated costs. We targeted a reduction of the Strategic Resolution Unit’s risk-weighted assets (excluding operational risk) to USD 11 billion and leverage exposure to USD 40 billion by year-end 2018.

As of the end of 2018, risk-weighted assets (excluding operational risk) in the Strategic Resolution Unit had been reduced to USD 7 billion and leverage exposure had been reduced to USD 30 billion. Reported pre-tax loss had been reduced to CHF 1,381 million and adjusted pre-tax loss had been reduced to CHF 1,240 million as of the end of 2018.

> Adjusted results are non-GAAP financial measures. Refer to “Reconciliation of adjusted results” in II – Operating and financial review – Credit Suisse for further information.

Beginning in 2019, the Strategic Resolution Unit has ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and will be separately disclosed within the Corporate Center. Certain activities such as legacy funding costs and noncontrolling interests without significant economic interest, which were previously part of the Strategic Resolution Unit, have been moved into the Corporate Center and will not be reflected in the Asset Resolution Unit. At our Investor Day in 2018 we confirmed our estimate that the Asset Resolution Unit would have an adjusted pre-tax loss of approximately USD 500 million in 2019.

> Refer to “Financial goals” in Strategy – Credit Suisse strategy for further information on the reconciliation of our estimates and targets to the nearest GAAP measures.

On occasion, the reduction of exposures in the Strategic Resolution Unit involved the maturation of lending facilities or other transactions that wholly or partially may have been renewed or extended by our strategic business divisions, such as Global Markets or International Wealth Management. Similarly, there may have been occasions where strategic business divisions would enter into new transactions with counterparties resulting in exposures that may have had similar characteristics to those recorded in the Strategic Resolution Unit. This was aligned with the Group’s risk appetite and that of the relevant strategic divisions.

In 2017, we amended and enhanced our risk appetite framework in an effort to provide additional governance and controls to ensure all new business activities are scrutinized to distinguish between those types of business exposures held in the Strategic Resolution Unit that will be allowed for execution in our strategic divisions and those that will be prohibited or for which we have limited risk appetite.
In the first quarter of 2018, after a business reassessment, the Executive Board and the Audit Committee approved the transfer of twelve counterparty relationships and associated financing transactions from the Strategic Resolution Unit to the Global Markets and Investment Banking & Capital Markets divisions. The execution of these transfers occurred in the first quarter of 2018. The impact of these transfers on risk-weighted assets and leverage exposure for the Strategic Resolution Unit was a decline of approximately USD 0.8 billion and USD 1.3 billion, respectively. Risk-weighted assets of USD 0.7 billion and leverage exposure of USD 1.2 billion were transferred to Global Markets and risk-weighted assets of USD 0.1 billion and leverage exposure of USD 0.1 billion were transferred to Investment Banking & Capital Markets.
A reassessment in the first quarter of 2018 of certain assets under management and assets under custody recorded in the Strategic Resolution Unit resulted in a change in the estimate of the expected outflows in connection with the tax regularization of client assets. The estimate of the expected outflows declined by approximately CHF 1.9 billion for assets under management, and CHF 1.1 billion, CHF 0.6 billion and CHF 0.2 billion of such assets under management were transferred to Asia Pacific, International Wealth Management and Swiss Universal Bank, respectively. In addition, CHF 0.6 billion of assets under custody were transferred to International Wealth Management. The transfers were in line with the original transfer of such assets to the Strategic Resolution Unit and as such were reflected as a structural effect in our asset under management disclosures, with no impact to net new assets.
In the second quarter of 2018, after a business reassessment in connection with our planning relating to the withdrawal of the UK from the EU, the Audit Committee approved the transfer of assets and liabilities relating to Credit Suisse (Deutschland) Aktiengesellschaft from the Strategic Resolution Unit to the Investment Banking & Capital Markets division. The execution of this transfer occurred in the second quarter of 2018. The impact of the transfer on risk-weighted assets for the Strategic Resolution Unit was a decline of approximately USD 0.2 billion.
In the fourth quarter of 2018, a reassessment of certain assets under management and assets under custody recorded in the Strategic Resolution Unit resulted in a change in the estimate of the expected outflows in connection with the tax regularization of client assets. The estimate of the expected outflows declined by approximately CHF 1.9 billion for assets under management, and CHF 1.5 billion and CHF 0.4 billion of such assets under management were transferred to International Wealth Management and Swiss Universal Bank, respectively. The transfers were in line with the original transfer of such assets to the Strategic Resolution Unit and as such were reflected as a structural effect in our asset under management disclosures, with no impact to net new assets. Additionally, the impact of these transfers on leverage exposure for the Strategic Resolution Unit was a decline of approximately USD 0.1 billion, transferred to International Wealth Management. In addition, after a business reassessment, the Audit Committee approved a transfer of 11 third-party fund interests from the Strategic Resolution Unit to International Wealth Management.
> Refer to “Update to the risk appetite framework” in III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk appetite framework for further information.

Regulation and supervision

Overview

Our operations are regulated by authorities in each of the jurisdictions in which we have offices, branches and subsidiaries.

Central banks and other bank regulators, financial services agencies, securities agencies and exchanges and self-regulatory organizations are among the regulatory authorities that oversee our businesses. There is coordination among many of our regulators, in particular among our primary regulators in Switzerland, the US, the EU and the UK as well as in the Asia Pacific region.

The supervisory and regulatory regimes of the countries in which we operate determine to some degree our ability to expand into new markets, the services and products that we are able to offer in those markets and how we structure specific operations.

Governments and regulatory authorities around the world have responded to the challenging market conditions beginning in 2007 by proposing and enacting numerous reforms of the regulatory framework for financial services firms such as the Group. In particular, a number of reforms have been proposed and enacted by regulators, including our primary regulators, which could potentially have a material effect on our business. These regulatory developments could result in additional costs or limit or restrict the way we conduct our business. Although we expect regulatory-related costs and capital requirements for all major financial services firms (including the Group) to continue to be high, we cannot predict the likely impact of proposed regulations on our businesses or results. We believe, however, that overall we are well positioned for regulatory reform, as we have reduced risk and maintained strong capital, funding and liquidity.

> Refer to “Risk factors” for further information on risks that may arise relating to regulation.

Recent regulatory developments and proposals

Some of the most significant regulations proposed or enacted during 2018 and early 2019 are discussed below.

Global initiatives

Certain regulatory developments and standards are being coordinated on a global basis and implemented under local law, such as those discussed below.

Total Loss-Absorbing Capacity

On June 13, 2018, the Bank of England published its final statement of policy on its approach to setting minimum requirements for own funds and eligible liabilities (MREL), including its approach on setting internal MREL. Under the statement of policy, internal MREL requirements for UK material subsidiaries of non-UK global systemically important banks (G-SIBs), such as Credit Suisse, will be scaled between 75% and 90% of external MREL based on factors including the resolution strategy of the group and the home country’s approach to internal total loss-absorbing capacity calibration. Interim internal MREL requirements came into effect beginning January 1, 2019, and their full implementation will be phased in through January 1, 2022.

ISDA Resolution Stay Protocols

On July 31, 2018, the International Swaps and Derivatives Association, Inc. (ISDA) published an ISDA 2018 US Resolution Stay Protocol (the ISDA US Protocol) to facilitate compliance with the final rules (the QFC Stay Rules) promulgated by the US banking regulators in 2017 requiring, among other things, the US operations of non-US G-SIBs to include provisions in qualified financial contracts (QFCs) that limit the ability of counterparties to exercise “default rights” arising in the context of a resolution of the G-SIB and ensure that actions taken under US resolution regimes are enforceable on a cross-border basis. Credit Suisse’s US operations are subject to the QFC Stay Rules and are in the process of having all of their covered entities adhere to the ISDA US Protocol to amend their QFCs with adhering counterparties to comply with the QFC Stay Rules.

Industry-led developments

In 2017, public and private sector representatives from the foreign exchange committees of 16 international foreign exchange (FX) trading centers agreed to form a Global Foreign Exchange Committee and publish the FX Global Code, which sets out global principles of good practice, including ethics, governance, execution, information sharing, risk management and compliance, and confirmation and settlement processes. Credit Suisse signed the FX Global Code’s Statement of Commitment on a global basis on May 21, 2018 and supports the adoption of the FX Global Code by FX market participants.

Switzerland

Credit Suisse is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks, which include capital, liquidity, leverage and large exposure requirements and rules for emergency plans designed to maintain systemically relevant functions in the event of threatened insolvency. Certain requirements under the legislation, including those regarding capital, were phased in through year-end 2018.

> Refer to “Liquidity and funding management” and “Capital management” in III – Treasury, Risk, Balance sheet and Off-balance sheet for information regarding our current regulatory framework and expected changes to this framework affecting capital and liquidity standards.

Supervision

On June 15, 2018, the Swiss Parliament adopted the Federal Financial Services Act (FFSA) and the Financial Institutions Act (FinIA). The FFSA regulates the provision of financial services in Switzerland, including to Swiss clients from abroad on a cross-border basis, as well as the offering of financial instruments in or into, and the admission to trading of financial instruments in, Switzerland. The FinIA governs the license requirements and provides for a differentiated supervisory regime for portfolio managers, trustees,

managers of collective assets, fund management companies and investment firms (so-called financial institutions) as well as for Swiss branches and representative offices of foreign financial institutions. The FinIA introduces prudential supervision of certain categories of asset managers that have previously not been subject to supervision by special supervisory bodies. The FFSA and FinIA are expected to enter into effect on January 1, 2020. The implementing ordinances were published on October 24, 2018 for consultation until February 6, 2019.
On July 18, 2018, FINMA published its revised Anti-Money Laundering Ordinance (AMLO-FINMA). For Swiss financial intermediaries with branches or group companies outside of Switzerland, the revised AMLO-FINMA sets out in detail the requirements for global monitoring of money laundering and terrorist financing risks, in particular legal and reputational risks. The revised AMLO-FINMA also specifies the risk management measures to be put in place if domiciliary companies or complex structures are used or if there are links with high-risk countries. The revised AMLO-FINMA will enter into effect on January 1, 2020.
In September 2018, FINMA announced the conclusion of two enforcement procedures against Credit Suisse AG. The first procedure related to past interactions with the Fédération Internationale de Football Association (FIFA), the Brazilian oil corporation Petróleo Brasileiro S.A. (Petrobras) and the Venezuelan oil corporation Petróleos de Venezuela, S.A. (PDVSA). The second procedure related to a significant business relationship with a politically exposed person. FINMA identified deficiencies in anti-money laundering processes for both of these procedures as well as shortcomings in Credit Suisse AG's control mechanisms and risk management for the second procedure. The Bank has cooperated with FINMA throughout this process and FINMA acknowledged the numerous proactive measures the Bank has adopted since the end of 2015 to strengthen its compliance procedures in general as well as specific efforts to combat money laundering. FINMA recommended additional measures to complement these actions and to accelerate the implementation of the steps already initiated by the Bank and will commission an independent third party to review the implementation and effectiveness of these measures.
Tax
On September 28, 2018, the Tax Proposal 17 or the Federal Act on Tax Reform and AHV Financing (TRAF) was adopted by the Swiss Parliament. The TRAF replaces the Corporate Tax Reform Act III (CTR III), which was rejected in a public vote on February 12, 2017. Like the CTR III, the TRAF provides for an abolishment of the cantonal tax privileges for holding companies, mixed companies and domicile companies. The TRAF includes, among other measures, a patent box that is mandatory for all cantons but narrower than the one contained in CTR III, an optional surplus research and development allowance of 50%, a notional interest deduction and a step-up in basis. Subject to certain exemptions, the TRAF introduces a 50:50% distribution rule according to which withholding tax-free (and for Swiss resident private individuals, income tax-free) distributions out of capital contribution reserves made by companies listed in Switzerland shall only benefit from the tax-free treatment if and to the extent the company distributes a taxable dividend in the same amount (provided that the company has distributable profits and retained earnings). In January 2019, the optional referendum on TRAF was called, and the popular vote is scheduled for May 19, 2019. Unless the TRAF is rejected in the referendum, its main provisions will enter into force on January 1, 2020, with some provisions having entered into force already on January 1, 2019, including the provisions on step-up. In connection with the tax reform, several cantons had announced to cut their statutory corporate income tax rates to approximately 12%, subject to, and simultaneously with, the effectiveness of the reform.
On December 14, 2018, the Swiss Parliament adopted the bill on the Federal Act on Calculation of the Participation Deduction for "Too Big to Fail" Instruments. The bill is subject to an optional referendum, which may be called until April 7, 2019. In March 2019, the Federal Council determined that, if no referendum is called, the act will enter into force retroactively as of January 1, 2019. Current legislation requires systemically relevant banks to issue contingent convertible bonds, write-off bonds and bail-in bonds through their top holding company from January 1, 2020 at the latest. Despite the top holding company on-lending the funds internally to direct or indirect subsidiaries, current corporate income tax laws require the top holding company to allocate interest paid under the contingent convertible bonds, write-off bonds or bail-in bonds to the participation exemption for dividends of the top holding company. This reduces the participation exemption for dividends of the top holding company of systemically relevant banks and may lead to materially higher corporate income taxes for such top holding company. This inadvertent consequence of higher corporate income taxes is inconsistent with the "Too Big to Fail" legislation's objective of strengthening the equity capital of systemically relevant banks. If enacted, the proposed legislation will permit systemically relevant banks to carve out interest paid in respect of such instruments for purposes of calculating tax exempt net participation

income and thereby remedy the effect of higher corporate income taxes from higher interest allocations.
US
In July 2010, the US enacted the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), which provides a broad framework for regulatory changes. Although rulemaking in respect of many of the provisions of the Dodd-Frank Act has already taken place, implementation will require further rulemaking by different regulators, including the US Department of the Treasury (US Treasury), the Board of Governors of the Federal Reserve System (Fed), the US Securities and Exchange Commission (SEC), the Office of the Comptroller of the Currency (OCC), the Federal Deposit Insurance Corporation (FDIC), the Commodity Futures Trading Commission (CFTC) and the Financial Stability Oversight Council (FSOC), and uncertainty remains about the details of implementation.

Sanctions

As a result of allegations concerning Russian acts related to Ukraine, Syria, cybersecurity and electoral interference, in 2018 the US Treasury's Office of Foreign Assets Control (OFAC) designated a number of Russian government officials, business people and certain related companies as specially designated nationals (SDNs), which blocks their assets and prohibits dealings within US jurisdiction by both the newly designated SDNs and entities owned 50% or more by one or more blocked persons. US law also authorizes the imposition of other restrictions against non-US entities which, among other activities, engage in significant transactions with or provide material support to such sanctioned persons. OFAC issued new general licenses concurrently with the designations to provide a limited time period to wind down pre-existing contracts and divest or withdraw from business relationships with many of the recently sanctioned persons and entities, but these licenses are temporary. Further sanctions related to Russia or additional Russian persons or entities are possible, and the potential effects of related disruptions may include an adverse impact on our businesses.

Since 2017, OFAC has imposed, and in early 2019 continued to expand, sanctions related to Venezuela that, among other restrictions, block the assets of Venezuela's state-owned oil company and certain government officials, prohibit further dealings with them within US jurisdiction and restrict the ability of US persons to purchase new debt of and certain bonds issued by the government of Venezuela, subject to certain exceptions and licenses. Further sanctions related to Venezuela or Venezuelan entities are possible, and the potential effects of related disruptions may include an adverse impact on our businesses.

Supervision

On May 24, 2018, the US President signed into law the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA). EGRRCPA raises the thresholds at which US enhanced prudential standards promulgated pursuant to the Dodd-Frank Act would apply to large bank holding companies (BHCs) and foreign banking organizations (FBOs) with between USD 50 billion and USD 250 billion in global consolidated assets. Because our global consolidated assets are above USD 250 billion, we do not expect to automatically benefit from the increase in thresholds. EGRRCPA also loosens the restrictions imposed by the so-called "Volcker Rule" on a banking entity sharing a name with a covered fund that it advises, although the name sharing restriction would continue to prevent us from sharing the Credit Suisse name with a covered fund. The Volcker Rule limits the ability of banking entities to sponsor or invest in certain private equity or hedge funds, broadly defined, and to engage in certain types of proprietary trading for their own account.

On June 14, 2018, the Fed issued a final rule establishing single counterparty credit limits (SCCLs) for BHCs with total consolidated assets of USD 250 billion or more, US global systemically important bank holding companies, the US operations of FBOs with global consolidated assets of USD 250 billion or more, and intermediate holding companies (IHCs) with total consolidated assets that equal or exceed USD 50 billion that are subsidiaries of such FBOs. The final rule limits aggregate net credit exposures to any single unaffiliated counterparty based on capital ratios. The final rule includes a regime of substituted compliance with home country rules for the combined US operations of FBOs (including our US IHC and New York Branch) that can certify that the FBO meets, on a consolidated basis, large exposure standards established by their home-country supervisor that are consistent with the large exposures framework established by the Basel Committee on Banking Supervision (BCBS). IHCs, however, including our US IHC, are ineligible for the substituted compliance regime and remain subject to a separate SCCL requirement. Our US IHC will be required to comply by July 1, 2020. If our combined US operations are unable to certify that they can meet the criteria to qualify for the regime of substituted compliance, our combined US operations will be required to comply by January 1, 2020.

Resolution regime

On December 20, 2018, the FDIC and the Fed provided feedback on the July 2018 resolution plans submitted by the four FBOs with large and complex US operations, including us. Our feedback letter did not find any deficiencies in our July 2018 plan and noted meaningful improvements over our July 2015 plan, including reorganizations of our US operations, pre-positioning of total loss-absorbing capacity (TLAC) and liquidity in the US, shared services resiliency and greater operational capabilities. The FDIC and the Fed noted shortcomings in the July 2018 plans of the FBOs, with ours relating to governance mechanisms, liquidity modelling and critical services mapping. A project plan to remediate these shortcomings is due by April 5, 2019. Our next resolution plan is due in July of 2020.

Investment services regulation

On June 21, 2018, the United States Court of Appeals for the Fifth Circuit issued its mandate vacating the US Department of Labor's final rules revising the definition of "fiduciary" for purposes of the US Employee Retirement Income Security Act of 1974, as amended, and US Internal Revenue Code of 1986, as amended, in their entirety. As a result, no revision of our policies, procedures or practices related to the US Department of Labor's vacated rule is necessary.

Tax

On December 22, 2017, the Tax Cuts and Jobs Act was enacted in the US, which revises US corporate income tax law by, among other things, introducing the base erosion and anti-abuse tax (BEAT), effective as of January 1, 2018. It is broadly levied on tax deductions created by certain payments, for example, for interest and services, to affiliated group companies outside the US, in the case where the calculated tax based on a modified taxable income exceeds the amount of ordinary federal corporate income taxes paid. The tax rates applicable for banks are 6% for 2018, 11% for 2019 until 2025 and 13.5% from 2026 onward. On the basis of the current analysis of the BEAT tax regime, following the draft regulations issued by the US Treasury on December 13, 2018, we regard it as more likely than not that the Group will be subject to this regime in 2018. The finalization of

US BEAT regulations is expected to occur in 2019. Prospectively, additional tax regulations of the US tax reform relating to interest deductibility may also impact Credit Suisse.
EU
The EU, the UK and other national European jurisdictions have also proposed and enacted a wide range of prudential, securities and governance regulations to address systemic risk and to further regulate financial institutions, products and markets. These proposals are at various stages of the EU pre-legislative, legislative rule-making and implementation processes, and their final form and cumulative impact remain uncertain.
Investment services regulation
On December 21, 2017, the European Commission decided to recognize the equivalence of the Swiss legal and supervisory framework for trading venues with that of the EU for a temporary period of one year. On December 17, 2018, the European Commission extended the equivalence for six months. The decision allows European securities traders to meet the new Markets in Financial Instruments Regulation (MiFIR) shares trading obligation on Swiss exchanges until June 30, 2019.
Anti-money laundering regulation
On June 19, 2018, the text of the Fifth Money Laundering Directive (MLD5) was published in the Official Journal of the EU. MLD5 entered into force on July 9, 2018 and the laws of the EU member states must comply with the requirements of MLD5 by January 10, 2020. Among other things, MLD5 clarified the requirements for enhanced due diligence measures and countermeasures relating to high-risk third countries and introduced a new obligation for EU member states to establish centralized mechanisms to identify holders and controllers of bank and payment accounts.
Prudential regulation
In November 2016, the European Commission published its legislative proposals for the amendment of the Capital Requirements Regulation (CRR) (through an amending Regulation CRR II), the Capital Requirements Directive IV (CRD IV) (through an amending Directive CRD V) and the EU Bank Recovery and Resolution Directive (BRRD) (through an amending Directive BRRD II). After trialogue negotiations between the EU Commission, Parliament and Council, political agreement on this legislative package was reached in December 2018, and this legislative package is expected to enter into force during the first quarter of 2019. Our EU banks and investment firms will be subject to CRR II, which contains, among other things, proposed reforms to the CRR regarding international prudential standards based on the Basel III standards and provisions relating to, among other things, leverage ratio, market risk, counterparty credit risk and large exposures and implementing the Financial Stability Board's (FSB) TLAC standard. The majority of the CRR II measures will apply beginning in 2021. In addition, Credit Suisse will be expected to comply with the CRD V proposal, which includes a requirement for non-EU groups that are G-SIBs, which have two or more bank or investment firm subsidiaries in the EU, to establish an intermediate parent undertaking in the EU, or two intermediate parent undertakings under certain specific circumstances, by 2023. Similarly, Credit Suisse will be subject to BRRD II, which revises the existing EU regime relating to MREL to align it with the TLAC standard and to introduce, among other things, changes to the contractual recognition of bail-in and a new moratorium power for competent authorities.
Tax
On May 25, 2018, the Council of the European Union adopted an amendment to the Directive on Administrative Cooperation in (direct) taxation in the EU, with respect to mandatory automatic exchange of information in the field of taxation in relation to reportable cross-border arrangements, imposing reporting requirements on intermediaries in relation to certain arrangements. The provisions of the amendment (DAC6) must be implemented into each EU member state's domestic law by the end of 2019, and will apply from July 1, 2020. However, once DAC6 applies, the reporting requirements (where triggered) will capture arrangements where the first step was implemented after June 25, 2018.
UK
UK-EU relationship
On June 23, 2016, voters in the UK voted to leave the EU in a non-binding referendum. On March 16, 2017, the European Union (Notification of Withdrawal) Bill was enacted and on March 29, 2017, the UK government submitted the formal notification under Article 50 of the Lisbon Treaty to the European Council of the intention of the UK to withdraw from the EU. In June 2018, the European Union (Withdrawal) Act 2018 (EUWA) was enacted in connection with the withdrawal of the United Kingdom from the EU. The EUWA, among other things, preserves EU-derived UK

legislation and incorporates directly applicable EU legislation in UK law, as “retained EU law”, on March 29, 2019, and delegates legislative powers to the UK government to prevent, remedy or mitigate any failure of retained EU law to operate effectively, or any other deficiency in retained EU law arising as a result of the UK’s withdrawal from the EU. A withdrawal agreement was negotiated between the EU and UK and finalized on November 14, 2018, which included an agreement on a standstill transition period until December 31, 2020 to further negotiate the future relationship. During the transition period, the UK would continue to implement new EU law that comes into effect and the UK would continue to be treated as part of the EU’s single market in financial services. The UK Parliament has not yet approved the withdrawal agreement between the EU and the UK, and it appears likely that there will be a delay of the UK’s withdrawal from the EU for a period of time beyond March 29, 2019, although it is still possible that the UK could leave the EU without such an agreement in place. To prepare for withdrawal, HM Treasury is using its powers under the EUWA to remedy deficiencies in retained EU law relating to financial services, through statutory instruments. The statutory instruments are not intended to make policy changes, other than to reflect the UK’s new position outside the EU, and to smooth the transition to this situation. HM

Treasury has also delegated powers to the UK's financial services regulators to address deficiencies in the regulators' rulebooks arising as a result of exit, and to the EU Binding Technical Standards that will become part of retained EU law.
Credit Suisse is working to address the implications of the consequences of these changes and to minimize disruption for our clients. Adverse changes to any of these arrangements, and even uncertainty over potential changes during any period of negotiation, could potentially impact our results in the UK or other markets we serve.
Regulatory framework
The principal regulatory structures that apply to our operations are discussed below.
Global initiatives
Total Loss-Absorbing Capacity
On January 1, 2019, the final FSB TLAC standard for G-SIBs became effective, subject to a phase-in until January 1, 2022. The purpose of the standard is to enhance the ability of regulators to recapitalize a G-SIB at the point of non-viability in a manner that minimizes systemic disruption, preserves critical functions and limits the exposure of public sector funds. TLAC-eligible instruments include instruments that count towards satisfying minimum regulatory capital requirements, as well as long-term unsecured debt instruments that have remaining maturities of no less than one year, are subordinated by statute, corporate structure or contract to certain excluded liabilities, including deposits, are held by unaffiliated third parties and meet certain other requirements. Excluding any applicable regulatory capital buffers that are otherwise required, the minimum TLAC requirement is at least 16% of a G-SIB's RWA as of January 1, 2019, and will increase to at least 18% as of January 1, 2022. In addition, the minimum TLAC requirement must be at least 6% of the Basel III leverage ratio denominator as of January 1, 2019, and at least 6.75% as of January 1, 2022. In Switzerland, effective July 1, 2016, the Swiss Federal Council adopted the revised Capital Adequacy Ordinance implementing the FSB's TLAC standard.
> Refer to "Liquidity and funding management" and "Capital management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for information regarding our current regulatory framework and expected changes to this framework affecting capital and liquidity standards.
In the US, the Fed has adopted a final rule that implements the FSB's TLAC standard. The final rule requires, among other things, the US IHCs of non-US G-SIBs, such as Credit Suisse's US IHC, to maintain minimum amounts of "internal" TLAC, a TLAC buffer and long-term debt satisfying certain eligibility criteria, commencing January 1, 2019. The entity designated as Credit Suisse's US IHC is required to issue all TLAC debt instruments to a foreign parent entity (a non-US entity that controls the IHC) or another foreign affiliate that is wholly owned by its foreign parent. The final rules also impose limitations on the types of financial transactions in which the entity designated as Credit Suisse's US IHC can engage.
In the UK, the Bank of England published its statement of policy on its approach to establishing the requirement under the BRRD for certain UK entities, including Credit Suisse International (CSI) and Credit Suisse Securities Europe Limited (CSSEL), to maintain the MREL requirement. Similar to the FSB's TLAC standard, the MREL requirement obliges firms within the scope of the BRRD to maintain a minimum level of own funds and liabilities that can be bailed in. The statement of policy reflects both the TLAC standards and the requirements of the European Banking Authority (EBA)'s Regulatory Technical Standards on MREL. It does not set TLAC requirements in addition to MREL. On June 13, 2018, the Bank of England also published its final statement of policy on its approach to setting MREL, including its approach on setting internal MREL. Under the statement of policy, internal MREL requirements for UK material subsidiaries of non-UK G-SIBs, such as Credit Suisse, will be scaled between 75% and 90% of external MREL based on factors including the resolution strategy of the group and the home country's approach to internal total loss-absorbing capacity calibration. Interim internal MREL requirements came into effect beginning January 1, 2019, and their full implementation will be phased in through January 1, 2022.
ISDA Resolution Stay Protocols
On November 12, 2015, ISDA launched the ISDA 2015 Universal Resolution Stay Protocol (ISDA 2015 Universal Protocol) and Credit Suisse voluntarily adhered to the ISDA 2015 Universal Protocol at the time of its launch. By adhering to the ISDA 2015 Universal Protocol, parties agree to be bound by, or "opt in", to certain existing and forthcoming special resolution regimes to ensure that cross-border derivatives and securities financing transactions are subject to statutory stays on affiliate-linked default and early termination rights in the event a bank counterparty enters into resolution, regardless of its governing law. These stays are intended to facilitate an orderly resolution of a

troubled bank. Statutory resolution regimes have been implemented in several jurisdictions, including Switzerland, the US and the EU. These regimes provide resolution authorities with a broad set of tools and powers to resolve a troubled bank, including the ability to temporarily stay, and under certain circumstances permanently override, the termination rights of counterparties of a bank and its affiliates in the event the bank enters into resolution. The ISDA 2015 Universal Protocol introduces similar stays and overrides in the event that an affiliate of an adhering party becomes subject to proceedings under the US Bankruptcy Code, under which no such stays or overrides currently exist. Although other large banking groups have also adhered to the ISDA 2015 Universal Protocol, it is anticipated that buy-side or end-user counterparties of Credit Suisse will not voluntarily give up early termination rights and will therefore not adhere to the ISDA 2015 Universal Protocol. In order to expand the scope of parties and transactions covered by the ISDA 2015 Universal

Protocol or similar contractual arrangements, the G20 committed to introducing regulations requiring large banking groups to include ISDA 2015 Universal Protocol-like provisions in certain financial contracts when facing counterparties under foreign laws. Certain G20 member nations, including the US, introduced such requirements in 2015, 2016 and 2017.
In Switzerland, the Swiss Federal Council introduced amendments to the Ordinance on Banks and Savings Banks (Banking Ordinance) that require banks, including Credit Suisse, to include terms in certain of their contracts (and in certain contracts entered into by their subsidiaries) that are not governed by Swiss law or that provide for jurisdiction outside of Switzerland that ensure that FINMA's stay powers under the Swiss Federal Act on Banks and Savings Banks of November 8, 1934, as amended (Bank Law), would be enforceable with respect to such contracts. These requirements have been set forth in the Banking Ordinance since January 1, 2016. A partial revision of the Ordinance of FINMA on the Insolvency of Banks and Securities Dealers (FINMA Banking Insolvency Ordinance) entered into effect on April 1, 2017. The rule only affects an exhaustive list of contracts whose continued existence is essential for a bank requiring restructuring. The listed contracts are customary in the financial market and include, in particular, contracts governing the purchase, sale, lending and repurchase of certain underlying securities. Contracts entered into by foreign group entities are only subject to the rule if, among other things, the respective financial contract is guaranteed or otherwise secured by a bank or securities dealer domiciled in Switzerland. Certain contracts, e.g. contracts with individuals as well as for the placement of financial instruments in the market, are excluded. The list of contracts is internationally harmonized and broadly in line with the definition of financial contracts in accordance with the BRRD.
In the UK, the Prudential Regulation Authority (PRA) published final rules in November 2015 requiring UK entities, including CSI and CSSEL, to ensure that their counterparties under a broad range of financial arrangements are subject to the stays on early termination rights under the UK Banking Act that would be applicable upon their resolution. UK entities have been required to comply with these rules from June 1, 2016 for contracts where the counterparty is a credit institution or an investment firm, and from January 1, 2017 in respect of contracts with all other counterparties.
ISDA has developed another protocol, the ISDA Resolution Stay Jurisdictional Modular Protocol to facilitate market-wide compliance with these new requirements by both dealers, such as Credit Suisse, and their counterparties.
In the US, in 2017, the Fed, the FDIC and the OCC each issued final rules designed to improve the resolvability of US headquartered G-SIBs and the US operations of non-US G-SIBs, such as our US operations. These final rules require covered entities to modify their QFCs to obtain agreement of counterparties that (1) their QFCs are subject to the stays on early termination rights under the Orderly Liquidation Authority and the Federal Deposit Insurance Act, which is similar to requirements introduced in other jurisdictions to which we are already subject, and (2) certain affiliate-linked default rights would be limited or overridden if an affiliate of the G-SIB entered proceedings under the US Bankruptcy Code or other insolvency or resolution regimes. Covered QFCs must be conformed to the rules' requirements starting January 1, 2019, with full compliance by January 1, 2020. ISDA has developed the ISDA US Protocol to facilitate compliance with the final rules. Credit Suisse's US operations are in the process of having all of their covered entities adhere to the ISDA US Protocol to amend their QFCs with adhering counterparties to comply with the final rules.
Switzerland
Banking regulation and supervision
Although Credit Suisse Group is not a bank according to the Bank Law and the Banking Ordinance, the Group is required, pursuant to the provisions on consolidated supervision of financial groups and conglomerates of the Bank Law, to comply with certain requirements for banks. Such requirements include capital adequacy, loss-absorbing capacity, solvency and risk concentration on a consolidated basis, and certain reporting obligations. Our banks in Switzerland are regulated by FINMA on a legal entity basis and, if applicable, on a consolidated basis.
Our banks in Switzerland operate under banking licenses granted by FINMA pursuant to the Bank Law and the Banking Ordinance. In addition, certain of these banks hold securities dealer licenses granted by FINMA pursuant to the Swiss Federal Act on Stock Exchanges and Securities Trading (SESTA).
FINMA is the sole bank supervisory authority in Switzerland and is independent from the Swiss National Bank (SNB). Under the Bank Law, FINMA is responsible for the supervision of the Swiss banking system. The SNB is responsible for implementing the government's monetary policy relating to banks and securities dealers and for

ensuring the stability of the financial system. Under the ”Too Big to Fail” legislation, the SNB is also responsible for determining which banks in Switzerland are systemically relevant banks and which functions are systemically relevant in Switzerland. The SNB has identified the Group on a consolidated basis as a systemically relevant bank for the purposes of Swiss law.
Our banks in Switzerland are subject to close and continuous prudential supervision and direct audits by FINMA. Under the Bank Law, our banks are subject to inspection and supervision by an independent auditing firm recognized by FINMA, which is appointed by the bank’s shareholder meeting and required to perform annual audits of the bank’s financial statements and to assess whether the bank is in compliance with laws and regulations, including the Bank Law, the Banking Ordinance and FINMA regulations.
Credit Suisse is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for

systemically important banks, which include capital, liquidity, leverage and large exposure requirements, and rules for emergency plans designed to maintain systemically relevant functions in the event of threatened insolvency.
Our regulatory capital is calculated on the basis of accounting principles generally accepted in the US, with certain adjustments required by, or agreed with, FINMA.
> Refer to “Liquidity and funding management” and “Capital management” in III – Treasury, Risk, Balance sheet and Off-balance sheet for further information regarding our current regulatory framework and expected changes to this framework affecting capital and liquidity standards.
Under Swiss banking law, banks and securities dealers are required to manage risk concentration within specific limits. Aggregated credit exposure to any single counterparty or a group of related counterparties must bear an adequate relationship to the bank’s adjusted eligible capital (for systemically relevant banks like us, to their core tier 1 capital) taking into account counterparty risks and risk mitigation instruments.
Under the Bank Law and SESTA, Swiss banks and securities dealers are obligated to keep confidential the existence and all aspects of their relationships with customers. These customer confidentiality laws do not, however, provide protection with respect to criminal offenses such as insider trading, money laundering, terrorist financing activities, tax fraud or evasion or prevent the disclosure of information to courts and administrative authorities.
Swiss rules and regulations to combat money laundering and terrorist financing are comprehensive and require banks and other financial intermediaries to thoroughly verify and document customer identity before commencing business. In addition, these rules and regulations include obligations to maintain appropriate policies for dealings with politically exposed persons and procedures and controls to detect and prevent money laundering and terrorist financing activities, including reporting suspicious activities to authorities.
In addition, Switzerland has stringent anti-corruption and anti-bribery laws related to Swiss and foreign public officials as well as persons in the private sector.
Compensation design and its implementation and disclosure have been required to comply with standards promulgated by FINMA under its Circular on Remuneration Schemes, as updated from time to time.
Securities dealer and asset management regulation and supervision
Our securities dealer activities in Switzerland are conducted primarily through the Bank and are subject to regulation under SESTA, which regulates all aspects of the securities dealer business in Switzerland, including regulatory capital, risk concentration, sales and trading practices, record-keeping requirements and procedures and periodic reporting procedures. Securities dealers are supervised by FINMA. On June 15, 2018, the Swiss Parliament adopted the FinIA, which is expected to govern all aspects of the securities dealer business in Switzerland instead of the SESTA, beginning January 1, 2020.
Our asset management activities in Switzerland, which include the establishment and administration of mutual funds registered for public distribution, are conducted under the supervision of FINMA. Effective January 1, 2020, our activities as asset manager of collective assets will also be governed by the FinIA.
Resolution regime
The FINMA Banking Insolvency Ordinance governs resolution (i.e., restructuring or liquidation) procedures of Swiss banks and securities dealers, such as Credit Suisse AG and Credit Suisse (Schweiz) AG, and of Swiss-domiciled parent companies of financial groups, such as Credit Suisse Group AG, and certain other unregulated Swiss-domiciled companies belonging to financial groups. Instead of prescribing a particular resolution concept, the FINMA Banking Insolvency Ordinance provides FINMA with a significant amount of authority and discretion in the case of resolution, as well as various restructuring tools from which FINMA may choose.
FINMA may open resolution proceedings if there is an impending insolvency because there is justified concern that the relevant Swiss bank (or Swiss-domiciled parent companies of financial groups and certain other unregulated Swiss-domiciled companies belonging to financial groups) is over-indebted, has serious liquidity problems or no longer fulfills capital adequacy requirements. Resolution proceedings may only take the form of restructuring (rather than liquidation) proceedings if (i) the recovery of, or the continued provision of individual banking services by, the relevant bank appears likely and (ii) the creditors of the relevant bank are likely better off in restructuring proceedings than in liquidation proceedings. All realizable assets in the relevant entity’s possession will be subject to such proceedings, regardless of where they are located.
If FINMA were to open restructuring proceedings with respect to Credit Suisse AG, Credit Suisse (Schweiz) AG or Credit Suisse Group AG, it would have discretion to take decisive actions, including (i) transferring the assets of the

banks or Credit Suisse Group AG, as applicable, or a portion thereof, together with its debt and other liabilities, or a portion thereof, and contracts, to another entity, (ii) staying (for a maximum of two working days) the termination of, and the exercise of rights to terminate netting rights, rights to enforce or dispose of certain types of collateral or rights to transfer claims, liabilities or certain collateral, under contracts to which the banks or Credit Suisse Group AG, as applicable, is a party, (iii) converting the debt of the banks or Credit Suisse Group AG, as applicable, into equity (debt-to-equity swap), and/or (iv) partially or fully writing off the obligations of the banks or Credit Suisse Group AG, as applicable (haircut).

Prior to any debt-to equity swap or haircut, outstanding equity capital and debt instruments issued by Credit Suisse AG, Credit Suisse (Schweiz) AG or Credit Suisse Group AG that are part of

its regulatory capital (including outstanding high trigger capital instruments and low trigger capital instruments) must be converted or written off (as applicable) and cancelled. Any debt-to-equity swap, (but not any haircut) would have to follow the hierarchy of claims to the extent such debt is not excluded from such conversion by the FINMA Banking Insolvency Ordinance. Contingent liabilities of Credit Suisse AG, Credit Suisse (Schweiz) AG or Credit Suisse Group AG such as guarantees could also be subjected to a debt-to-equity swap or a haircut, to the extent amounts are due and payable thereunder at any time during restructuring proceedings.
For systemically relevant institutions such as Credit Suisse AG, Credit Suisse (Schweiz) AG and Credit Suisse Group AG, creditors have no right to reject the restructuring plan approved by FINMA.
Supervision
The Federal Act on Financial Market Infrastructure and Market Conduct in Securities and Derivatives Trading (also known as "FMIA") governs the organization and operation of financial market infrastructures and the conduct of financial market participants in securities and derivatives trading. FMIA, along with the Financial Market Infrastructure Ordinance (also known as "FMIO") came into effect on January 1, 2016. However, financial market infrastructures and the operators of organized trading facilities were granted different transitional periods to comply with various new duties, including those associated with the publication of pre- and post-trade transparency information and with high-frequency trading. Under the FMIA, FINMA was designated to determine the timing of the introduction of a clearing obligation and to specify the categories of derivatives covered. Accordingly, on September 1, 2018, the revised Ordinance of the Swiss Financial Market Supervisory Authority on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading (FMIO-FINMA) entered into force, introducing a mandatory clearing obligation for standardized interest-rate and credit derivatives traded over the counter (OTC) and making effective, as of such date, the deadlines for the first clearing obligations laid down in the FMIO, i.e., six months, twelve months or eighteen months, depending on the categories of derivatives and the type of counterparty.
Tax
Administrative assistance in tax matters
The Multilateral Convention on Mutual Administrative Assistance in Tax Matters (MAC) entered into force and became applicable as of January 1, 2018. Under the MAC, Switzerland is required to exchange information in tax matters both spontaneously in certain cases as well as upon request. Furthermore, the revised Federal Act on International Administrative Assistance in Tax Matters and the revised Federal Ordinance on International Administrative Assistance in Tax Matters (OIAA) entered into force, which provide the procedural rules for international administrative assistance on tax matters based on either the MAC or under bilateral double taxation treaties of Switzerland. In exceptional cases, the Swiss legislation permits exchange of information before the taxpayer concerned is informed. Under the MAC (and as clarified in the OIAA), Switzerland commenced for tax periods from January 1, 2018 onwards to automatically exchange information on certain advance tax rulings within the scope of the Organisation for Economic Co-operation and Development (OECD) and the Group of Twenty (G20) project to combat base erosion and profit shifting (BEPS).
On June 10, 2016, the Swiss Federal Council submitted to the Swiss Parliament an amendment of the Federal Act on International Administrative Assistance in Tax Matters for adoption to also allow administrative assistance for requests based on stolen data, however, only if the stolen data has been obtained by regular administrative assistance or from public sources. The Swiss Parliament has yet to debate the proposed new law.
On December 1, 2017, the Multilateral Competent Authority Agreement on the Exchange of Country-by-Country Reports (CbCR) as well as the implementing Swiss federal legislation entered into force, which is the Federal Act on the International Automatic Exchange of Country by Country Reports of Multinationals and the Federal Ordinance on the International Automatic Exchange of Country by Country Reports of Multinationals. Under the CbCR and the implementing legislation, multinational groups of companies in Switzerland will have to prepare country-by-country reports for the first time for the 2018 tax year. The reports will be exchanged by Switzerland starting in 2020. On a voluntary basis, multinational groups of companies may prepare, and are permitted to submit, country-by-country reports for the 2016 and 2017 tax periods. Any such reports were exchanged for the first time in 2018.
Automatic exchange of information in tax matters
Switzerland has concluded a multilateral agreement with the EU on the international automatic exchange of information (AEOI) in tax matters (the AEOI Agreement), which applies to all 28 member states and also Gibraltar.

Further, Switzerland signed the multilateral competent authority agreement on the automatic exchange of financial account information (MCAA), and based on the MCAA, a number of bilateral AEOI agreements with other countries also became effective. Based on the AEOI Agreement, the bilateral AEOI agreements and the implementing laws of Switzerland, in 2017 Switzerland began to collect data in respect of financial assets held in, and income derived thereon and credited to, accounts or deposits with a paying agent in Switzerland for the benefit of residents in a EU member state or Gibraltar or a treaty state, and began to exchange such data in 2018. Switzerland has signed and will sign further AEOI agreements with additional countries. An up-to-date list of the AEOI agreements of Switzerland in effect or signed and becoming effective can be found on the website of the State Secretariat for International Financial Matters.

Withholding tax reforms

On January 1, 2017, the revised Withholding Tax Act entered into force. It extends the exemption of interest paid on contingent convertible bonds and write-down bonds of banks or group companies of finance groups which were approved by FINMA and issued between January 1, 2013 and December 31, 2016, to issuances between January 1, 2017 and December 31, 2021. It also exempts interest paid on TLAC instruments approved

by FINMA for purposes of meeting regulatory requirements which have been or will be issued between January 1, 2017 and December 31, 2021, or have been issued prior to January 1, 2017 where the foreign issuer thereof will be substituted for a Swiss issuer between January 1, 2017 and December 31, 2021.
Stamp tax reforms
On January 1, 2017, the revised Stamp Tax Act entered into force. The revision introduced an exemption from the 1% issuance stamp tax for equity securities in banks or group companies of a financial group issued in connection with the conversion of TLAC instruments into equity, in addition to the exemption for equity securities in banks issued from conversion capital.
US
Banking regulation and supervision
Our banking operations are subject to extensive federal and state regulation and supervision in the US. Our direct US offices are composed of our New York Branch and representative offices in California. Each of these offices is licensed with, and subject to examination and regulation by, the state banking authority in the state in which it is located.
Our New York Branch is licensed by the New York Superintendent of Financial Services (Superintendent), examined by the New York Department of Financial Services (DFS), and subject to laws and regulations applicable to a foreign bank operating a New York branch. Under the New York Banking Law, our New York Branch must maintain eligible assets with banks in the state of New York. The amount of eligible assets required, which is expressed as a percentage of third-party liabilities, could increase if our New York Branch is no longer designated well rated by the Superintendent.
The New York Banking Law authorizes the Superintendent to seize our New York Branch and all of Credit Suisse AG's business and property in New York State (which includes property of our New York Branch, wherever it may be located, and all of Credit Suisse AG's property situated in New York State) under circumstances generally including violations of law, unsafe or unsound practices or insolvency. In liquidating or dealing with our New York Branch's business after taking possession, the Superintendent would only accept for payment the claims of depositors and other creditors (unaffiliated with us) that arose out of transactions with our New York Branch. After the claims of those creditors were paid out of the business and property of the Bank in New York, the Superintendent would turn over the remaining assets, if any, to us or our liquidator or receiver.
Under New York Banking Law and US federal banking laws, our New York Branch is generally subject to single borrower lending limits expressed as a percentage of the worldwide capital of the Bank. Under the Dodd-Frank Act, lending limits take into account credit exposure arising from derivative transactions, securities borrowing and lending transactions and repurchase and reverse repurchase agreements with counterparties.
Our operations are also subject to reporting and examination requirements under US federal banking laws. Our US non-banking operations are subject to examination by the Fed in its capacity as our US umbrella supervisor. The New York Branch is also subject to examination by the Fed and is subject to federal banking law requirements and limitations on the acceptance and maintenance of deposits. Because the New York Branch does not engage in retail deposit taking, it is not a member of, and its deposits are not insured by, the FDIC.
US federal banking laws provide that a state-licensed branch (such as the New York Branch) or agency of a foreign bank may not, as a general matter, engage as principal in any type of activity that is not permissible for a federally licensed branch or agency of a foreign bank unless the Fed has determined that such activity is consistent with sound banking practice. In addition, regulations which the Fed may adopt (including at the recommendation of the FSOC) could affect the nature of the activities which the Bank (including the New York Branch) may conduct, and may impose restrictions and limitations on the conduct of such activities.
The Fed may terminate the activities of a US branch or agency of a foreign bank if it finds that the foreign bank: (i) is not subject to comprehensive supervision in its home country; (ii) has violated the law or engaged in an unsafe or unsound banking practice in the US; or (iii) for a foreign bank that presents a risk to the stability of the US financial system, the home country of the foreign bank has not adopted, or made demonstrable progress toward adopting, an appropriate system of financial regulation to mitigate such risk.
Credit Suisse Group and the Bank became financial holding companies for purposes of US federal banking law in 2000 and, as a result, may engage in a broad range of non-banking activities in the US, including insurance, securities, private equity and other financial activities, in each case subject to regulatory requirements and limitations. Credit

Suisse Group is still required to obtain the prior approval of the Fed (and potentially other US banking regulators) before acquiring, directly or indirectly, the ownership or control of more than 5% of any class of voting shares of (or otherwise controlling) any US bank, bank holding company or many other US depositary institutions and their holding companies, and as a result of the Dodd-Frank Act, before making certain acquisitions involving large non-bank companies. The New York Branch is also restricted from engaging in certain tying arrangements involving products and services, and in certain transactions with certain of its affiliates. If Credit Suisse Group or the Bank ceases to be well-capitalized or well-managed under applicable Fed rules, or otherwise fails to meet any of the requirements for financial holding company status, it may be required to discontinue certain financial activities or terminate its New York Branch. Credit Suisse Group's ability to undertake acquisitions permitted for financial holding companies could also be adversely affected.

As mentioned above, Credit Suisse is also subject to the so-called "Volcker Rule", which limits the ability of banking entities to

sponsor or invest in certain private equity or hedge funds, broadly defined, and to engage in certain types of proprietary trading for their own account. These restrictions are subject to certain exclusions and exemptions, including with respect to underwriting, market-making, risk-mitigating hedging and certain asset and fund management activities, and with respect to certain transactions and investments occurring solely outside of the US. The Volcker Rule requires banking entities to establish an extensive array of compliance policies, procedures and quantitative metrics reporting designed to ensure and monitor compliance with restrictions under the Volcker Rule. It also requires an annual attestation either by the CEO of the top-tier FBO or the senior management officer in the US as to the implementation of a compliance program reasonably designed to achieve compliance with the Volcker Rule. The Volcker Rule's implementing regulations became effective in April 2014 and Credit Suisse was generally required to come into compliance with the Volcker Rule by July 2015, with the exception of "legacy" investments in, and bank relationships with, certain private funds, that were in place prior to December 31, 2013, for which the Fed extended the compliance deadline to July 21, 2017. In April 2017, the Fed granted Credit Suisse an extended transition period to conform investments in certain illiquid funds under the Volcker Rule for an additional five years (i.e., until July 21, 2022). Credit Suisse has implemented a Volcker Rule compliance program reasonably designed to satisfy the requirements of the Volcker Rule. The Volcker Rule's implementing regulations are highly complex and may be subject to further rulemaking, regulatory interpretation and guidance, and its full impact will not be known with certainty for some time.

Fed regulations implementing the Dodd-Frank Act required Credit Suisse to create a single US IHC to hold all of its US subsidiaries with limited exceptions by July 1, 2017. The IHC requirement does not apply to the New York Branch. Credit Suisse's US IHC is subject to US risk-based capital and leverage requirements that are largely consistent with the Basel III framework published by the BCBS, though they diverge in several important respects due to the requirements of the Dodd-Frank Act, and is subject to capital planning and capital stress testing requirements under the Dodd-Frank Act and the Fed's annual Comprehensive Capital Analysis and Review (CCAR). In June 2018, the Fed released results of its annual CCAR stress tests, publicly releasing results for Credit Suisse's US IHC for the first time. Credit Suisse's US IHC was projected to maintain capital ratios above minimum regulatory requirements in the adverse and severely adverse CCAR stress scenarios, and the Fed did not object to its proposed capital plan. As part of the stress testing requirements of the Dodd-Frank Act, Credit Suisse's US IHC was also required to conduct a mid-cycle stress test using a set of internally developed macroeconomic scenarios and submit the results to the Fed in October 2018. As disclosed, Credit Suisse's US IHC was projected to maintain capital ratios above minimum regulatory requirements under the internally developed severely adverse scenario.

Credit Suisse's US IHC is also subject to additional requirements under the Fed's final TLAC framework for IHCs, described above. In addition, both Credit Suisse's US IHC itself and the combined US operations of Credit Suisse (including Credit Suisse's US IHC and the New York Branch) are subject to other new prudential requirements, including with respect to liquidity risk management, separate liquidity buffers for each of Credit Suisse's US IHC and the New York Branch, liquidity stress testing and SCCLs. Under proposals that remain under consideration, the combined US operations of Credit Suisse may become subject to an early remediation regime which could be triggered by risk-based capital, leverage, stress tests, liquidity, risk management and market indicators. The Fed has also indicated that it is considering future rulemakings that could apply the US rules implementing the Basel III liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) to the US operations of certain large FBOs, and that could further tailor the US prudential standards applicable to FBOs based on size, complexity and risk.

> Refer to "Liquidity and funding management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for further information on Basel III LCR and NSFR.

A major focus of US policy and regulation relating to financial institutions has been to combat money laundering and terrorist financing. These laws and regulations impose obligations to maintain appropriate policies, procedures and controls to detect, prevent and report money laundering and terrorist financing, verify the identity of customers and comply with economic sanctions. Any failure to maintain and implement adequate programs to combat money laundering and terrorist financing, and violations of such economic sanctions, laws and regulations, could have serious legal and reputational consequences. We take our obligations to prevent money laundering and terrorist financing in the US and globally very seriously, while appropriately respecting and protecting the confidentiality of clients. We have policies, procedures and training intended to ensure that our employees comply with "know your customer" regulations and understand when a client relationship or business should be evaluated as higher risk for us.

The Dodd-Frank Act requires issuers with listed securities to establish a claw-back policy to recoup erroneously awarded compensation in the event of an accounting restatement but no final rules have been adopted.

Broker-dealer and asset management regulation and supervision

Our US broker-dealers are subject to extensive regulation by US regulatory authorities. The SEC is the federal agency primarily responsible for the regulation of broker-dealers, investment advisers and investment companies. In addition, the US Treasury has the authority to promulgate rules relating to US Treasury and government agency securities, the Municipal Securities Rulemaking Board (MSRB) has the authority to promulgate rules relating to municipal securities, and the MSRB also promulgates regulations applicable to certain securities credit transactions. In addition, broker-dealers are subject to regulation by securities industry self-regulatory organizations, including the Financial Industry Regulatory Authority (FINRA), and by state securities authorities.

Our US broker-dealers are registered with the SEC and our primary US broker-dealer is registered in all 50 states, the District

of Columbia, Puerto Rico and the US Virgin Islands. Our US registered entities are subject to extensive regulatory requirements that apply to all aspects of their business activity, including, where applicable: capital requirements; the use and safekeeping of customer funds and securities; the suitability of customer investments; record-keeping and reporting requirements; employee-related matters; limitations on extensions of credit in securities transactions; prevention and detection of money laundering and terrorist financing; procedures relating to research analyst independence; procedures for the clearance and settlement of trades; and communications with the public.
Our US broker-dealers are also subject to the SEC's net capital rule, which requires broker-dealers to maintain a specified level of minimum net capital in relatively liquid form. Compliance with the net capital rule could limit operations that require intensive use of capital, such as underwriting and trading activities and the financing of customer account balances and also could restrict our ability to withdraw capital from our broker-dealers. Most of our US broker-dealers are also subject to additional net capital requirements of FINRA and, in some cases, other self-regulatory organizations.
Our securities and asset management businesses include legal entities registered and regulated as a broker-dealer and investment adviser by the SEC. The SEC-registered mutual funds that we advise are subject to the Investment Company Act of 1940. For pension fund customers, we are subject to ERISA and similar state statutes.
The Dodd-Frank Act also requires broader regulation of hedge funds and private equity funds, as well as credit rating agencies.
Derivative regulation and supervision
The CFTC is the federal agency primarily responsible for the regulation of futures commission merchants, commodity pool operators, commodity trading advisors and introducing brokers, among other regulatory categories. With the effectiveness of the Dodd-Frank Act, CFTC oversight was expanded to include persons engaging in a relevant activity with respect to swaps, and registration categories were added for swap dealers and major swap participants. For derivatives activities, these CFTC registrants are subject to industry self-regulatory organizations, such as the National Futures Association (NFA), which has been designated by the CFTC as a registered futures association.
Each of CSI, CSSEL and Credit Suisse Capital LLC (CS Capital) is registered with the CFTC as a swap dealer as a result of its applicable swap activities and is therefore subject to requirements relating to reporting, record-keeping, swap confirmation, swap portfolio reconciliation and compression, mandatory clearing, mandatory on-facility trading, swap trading relationship documentation, external business conduct, risk management, chief compliance officer duties and reports and internal controls. However, where permitted by comparability determinations by the CFTC or in reliance on no-action letters issued by the CFTC, non-US swap dealers, including CSI and CSSEL, can comply with certain requirements through substituted compliance with EU regulations. The CFTC has also stated that it intends to grant new substituted compliance and exemption orders and no-action letters at the point of the UK's withdrawal from the EU, which would permit CSI and CSSEL to satisfy such requirements by complying with relevant UK regulations.
As registered swap dealers that are not banks, CSSEL and CS Capital are also subject to the CFTC's margin rules for uncleared swaps. As a non-US swap dealer, CSSEL is only subject to these rules in connection with its uncleared swaps with US persons, non-US persons guaranteed by US persons, and certain non-US swap dealer subsidiaries of US persons. As a registered swap dealer that is a foreign bank, CSI is subject to the margin rules for uncleared swaps and security-based swaps of the Fed, and CSI likewise is only subject to these rules in connection with its uncleared swaps and security-based swaps with US persons, non-US persons guaranteed by US persons, and certain non-US swap dealer subsidiaries of US persons. Both of these margin rules are following a phased implementation schedule. Since March 1, 2017, CSI, CSSEL and CS Capital have been required to comply with variation margin requirements with covered entities under these rules, requiring the exchange of daily mark-to-market margin with all such covered entities. Initial margin requirements began phasing in annually for different counterparties from September 1, 2016, with remaining phases relating to the application of initial margin requirements to market participants with group-wide notional derivatives exposure during the preceding March, April and May of at least USD 750 billion or at least USD 8 billion on September 1, 2019 or September 1, 2020, respectively. The broad expansion of initial margin requirements on September 1, 2020 could have a significant adverse impact on our OTC derivatives business because of the large number of affected counterparties that might need to enter into new documentation and upgrade their systems in order to comply.
The Dodd-Frank Act also mandates that the CFTC adopt capital requirements for non-bank swap dealers (such as CSSEL and CS Capital), and the CFTC continues to consider proposed rules in this area. Under the CFTC's most

recent proposal, CSSEL and CS Capital could elect whether to satisfy capital requirements based on Fed rules implementing Basel capital requirements or SEC rules similar to the capital requirements currently applicable to US broker-dealers, but in each case they would be subject to an additional capital requirement based on 8% of the initial margin required for their derivatives positions. If the CFTC found EU capital requirements to be comparable, or, following the UK's withdrawal from the EU, if the CFTC found relevant UK capital requirements to be comparable, CSSEL could satisfy the CFTC's requirements through "substituted compliance" with the EU or UK requirements, as applicable. If the CFTC did not grant that comparability determination, however, CSSEL could face a significant competitive disadvantage relative to non-US competitors not subject to CFTC capital requirements due to the additional capital that may be required under the CFTC's rules as proposed and the burdens associated with satisfying duplicative capital regimes. In contrast, the Fed thus far has declined to apply additional capital requirements to swap dealers that are foreign banks, such as CSI.

The CFTC continues to consider proposed rules with potential revisions to its framework for the cross-border application of swap dealer regulations. In the meantime, key aspects of that framework, such as the application of certain CFTC rules to swaps between non-US persons, remain subject to temporary no-action letters. Expiration of any of these letters without modifications to the CFTC's guidance or permitting substituted compliance with the EU rules could reduce the willingness of non-US counterparties to trade with CSI and CSSEL, which could negatively affect our swap trading revenue or necessitate changes to how we organize our swap business. We continue to monitor these developments and prepare contingency plans to comply with the final guidance or rules once effective.
One of our US broker-dealers, Credit Suisse Securities (USA) LLC, is also registered as a futures commission merchant and subject to the capital, segregation and other requirements of the CFTC and the NFA.
Our asset management businesses include legal entities registered and regulated as commodity pool operators and commodity trading advisors by the CFTC and the NFA and therefore are subject to disclosure, recordkeeping, reporting and other requirements of the CFTC and the NFA.
The Dodd-Frank Act mandates that the CFTC establish aggregate position limits for certain physical commodity futures contracts and economically equivalent swaps, and the CFTC continues to consider proposed rules in this area. If the CFTC adopted its most recent proposal, these position limit rules would require us to develop a costly compliance infrastructure and could reduce our ability to participate in the commodity derivatives markets, both directly and on behalf of our clients.
In addition, in late 2018 the SEC began again to solicit comments on its rules implementing the derivatives provisions of the Dodd-Frank Act, and it is possible that the SEC will finalize some of these rules during 2019. However, the timing remains unclear. While the SEC's proposals have largely paralleled many of the CFTC's rules, significant differences between the final CFTC and SEC rules could materially increase the compliance costs associated with, and hinder the efficiency of, our equity and credit derivatives businesses with US persons. For example, significant differences between the SEC rules regarding capital, margin and segregation requirements for OTC derivatives and related CFTC rules, as well as the cross-border application of SEC and CFTC rules, could have such effects. In particular, SEC rules applying public transaction reporting and external business conduct requirements to security-based swaps between non-US persons that are arranged, negotiated or executed by US personnel could discourage non-US counterparties from entering into such transactions, unless the SEC permits substituted compliance with non-US reporting or business conduct requirements. The SEC requirements, as currently finalized, would take effect upon or shortly after security-based swap dealer registration, which will not be required until after the SEC completes several other pending rulemakings relating to security-based swap dealer regulation.
FATCA
Pursuant to an agreement with the US Internal Revenue Service (IRS) entered into in compliance with the US Foreign Account Tax Compliance Act (FATCA), Credit Suisse is required to identify and provide the IRS with information on accounts held by US persons and certain US-owned foreign entities, as well as to withhold tax on payments made to foreign financial institutions (FFIs) that are not in compliance with FATCA and account holders who fail to provide sufficient information to classify an account as a US or non-US account. Switzerland and the United States have entered into a "Model 2" intergovernmental agreement to implement FATCA, pursuant to which US authorities may ask Swiss authorities for administrative assistance in connection with group requests where consent to provide information regarding potential US accounts is not provided to FFIs, such as Credit Suisse. The Swiss Federal Council announced on October 8, 2014 that it intends to negotiate a Model 1 intergovernmental agreement that would replace the existing agreement and that would instead require FFIs in Switzerland to report US accounts to the Swiss authorities, who would in turn report that information to the IRS. It is unclear when negotiations will continue for the Model 1 intergovernmental agreement and when any new regime would come into force. We are continuing to follow developments regarding FATCA closely and are coordinating with all relevant authorities.
Resolution regime
The Dodd-Frank Act also established an "Orderly Liquidation Authority", a regime for the orderly liquidation of systemically significant non-bank financial companies, which could potentially apply to certain of our US entities. The Secretary of the US Treasury may under certain circumstances appoint the FDIC as receiver for a failing financial company in order to prevent risks to US financial stability. The FDIC would then have the authority to charter a "bridge" company to which it can transfer assets and liabilities of the financial company, including swaps and other QFCs, in order to preserve the continuity of critical functions of the financial company. The FDIC has indicated that it

prefers a single-point-of-entry strategy, although it retains the ability to resolve individual financial companies. On February 17, 2016, the FDIC and SEC proposed rules that would clarify the application of the Securities Investor Protection Act in a receivership for a systemically significant broker-dealer under the Dodd-Frank Act's Orderly Liquidation Authority.

In addition, the Dodd-Frank Act and related rules promulgated by the Fed and the FDIC require bank holding companies and companies treated as bank holding companies with total consolidated assets of USD 100 billion or more, such as us, and certain designated non-bank financial firms, to submit periodically to the Fed and the FDIC resolution plans describing the strategy for rapid and orderly resolution under the US Bankruptcy Code or other applicable insolvency regimes, though such plans may not rely on the Orderly Liquidation Authority. The Fed and FDIC delayed our

deadline for submission of our next US resolution plan until July 2020.
Cybersecurity
Federal and state regulators, including the DFS, FINRA and the SEC, have increasingly focused on cybersecurity risks and responses for regulated entities. For example, the DFS cybersecurity regulation applies to any licensed person, including DFS-licensed branches of non-US banks, and requires each company to assess its specific risk profile periodically and design a program that addresses its risks in a robust fashion. Each covered entity must monitor its systems and networks and notify the superintendent of the DFS within 72 hours after it is determined that a material cybersecurity event has occurred. Similarly, FINRA has identified cybersecurity as a significant risk and will assess firms' programs to mitigate those risks. In addition, the SEC has issued expanded interpretative guidance that highlights requirements under US federal securities laws that public operating companies must pay particular attention to with respect to cybersecurity risks and incidents.
EU
Financial services regulation and supervision
Our EU banks, investment firms and fund managers are subject to extensive regulation by EU and national regulatory authorities, whose requirements are increasingly imposed under EU directives and regulations aimed at increasing integration and harmonization in the European market for financial services. While regulations have immediate and direct effect in EU member states, directives must be implemented through national legislation. As a result, the terms of implementation of directives are not always consistent from country to country. In response to the financial crisis and in order to strengthen European supervisory arrangements, the EU established the European Systemic Risk Board, which has macro-prudential oversight of the financial system. The EU has also established three supervisory authorities responsible for promoting greater harmonization and consistent application of EU legislation by national regulators: EBA, the European Securities and Markets Authority (ESMA) and the European Insurance and Occupational Pensions Authority.
The Basel III capital framework is implemented in the EU by the CRD IV and the CRR (together with CRD IV, the CRD IV package). The CRD IV package comprises a single prudential rule book for banks and investment firms and establishes corporate governance and remuneration requirements, including a cap on variable remuneration for EU banks and investment firms.
Within the eurozone, banks are supervised within the Single Supervisory Mechanism. This empowers the European Central Bank (ECB) to act as a single direct supervisor for significant banks in the 17 eurozone countries and for certain non-eurozone countries which may choose to participate in the Single Supervisory Mechanism.
The revised Markets in Financial Instruments Directive (MiFID II) and MiFIR have introduced a number of significant changes to the regulatory framework established by the Markets in Financial Instruments Directive (MiFID I), and the European Commission has adopted a number of delegated and implementing measures, which supplement their requirements. In particular, MiFID II and MiFIR have introduced enhanced organizational and business conduct standards that apply to investment firms, including a number of Credit Suisse EU entities advising clients within the European Economic Area. These provisions include standards for managing conflicts of interest, best execution and enhanced investor protection. MiFID II has also enforced specific safeguards for algorithmic and high-frequency trading and introduced a ban on the receipt of investment research by portfolio managers and providers of independent investment advice unless paid for by clients.
The Directive on payment services in the internal market (PSD2), the main piece of legislation governing payment services in the EU, came into force on January 12, 2016 and was required to be transposed into their national legislation by the member states by January 13, 2018. Among other things, PSD2 extends the geographical scope of transparency and conduct of business requirements to payments to and from third countries where one of the payment service providers is located in the EU, and to transactions in non-EU currencies that have at least one leg in the EU. In addition, PSD2 has introduced more stringent requirements relating to operational and security risks. Further delegated legislation will apply from September 14, 2019. In order to comply with the new regime, financial institutions, such as Credit Suisse, may have to make changes to their payment services terms and conditions, as well as to adapt their processes and IT systems.
The Benchmarks Regulation (BMR) introduces new rules aimed at ensuring greater accuracy and integrity of benchmarks in financial instruments. The BMR sets out various requirements which will govern the activities of benchmark administrators and submitters. The majority of the provisions of the BMR have applied since January 1,

2018. Certain requirements introduced by the BMR have applied to Credit Suisse in its capacity as a contributor to certain critical benchmarks from June 30, 2016. A number of European Commission Delegated Regulations supplementing the BMR entered into force in 2018. The regulations specify, among other things, the criteria for assessing whether certain events would result in significant and adverse impacts on matters including the market integrity and financial stability of one or more member states and the conditions to assess the impact resulting from the cessation of, or change to, existing benchmarks.

On January 4, 2017, the European Commission Delegated Regulation supplementing the European Market Infrastructure Regulation (also known as “EMIR”) with regard to regulatory technical standards for risk mitigation techniques for OTC derivatives not cleared by a central counterparty entered into force. The delegated regulation imposes a requirement on financial

counterparties and non-financial counterparties above the clearing threshold to collect initial margin and variation margin in respect of non-centrally cleared OTC derivative transactions. The requirements relating to initial margin and variation margin have applied since February 4, 2017 in relation to the largest market participants. Other market participants have become or in the future will become subject to the requirements relating to initial margin through a series of annual phase-in dates, starting September 1, 2017. Requirements relating to variation margin have applied to all financial and non-financial counterparties above the clearing threshold since March 1, 2017.

Resolution regime

The BRRD establishes a framework for the recovery and resolution of credit institutions and investment firms. The BRRD introduces requirements for recovery and resolution plans, provides for bank resolution tools, including bail-in for failing banks, and establishes country-specific bank resolution financing arrangements. In addition, as part of their powers over banks in resolution, resolution authorities are empowered to replace a bank's senior management, transfer a bank's rights, assets and liabilities to another person, take a bank into public ownership, and close out and terminate a bank's financial contracts or derivatives contracts. Banks are required to produce recovery plans, describing proposed arrangements to permit them to restore their viability, while resolution authorities are empowered to produce resolution plans which describe how a bank may be resolved in an orderly manner, were it to fail.

Under the BRRD, the resolution authority can increase the capital of a failing or failed bank through bail-in: i.e., the write-down, reduction or cancellation of liabilities held by unsecured creditors, or their conversion to equity or other securities. All of a bank's liabilities are subject to bail-in, unless explicitly excluded by the BRRD because they are, for example, covered deposits, secured liabilities, or liabilities arising from holding client assets or client money.

The BRRD also requires banks to hold a certain amount of bail-inable loss-absorbing capacity at both individual and consolidated levels. This requirement is known as the MREL, and is conceptually similar to the TLAC framework.

The BRRD applies to all Credit Suisse EU entities, including branches of the Bank. The Single Resolution Mechanism Regulation, which came into force on August 19, 2014, established the Single Resolution Board as the resolution authority in charge of Banks in the eurozone. Since January 1, 2016, the Single Resolution Board has had full resolution powers, including bail-in.

Data protection regulation

The General Data Protection Regulation (GDPR) is now fully applicable and applies to the processing of personal data in the context of our EU establishments as well as in relation to the processing of personal data of individuals in the EU by our non-EU establishments to the extent such non-EU establishments are offering products and/or services to EU customers or monitoring their behavior in the EU. The GDPR requires us to take various measures to ensure compliance with the regulation, including processing personal data in accordance with the data protection principles, maintaining records of data processing, ensuring adequate security for personal data, complying with data breach notification requirements, and giving effect to data subjects' rights. Furthermore, in accordance with the GDPR, we have appointed a Data Protection Officer who is responsible for monitoring our compliance with the GDPR and providing advice in connection with the regulation. The GDPR grants broad enforcement powers to data protection authorities, including the potential to levy significant administrative fines for non-compliance.

UK

Banking regulation and supervision

The principal statutory regulators of financial services activity in the UK are the PRA, a part of the Bank of England, which is responsible for the micro-prudential regulation of banks and larger investment firms, and the Financial Conduct Authority (FCA), which regulates markets, the conduct of business of all financial firms, and the prudential regulation of firms not regulated by the PRA. In addition, the Financial Policy Committee of the Bank of England is responsible for macro-prudential regulation.

As a member state of the EU, the UK is required to implement EU directives into national law. The regulatory regime for banks operating in the UK conforms to required EU standards, including compliance with capital adequacy standards, customer protection requirements, conduct of business rules and anti-money laundering rules. These standards, requirements and rules are similarly implemented, under the same directives, throughout the other member states of the EU in which we operate.

CSI, Credit Suisse (UK) Limited and Credit Suisse AG, London Branch are authorized to take deposits. We also have a number of entities authorized to conduct investment business and asset management activities. In deciding whether to grant authorization, the PRA must first determine whether a firm satisfies the threshold conditions for authorization,

which include suitability and the requirement for the firm to be fit and proper.

Our London Branch is required to comply principally with Swiss home country regulation. However, as a response to the global financial crisis, the PRA made changes to its prudential supervision rules in its Handbook of Rules and Guidance, applying a principle of "self-sufficiency", such that CSI, CSSEL and Credit Suisse (UK) Limited are required to maintain adequate liquidity resources, under the day-to-day supervision of the entity's senior management, held in a custodian account in the name of the entity, unencumbered and attributed to the entity balance sheet. In addition, the PRA requires CSI, CSSEL and Credit Suisse (UK) Limited to maintain a minimum capital ratio and to monitor and report large exposures in accordance with the rules implementing CRD IV.

With effect from January 1, 2014, CRD IV replaced the previous CRD with new measures implementing Basel III and other requirements. The PRA is also responsible for approval of certain models with respect to regulatory capital requirements of our UK subsidiaries.

The PRA has implemented the requirements of CRD IV relating to staff remuneration and imposed a 1:1 cap on variable remuneration which can rise to 1:2 with explicit shareholder approval.

The UK Financial Services Act 2013 (Banking Reform Act), enacted in December 2013, establishes a more stringent regulatory regime for senior managers and specified risk takers in a bank or PRA authorized investment firm; it also makes reckless misconduct in the management of a bank a criminal offense. These rules impact our UK entities, such as CSI and CSSEL.

Broker-dealer and asset management regulation and supervision

Our London bank and broker-dealer subsidiaries are authorized under the Financial Services and Markets Act 2000 (FSMA) and are subject to regulation by the PRA and FCA. In addition, our asset management companies are authorized under the FSMA and are subject to regulation by the FCA. In deciding whether to authorize an investment firm in the UK, the PRA and FCA will consider the threshold conditions, which include suitability and the general requirement for a firm to be fit and proper. The PRA and FCA are responsible for regulating most aspects of an investment firm's business, including its regulatory capital, sales and trading practices, use and safekeeping of customer funds and securities, record-keeping, margin practices and procedures, registration standards for individuals carrying on certain functions, anti-money laundering systems and periodic reporting and settlement procedures.

Resolution regime

The UK legislation related to the recovery and resolution of credit institutions such as Credit Suisse consists of the special resolution regime (SRR), the PRA recovery and resolution framework and the FCA recovery and resolution requirements, which implement the BRRD in the UK. The UK Banking Act and the related secondary legislation govern the application of the SRR, which grants the UK authorities powers to handle systemically important firms, such as banks, in case of highly likely failure. The UK resolution authority is the Bank of England which is empowered, among other things, to direct firms and their parent undertakings to address or remove barriers to resolvability, to enforce resolution actions and to carry out resolvability assessments of credit institutions. Separately, the PRA and the FCA have the power to require parent undertakings of firms subject to this regime to take actions such as the preparation and submission of group recovery plans or the facilitation of the use of resolution powers.

Risk factors

Our businesses are exposed to a variety of risks that could adversely affect our results of operations and financial condition, including, among others, those described below.

Liquidity risk

Liquidity, or ready access to funds, is essential to our business, particularly our investment banking businesses. We seek to maintain available liquidity to meet our obligations in a stressed liquidity environment.

> Refer to "Liquidity and funding management" in III – Treasury, Risk, Balance sheet and Off-balance sheet for information on our liquidity management.

Our liquidity could be impaired if we were unable to access the capital markets, sell our assets, our liquidity costs increase or as a result of uncertainties regarding the possible discontinuation of benchmark rates

Our ability to borrow on a secured or unsecured basis and the cost of doing so can be affected by increases in interest rates or credit spreads, the availability of credit, regulatory requirements relating to liquidity or the market perceptions of risk relating to us, certain of our counterparties or the banking sector as a whole, including our perceived or actual creditworthiness. An inability to obtain financing in the unsecured long-term or short-term debt capital markets, or to access the secured lending markets, could have a substantial adverse effect on our liquidity. In challenging credit markets our funding costs may increase or we may be unable to raise funds to support or expand our businesses, adversely affecting our results of operations. Following the financial crisis in 2008 and 2009, our costs of liquidity have been significant and we expect to incur ongoing costs as a result of regulatory requirements for increased liquidity. In addition, in July 2017, the FCA, which regulates the London interbank offered rate (LIBOR), announced that the FCA will no longer persuade or compel banks to submit rates for the calculation of the LIBOR benchmark after 2021. As such, it appears highly likely that LIBOR will be discontinued after 2021. Any such developments or future changes in the administration of benchmarks could result in adverse consequences to the return on, value of and market for securities and other instruments whose returns or contractual mechanics are linked to any such benchmark, including those issued by the Group. For example, alternative reference rates may not provide a term structure and may require a change in contractual terms of products currently indexed on terms other than overnight. The replacement of LIBOR or any other benchmark with an alternative reference rate could negatively impact the value of and return on existing securities and other contracts and result in mispricing and additional legal, financial, operational, compliance, reputational or other risks to us, our clients and other market participants. In addition, any transition to alternative reference rates will require changes to our documentation, methodologies, processes, controls, systems and operations, which would result in increased effort and cost.

> Refer to "Potential replacement of interbank offered rates" in II – Operating and financial review – Credit Suisse – Other information for further information.

If we are unable to raise needed funds in the capital markets (including through offerings of equity, debt and regulatory capital securities), we may need to liquidate unencumbered assets to meet our liabilities. In a time of reduced liquidity, we may be unable to sell some of our assets, or we may need to sell assets at depressed prices, which in either case could adversely affect our results of operations and financial condition.

Our businesses rely significantly on our deposit base for funding

Our businesses benefit from short-term funding sources, including primarily demand deposits, inter-bank loans, time deposits and cash bonds. Although deposits have been, over time, a stable source of funding, this may not continue. In that case, our liquidity position could be adversely affected and we might be unable to meet deposit withdrawals on demand or at their contractual maturity, to repay borrowings as they mature or to fund new loans, investments and businesses.

Changes in our ratings may adversely affect our business

Ratings are assigned by rating agencies. They may lower, indicate their intention to lower or withdraw their ratings at any time. The major rating agencies remain focused on the financial services industry, particularly on uncertainties as to whether firms pose systemic risk in a financial or credit crisis, and on such firms' potential vulnerability to market sentiment and confidence, particularly during periods of severe economic stress. Any downgrades in our ratings could increase our borrowing costs, limit our access to capital markets, increase our cost of capital and adversely affect the ability of our businesses to sell or market their products, engage in business transactions – particularly financing and derivatives transactions – and retain our clients.

Market risk

We may incur significant losses on our trading and investment activities due to market fluctuations and volatility Although we continued to strive to reduce our balance sheet and made significant progress in implementing our strategy in 2018, we continue to maintain large trading and investment positions and hedges in the debt, currency and equity markets, and in private equity, hedge funds, real estate and other assets. These positions could be adversely affected by volatility in financial and other markets, that is, the degree to which prices fluctuate over a particular period in a particular market, regardless of market

levels. To the extent that we own assets, or have net long positions, in any of those markets, a downturn in those markets could result in losses from a decline in the value of our net long positions. Conversely, to the extent that we have sold assets that we do not own, or have net short positions, in any of those markets, an upturn in those markets could expose us to potentially significant losses as we attempt to cover our net short positions by acquiring assets in a rising market. Market fluctuations, downturns and volatility can adversely affect the fair value of our positions and our results of operations. Adverse market or economic conditions or trends have caused, and in the future may cause, a significant decline in our net revenues and profitability.

Our businesses and organization are subject to the risk of loss from adverse market conditions and unfavorable economic, monetary, political, legal, regulatory and other developments in the countries in which we operate

As a global financial services company, our businesses are materially affected by conditions in the financial markets, economic conditions generally and other developments in Europe, the US, Asia and elsewhere around the world. The recovery from the economic crisis of 2008 and 2009 continues to be sluggish in several key developed markets. The European sovereign debt crisis as well as US debt levels and the federal budget process have not been permanently resolved. In addition, commodity price volatility and concerns about emerging markets have affected financial markets. Financial market volatility increased significantly during 2018, and several global financial market indices declined sharply in the fourth quarter of 2018. Our financial condition and results of operations could be materially adversely affected if these conditions do not improve, or if they stagnate or worsen. Further, various countries in which we operate or invest have experienced severe economic disruptions particular to that country or region, including extreme currency fluctuations, high inflation, or low or negative growth, among other negative conditions. Concerns about weaknesses in the economic and fiscal condition of certain European countries have continued, especially with regard to how such weaknesses might affect other economies as well as financial institutions (including us) which lent funds to or did business with or in those countries.

Continued concern about European economies, including the refugee crisis and political uncertainty as well as in relation to the UK's withdrawal from the EU, could cause disruptions in market conditions in Europe and around the world. UK Prime Minister Theresa May initiated the two-year process of negotiations for withdrawal from the EU in March 2017, with an anticipated date of withdrawal in 2019 (subject to any transitional arrangements that may be agreed between the EU and the UK). The results of this negotiation and the macroeconomic impact of this decision are difficult to predict and are expected to remain uncertain for a prolonged period. Among the significant global implications of the UK referendum was the increased uncertainty concerning a potentially more persistent and widespread imposition by central banks of negative interest rate policies. We cannot accurately predict the impact of the UK leaving the EU on Credit Suisse and such impact may negatively affect our future results of operations and financial condition. Our legal entities that are organized or operate in the UK could face limitations on providing services or otherwise conducting business in the EU following the UK's withdrawal, which may require us, immediately or following any applicable transitional period, to implement potentially significant changes to our legal entity structure and locations in which we conduct certain operations.

> Refer to "UK-EU relationship" in Regulation and supervision – Recent regulatory developments and proposals – UK for further information.

While the execution of the program evolving the Group's legal entity structure to meet developing and future regulatory requirements has substantially concluded, there remain a number of uncertainties that may affect the feasibility, scope and timing of the intended results relating to the evolution of our legal entity structure. Significant legal and regulatory changes affecting us and our operations may require us to make further changes in our legal structure. The implementation of these changes has required, and may further require, significant time and resources and has increased, and may potentially further increase, operational, capital, funding and tax costs as well as our counterparties' credit risk. The environment of political uncertainty in continental Europe may also affect our business. The popularity of nationalistic sentiments may result in significant shifts in national policy and a decelerated path to further European integration. Similar uncertainties exist regarding the impact of recent and proposed changes in US policies on trade, immigration, climate change and foreign relations. Growing global trade tensions, including between key trading partners such as China, the US and the EU, may be disruptive to global economic growth and may also negatively affect our business.

Economic disruption in other countries, even in countries in which we do not currently conduct business or have operations, could adversely affect our businesses and results. Adverse market and economic conditions continue to

create a challenging operating environment for financial services companies. In particular, the impact of interest and currency exchange rates, the risk of geopolitical events, fluctuations in commodity prices and concerns about European stagnation have affected financial markets and the economy. In recent years, the low interest rate environment has adversely affected our net interest income and the value of our trading and non-trading fixed income portfolios. Future changes in interest rates, including increasing interest rates or changes in the current negative short-term interest rates in our home market, could adversely affect our businesses and results. In addition, movements in equity markets have affected the value of our trading and non-trading equity portfolios, while the historical strength of the Swiss franc has adversely affected our revenues and net income. Further, diverging monetary policies among the major economies in which we operate, in particular among the Fed, ECB and SNB, may adversely affect our results.

Such adverse market or economic conditions may reduce the number and size of investment banking transactions in which we provide underwriting, mergers and acquisitions advice or other services and, therefore, may adversely affect our financial

advisory and underwriting fees. Such conditions may adversely affect the types and volumes of securities trades that we execute for customers and may adversely affect the net revenues we receive from commissions and spreads. In addition, several of our businesses engage in transactions with, or trade in obligations of, governmental entities, including supranational, national, state, provincial, municipal and local authorities. These activities can expose us to enhanced sovereign, credit-related, operational and reputational risks, including the risks that a governmental entity may default on or restructure its obligations or may claim that actions taken by government officials were beyond the legal authority of those officials, which could adversely affect our financial condition and results of operations.
Unfavorable market and economic conditions have affected our businesses over the last years, including the low interest rate environment, continued cautious investor behavior and changes in market structure. These negative factors have been reflected in lower commissions and fees from our client-flow sales and trading and asset management activities, including commissions and fees that are based on the value of our clients' portfolios.
Investment performance that is below that of competitors or asset management benchmarks could result in a decline in assets under management and related fees and make it harder to attract new clients. There has been a fundamental shift in client demand away from more complex products and significant client deleveraging, and our results of operations related to private banking and asset management activities have been and could continue to be adversely affected as long as this continues.
Adverse market or economic conditions have also negatively affected our private equity investments and may negatively affect them in the future since, if a private equity investment substantially declines in value, we may not receive any increased share of the income and gains from such investment (to which we are entitled in certain cases when the return on such investment exceeds certain threshold returns), may be obligated to return to investors previously received excess carried interest payments and may lose our pro rata share of the capital invested. In addition, it could become more difficult to dispose of the investment as even investments that are performing well may prove difficult to exit.
In addition to the macroeconomic factors discussed above, other events beyond our control, including terrorist attacks, cyber attacks, military conflicts, economic or political sanctions, disease pandemics, political unrest or natural disasters, could have a material adverse effect on economic and market conditions, market volatility and financial activity, with a potential related effect on our businesses and results.
We may incur significant losses in the real estate sector
We finance and acquire principal positions in a number of real estate and real estate-related products, primarily for clients, and originate loans secured by commercial and residential properties. As of December 31, 2018, our real estate loans as reported to the SNB totaled approximately CHF 146 billion. We also securitize and trade in commercial and residential real estate and real estate-related whole loans, mortgages and other real estate and commercial assets and products, including CMBS and RMBS. Our real estate-related businesses and risk exposures could be adversely affected by any downturn in real estate markets, other sectors and the economy as a whole. In particular, the risk of potential price corrections in the real estate market in certain areas of Switzerland could have a material adverse effect on our real estate-related businesses.
Holding large and concentrated positions may expose us to large losses
Concentrations of risk could increase losses, given that we have sizeable loans to, and securities holdings in, certain customers, industries or countries. Decreasing economic growth in any sector in which we make significant commitments, for example, through underwriting, lending or advisory services, could also negatively affect our net revenues.
We have significant risk concentration in the financial services industry as a result of the large volume of transactions we routinely conduct with broker-dealers, banks, funds and other financial institutions, and in the ordinary conduct of our business we may be subject to risk concentration with a particular counterparty. We, like other financial institutions, continue to adapt our practices and operations in consultation with our regulators to better address an evolving understanding of our exposure to, and management of, systemic risk and risk concentration to financial institutions. Regulators continue to focus on these risks, and there are numerous new regulations and government proposals, and significant ongoing regulatory uncertainty, about how best to address them. There can be no assurance that the changes in our industry, operations, practices and regulation will be effective in managing this risk.
> Refer to "Regulation and supervision" for further information.

Risk concentration may cause us to suffer losses even when economic and market conditions are generally favorable for others in our industry.

Our hedging strategies may not prevent losses

If any of the variety of instruments and strategies we use to hedge our exposure to various types of risk in our businesses is not effective, we may incur losses. We may be unable to purchase hedges or be only partially hedged, or our hedging strategies may not be fully effective in mitigating our risk exposure in all market environments or against all types of risk.

Market risk may increase the other risks that we face

In addition to the potentially adverse effects on our businesses described above, market risk could exacerbate the other risks that we face. For example, if we were to incur substantial trading losses, our need for liquidity could rise sharply while our access to liquidity could be impaired. In conjunction with another market downturn, our customers and counterparties could also incur substantial losses of their own, thereby weakening their financial condition and increasing our credit and counterparty risk exposure to them.

Credit risk

We may suffer significant losses from our credit exposures

Our businesses are subject to the fundamental risk that borrowers and other counterparties will be unable to perform their obligations. Our credit exposures exist across a wide range of transactions that we engage in with a large number of clients and counterparties, including lending relationships, commitments and letters of credit, as well as derivative, currency exchange and other transactions. Our exposure to credit risk can be exacerbated by adverse economic or market trends, as well as increased volatility in relevant markets or instruments. In addition, disruptions in the liquidity or transparency of the financial markets may result in our inability to sell, syndicate or realize the value of our positions, thereby leading to increased concentrations. Any inability to reduce these positions may not only increase the market and credit risks associated with such positions, but also increase the level of risk-weighted assets on our balance sheet, thereby increasing our capital requirements, all of which could adversely affect our businesses.

> Refer to “Credit risk” in III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk coverage and management for information on management of credit risk.

Our regular review of the creditworthiness of clients and counterparties for credit losses does not depend on the accounting treatment of the asset or commitment. Changes in creditworthiness of loans and loan commitments that are fair valued are reflected in trading revenues.

Management’s determination of the provision for loan losses is subject to significant judgment. Our banking businesses may need to increase their provisions for loan losses or may record losses in excess of the previously determined provisions if our original estimates of loss prove inadequate, which could have a material adverse effect on our results of operations.

> Refer to “Credit risk” in III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk coverage and management and “Note 1 – Summary of significant accounting policies”, “Note 9 – Provision for credit losses” and “Note 19 – Loans, allowance for loan losses and credit quality” in VI – Consolidated financial statements – Credit Suisse Group for information on provisions for loan losses and related risk mitigation.

Under certain circumstances, we may assume long-term credit risk, extend credit against illiquid collateral and price derivative instruments aggressively based on the credit risks that we take. As a result of these risks, our capital and liquidity requirements may continue to increase.

Defaults by one or more large financial institutions could adversely affect financial markets generally and us specifically

Concerns or even rumors about or a default by one institution could lead to significant liquidity problems, losses or defaults by other institutions because the commercial soundness of many financial institutions may be closely related as a result of credit, trading, clearing or other relationships between institutions. This risk is sometimes referred to as systemic risk. Concerns about defaults by and failures of many financial institutions, particularly those in or with significant exposure to the eurozone, continued in 2018 and could continue to lead to losses or defaults by financial institutions and financial intermediaries with which we interact on a daily basis, such as clearing agencies, clearing houses, banks, securities firms and exchanges. Our credit risk exposure will also increase if the collateral we hold cannot be realized or can only be liquidated at prices insufficient to cover the full amount of exposure.

The information that we use to manage our credit risk may be inaccurate or incomplete

Although we regularly review our credit exposure to specific clients and counterparties and to specific industries, countries and regions that we believe may present credit concerns, default risk may arise from events or circumstances that are difficult to foresee or detect, such as fraud. We may also lack correct and complete information with respect to the credit or trading risks of a counterparty or risk associated with specific industries, countries and regions or misinterpret such information that is received or otherwise incorrectly assess a given risk situation. Additionally, there can be no assurance that measures instituted to manage such risk will be effective in all instances.

Risks relating to our strategy

We may not achieve all of the expected benefits of our strategic initiatives

In October 2015, we announced a comprehensive new strategic direction, structure and organization of the Group, which we updated in 2016, 2017 and 2018. Our ability to implement our strategic direction, structure and organization is based on a number of key assumptions regarding the future economic environment, the economic growth of certain geographic regions, the regulatory landscape, our ability to meet certain financial goals and targets, anticipated interest rates and central bank action, among other things. If any of these assumptions (including but not limited to our

ability to meet certain financial goals and targets) prove inaccurate in whole or in part, our ability to achieve some or all of the expected benefits of this strategy could be limited, including our ability to meet our stated financial goals and targets and retain key employees. Factors beyond our control, including but not limited to market and economic conditions, changes in laws, rules or regulations, including the application of regulations to be issued by the US Internal Revenue Service related to BEAT, execution risk related to the implementation of our strategy and other challenges and risk factors discussed in this report, could limit our ability to achieve some or all of the expected benefits of this strategy. If we are unable to implement our strategy successfully in whole or in part or should the components of the strategy that are implemented fail to produce the expected benefits, our financial results and our share price may be materially and adversely affected.

> Refer to “Strategy” for further information on our strategic direction.

Additionally, part of our strategy involves a change in focus within certain areas of our business, which may have unanticipated negative effects in other areas of the business and may result in an adverse effect on our business as a whole.
The implementation of our strategy may increase our exposure to certain risks, including but not limited to credit risks, market risks, operational risks and regulatory risks. We also seek to achieve certain financial goals and targets, for example in relation to return on tangible equity, which may or may not be successful. There is no guarantee that we will be able to achieve these goals and targets in the form described or at all. Finally, changes to the organizational structure of our business, as well as changes in personnel and management, may lead to temporary instability of our operations.
In addition, acquisitions and other similar transactions we undertake subject us to certain risks. Even though we review the records of companies we plan to acquire, it is generally not feasible for us to review all such records in detail. Even an in-depth review of records may not reveal existing or potential problems or permit us to become familiar enough with a business to assess fully its capabilities and deficiencies. As a result, we may assume unanticipated liabilities (including legal and compliance issues), or an acquired business may not perform as well as expected. We also face the risk that we will not be able to integrate acquisitions into our existing operations effectively as a result of, among other things, differing procedures, business practices and technology systems, as well as difficulties in adapting an acquired company into our organizational structure. We face the risk that the returns on acquisitions will not support the expenditures or indebtedness incurred to acquire such businesses or the capital expenditures needed to develop such businesses. We also face the risk that unsuccessful acquisitions will ultimately result in our having to write down or write off any goodwill associated with such transactions. We continue to have a significant amount of goodwill relating to our acquisition of Donaldson, Lufkin & Jenrette Inc. and other transactions recorded on our balance sheet that could result in additional goodwill impairment charges.
We may also seek to engage in new joint ventures (within the Group and with external parties) and strategic alliances. Although we endeavor to identify appropriate partners, our joint venture efforts may prove unsuccessful or may not justify our investment and other commitments.
Risks from estimates and valuations
We make estimates and valuations that affect our reported results, including measuring the fair value of certain assets and liabilities, establishing provisions for contingencies and losses for loans, litigation and regulatory proceedings, accounting for goodwill and intangible asset impairments, evaluating our ability to realize deferred tax assets, valuing equity-based compensation awards, modeling our risk exposure and calculating expenses and liabilities associated with our pension plans. These estimates are based upon judgment and available information, and our actual results may differ materially from these estimates.
> Refer to “Critical accounting estimates” in II – Operating and financial review and “Note 1 – Summary of significant accounting policies” in VI – Consolidated financial statements – Credit Suisse Group for information on these estimates and valuations.
Our estimates and valuations rely on models and processes to predict economic conditions and market or other events that might affect the ability of counterparties to perform their obligations to us or impact the value of assets. To the extent our models and processes become less predictive due to unforeseen market conditions, illiquidity or volatility, our ability to make accurate estimates and valuations could be adversely affected.
Risks relating to off-balance sheet entities
We enter into transactions with special purpose entities (SPEs) in our normal course of business, and certain SPEs with which we transact business are not consolidated and their assets and liabilities are off-balance sheet. We may have to exercise significant management judgment in applying relevant accounting consolidation standards, either initially or after the occurrence of certain events that may require us to reassess whether consolidation is required. Accounting standards relating to consolidation, and their interpretation, have changed and may continue to change. If we are required to consolidate an SPE, its assets and liabilities would be recorded on our consolidated balance sheets and we would recognize related gains and losses in our consolidated statements of operations, and this could have an adverse impact on our results of operations and capital and leverage ratios.
> Refer to “Off-balance sheet” in III – Treasury, Risk, Balance sheet and Off-balance sheet – Balance sheet and off-balance sheet for information on our transactions with and commitments to SPEs.
Country and currency exchange risk

Country risks may increase market and credit risks we face

Country, regional and political risks are components of market and credit risk. Financial markets and economic conditions generally have been and may in the future be materially affected by such risks. Economic or political pressures in a country or region, including those arising from local market disruptions, currency crises, monetary controls or other factors, may adversely affect the ability of clients or counterparties located in that country or region to obtain foreign currency or credit and, therefore, to perform their obligations to us, which in turn may have an adverse impact on our results of operations.

We may face significant losses in emerging markets

An element of our strategy is to scale up our private banking businesses in emerging market countries. Our implementation of that strategy will necessarily increase our existing exposure to economic instability in those countries. We monitor these risks, seek diversity in the sectors in which we invest and emphasize client-driven business. Our efforts at limiting emerging market risk, however, may not always succeed. In addition, various emerging market countries, such as Brazil during 2017 and 2018, have experienced and may continue to experience severe economic, financial and political disruptions or slower economic growth than in prior years. In addition, sanctions have been imposed on certain individuals and companies in Russia and further sanctions are possible. The possible effects of any such disruptions may include an adverse impact on our businesses and increased volatility in financial markets generally.

Currency fluctuations may adversely affect our results of operations

We are exposed to risk from fluctuations in exchange rates for currencies, particularly the US dollar. In particular, a substantial portion of our assets and liabilities are denominated in currencies other than the Swiss franc, which is the primary currency of our financial reporting. Our capital is also stated in Swiss francs, and we do not fully hedge our capital position against changes in currency exchange rates. The Swiss franc weakened slightly against the US dollar and strengthened against the euro in 2018.

As we incur a significant part of our expenses in Swiss francs while we generate a large proportion of our revenues in other currencies, our earnings are sensitive to changes in the exchange rates between the Swiss franc and other major currencies. Although we have implemented a number of measures designed to offset the impact of exchange rate fluctuations on our results of operations, the appreciation of the Swiss franc in particular and exchange rate volatility in general have had an adverse impact on our results of operations and capital position in recent years and may have such an effect in the future.

Operational risk

We are exposed to a wide variety of operational risks, including cybersecurity and other information technology risks

Operational risk is the risk of financial loss arising from inadequate or failed internal processes, people or systems or from external events. In general, although we have business continuity plans, our businesses face a wide variety of operational risks, including technology risk that stems from dependencies on information technology, third-party suppliers and the telecommunications infrastructure as well as from the interconnectivity of multiple financial institutions with central agents, exchanges and clearing houses. As a global financial services company, we rely heavily on our financial, accounting and other data processing systems, which are varied and complex. Our business depends on our ability to process a large volume of diverse and complex transactions, including derivatives transactions, which have increased in volume and complexity. We are exposed to operational risk arising from errors made in the execution, confirmation or settlement of transactions or from transactions not being properly recorded or accounted for. Cybersecurity and other information technology risks for financial institutions have significantly increased in recent years. Regulatory requirements in these areas have increased and are expected to increase further. Information security, data confidentiality and integrity are of critical importance to our businesses. Despite our wide array of security measures to protect the confidentiality, integrity and availability of our systems and information, it is not always possible to anticipate the evolving threat landscape and mitigate all risks to our systems and information. We could also be affected by risks to the systems and information of clients, vendors, service providers, counterparties and other third parties. In addition, we may introduce new products or services or change processes, resulting in new operational risk that we may not fully appreciate or identify.

These threats may derive from human error, fraud or malice, or may result from accidental technological failure. There may also be attempts to fraudulently induce employees, clients, third parties or other users of our systems to disclose sensitive information in order to gain access to our data or that of our clients.

A cyber attack, information or security breach or technology failure may result in operational issues, the infiltration of payment systems or the unauthorized release, gathering, monitoring, misuse, loss or destruction of confidential, proprietary and other information relating to Credit Suisse, our clients, vendors, service providers, counterparties or other third parties. Given our global footprint and the high volume of transactions we process, the large number of clients, partners and counterparties with which we do business, our growing use of digital, mobile and internet-based services, and the increasing frequency, sophistication and evolving nature of cyber attacks, a cyber attack, information or security breach or technology failure may occur without detection for an extended period of time. In addition, we

expect that any investigation of a cyber attack, information or security breach or technology failure will be inherently unpredictable and it may take time before any investigation is complete. During such time, we may not know the extent of the harm or how best to remediate it and certain errors or actions may be repeated or compounded before they are discovered and rectified, all or any of which would further increase the costs and consequences of a cyber attack, information or security breach or technology failure.
If any of our systems do not operate properly or are compromised as a result of cyber attacks, information or security breaches, technology failures, unauthorized access, loss or destruction of data, unavailability of service, computer viruses or other events that could have an adverse security impact, we could be subject to litigation or suffer financial loss not covered by insurance, a disruption of our businesses, liability to our clients, damage to relationships with our vendors, regulatory intervention or reputational

damage. Any such event could also require us to expend significant additional resources to modify our protective measures or to investigate and remediate vulnerabilities or other exposures. We may also be required to expend resources to comply with new and increasingly expansive regulatory requirements related to cybersecurity.

We may suffer losses due to employee misconduct

Our businesses are exposed to risk from potential non-compliance with policies or regulations, employee misconduct or negligence and fraud, which could result in civil or criminal investigations and charges, regulatory sanctions and serious reputational or financial harm. In recent years, a number of multinational financial institutions have suffered material losses due to, for example, the actions of traders performing unauthorized trades or other employee misconduct. It is not always possible to deter employee misconduct and the precautions we take to prevent and detect this activity may not always be effective.

Risk management

We have risk management procedures and policies designed to manage our risk. These techniques and policies, however, may not always be effective, particularly in highly volatile markets. We continue to adapt our risk management techniques, in particular value-at-risk and economic capital, which rely on historical data, to reflect changes in the financial and credit markets. No risk management procedures can anticipate every market development or event, and our risk management procedures and hedging strategies, and the judgments behind them, may not fully mitigate our risk exposure in all markets or against all types of risk.

> Refer to “Risk management” in III – Treasury, Risk, Balance sheet and Off-balance sheet for information on our risk management.

Legal and regulatory risks

Our exposure to legal liability is significant

We face significant legal risks in our businesses, and the volume and amount of damages claimed in litigation, regulatory proceedings and other adversarial proceedings against financial services firms continue to increase in many of the principal markets in which we operate.

We and our subsidiaries are subject to a number of material legal proceedings, regulatory actions and investigations, and an adverse result in one or more of these proceedings could have a material adverse effect on our operating results for any particular period, depending, in part, upon our results for such period.

> Refer to “Note 39 – Litigation” in VI – Consolidated financial statements – Credit Suisse Group for information relating to these and other legal and regulatory proceedings involving our investment banking and other businesses.

It is inherently difficult to predict the outcome of many of the legal, regulatory and other adversarial proceedings involving our businesses, particularly those cases in which the matters are brought on behalf of various classes of claimants, seek damages of unspecified or indeterminate amounts or involve novel legal claims. Management is required to establish, increase or release reserves for losses that are probable and reasonably estimable in connection with these matters, all of which requires significant judgment.

> Refer to “Critical accounting estimates” in II – Operating and financial review and “Note 1 – Summary of significant accounting policies” in VI – Consolidated financial statements – Credit Suisse Group for more information.

Regulatory changes may adversely affect our business and ability to execute our strategic plans

As a participant in the financial services industry, we are subject to extensive regulation by governmental agencies, supervisory authorities and self-regulatory organizations in Switzerland, the EU, the UK, the US and other jurisdictions in which we operate around the world. Such regulation is increasingly more extensive and complex and, in recent years, costs related to our compliance with these requirements and the penalties and fines sought and imposed on the financial services industry by regulatory authorities have all increased significantly and may increase further. Moreover, a number of these requirements are currently being finalized and their regulatory burden may further increase in the future. For example, the Basel III reforms are still being finalized and implemented and/or phased-in, as applicable, and new gone concern requirements may be introduced for Credit Suisse AG. These regulations often serve to limit our activities, including through the application of increased or enhanced capital, leverage and liquidity requirements, the addition of capital surcharges for risks related to operational, litigation, regulatory and similar matters, customer protection and market conduct regulations and direct or indirect restrictions on the businesses in which we may operate or invest. Such limitations can have a negative effect on our business and our ability to implement strategic initiatives. To the extent we are required to divest certain businesses, we could incur losses, as we may be forced to sell such businesses at a discount, which in certain instances could be substantial, as a

result of both the constrained timing of such sales and the possibility that other financial institutions are liquidating similar investments at the same time.
Since 2008, regulators and governments have focused on the reform of the financial services industry, including enhanced capital, leverage and liquidity requirements, changes in compensation practices (including tax levies) and measures to address systemic risk, including ring-fencing certain activities and operations within specific legal entities. We are already subject to extensive regulation in many areas of our business and expect to face increased regulation and regulatory scrutiny and enforcement. These various regulations and requirements could require us to reduce assets held in certain subsidiaries or inject capital or other funds into or otherwise change our operations or the structure of our subsidiaries and the Group. We expect such increased regulation to continue to increase our costs, including, but not limited to, costs related to compliance, systems and operations, as well as affect our ability to conduct certain types of business, which could adversely affect our profitability and competitive position. Variations in the details and implementation of such regulations

may further negatively affect us, as certain requirements currently are not expected to apply equally to all of our competitors or to be implemented uniformly across jurisdictions.
For example, the additional requirements related to minimum regulatory capital, leverage ratios and liquidity measures imposed by Basel III, as implemented in Switzerland, together with more stringent requirements imposed by the Swiss legislation, and the related implementing ordinances and actions by our regulators, have contributed to our decision to reduce risk-weighted assets and the size of our balance sheet, and could potentially impact our access to capital markets and increase our funding costs. In addition, the ongoing implementation in the US of the provisions of the Dodd-Frank Act, including the "Volcker Rule", derivatives regulation, and other regulatory developments described in "Regulation and supervision", have imposed, and will continue to impose, new regulatory burdens on certain of our operations. These requirements have contributed to our decision to exit certain businesses (including a number of our private equity businesses) and may lead us to exit other businesses. Recent CFTC, SEC and Fed rules and proposals have materially increased, or could in the future materially increase, the operating costs, including margin requirements, compliance, information technology and related costs, associated with our derivatives businesses with US persons, while at the same time making it more difficult for us to transact derivatives business outside the US.
Further, in 2014, the Fed adopted a final rule under the Dodd-Frank Act that created a new framework for regulation of the US operations of foreign banking organizations such as ours. Certain aspects of the framework are still to be implemented. Implementation is expected to continue to result in our incurring additional costs and to affect the way we conduct our business in the US, including through our US IHC. Certain of these proposals are not final or may be subject to further modification or changes, and the ultimate impact of any final requirements cannot be predicted at this time. Further, already enacted and possible future cross-border tax regulation with extraterritorial effect, such as FATCA, and other bilateral or multilateral tax treaties and agreements on the automatic exchange of information in tax matters, impose detailed reporting obligations and increased compliance and systems-related costs on our businesses. In addition, the US tax reform enacted on December 22, 2017 introduced substantial changes to the US tax system, including the lowering of the corporate tax rate and the introduction of BEAT. Additionally, implementation of CRD IV, MiFID II and MiFIR and their Swiss counterpart, the Federal Financial Services Act (FFSA), and other reforms may negatively affect our business activities. Whether or not the FFSA, together with supporting or implementing laws and regulations, will be deemed equivalent to MiFID II is uncertain. Swiss banks, including us, may accordingly be limited from participating in businesses regulated by such laws. Finally, we expect that TLAC requirements, which took effect on January 1, 2019 in Switzerland and the US, as well as in the UK, and are being finalized in many other jurisdictions, including the EU, as well as new requirements and rules with respect to the internal total loss-absorbing capacity of G-SIBs and their operating entities (iTLAC), may increase our cost of funding and restrict our ability to deploy capital and liquidity on a global basis as needed when they are implemented.
Further, following the formal notification by the UK of its decision to leave the EU, negotiations have been carried out on the withdrawal agreement and the final outcome remains uncertain. Negotiations include the renegotiation, either during a transitional period or more permanently, of a number of regulatory and other arrangements between the EU and the UK that could directly impact our business. Adverse changes to any of these arrangements, and even uncertainty over potential changes during the remaining period of negotiation, could potentially impact our results.
> Refer to "UK-EU relationship" in Regulation and supervision – Recent regulatory developments and proposals – UK for further information.
In addition, there have been frequent and complex changes in sanction regimes imposed on countries, entities and individuals in recent years. As a result, our costs of monitoring and complying with sanctions requirements have increased, and there is an increased risk that we will not timely identify prohibited activity.
We expect the financial services industry and its members, including us, to continue to be affected by the significant uncertainty over the scope and content of regulatory reform in 2019 and beyond. The uncertainty about the future US regulatory agenda, which includes a variety of proposals to change existing regulations or the approach to regulation of the financial industry and potential changes in regulation following a UK withdrawal from the EU and the results of national elections in Europe may result in significant changes in the regulatory direction and policies applicable to us.
Changes in laws, rules or regulations, or in their interpretation or enforcement, or the implementation of new laws, rules or regulations, may adversely affect our results of operations.
Despite our best efforts to comply with applicable regulations, a number of risks remain, particularly in areas where applicable regulations may be unclear or inconsistent among jurisdictions or where regulators or international bodies,

organizations or unions revise their previous guidance or courts overturn previous rulings. Additionally, authorities in many jurisdictions have the power to bring administrative or judicial proceedings against us, which could result in, among other things, suspension or revocation of our licenses, cease and desist orders, fines, civil penalties, criminal penalties or other disciplinary action which could materially adversely affect our results of operations and seriously harm our reputation.

> Refer to “Regulation and supervision” for a description of our regulatory regime and a summary of some of the significant regulatory and government reform proposals affecting the financial services industry as well as to “Liquidity and funding management” and “Capital management” in III – Treasury, Risk, Balance sheet and Off-balance sheet for information regarding our current regulatory framework and expected changes to this framework affecting capital and liquidity standards.

Swiss resolution proceedings and resolution planning requirements may affect our shareholders and creditors

Pursuant to Swiss banking laws, FINMA has broad powers and discretion in the case of resolution proceedings with respect to a Swiss bank, such as Credit Suisse AG or Credit Suisse (Schweiz) AG, and to a Swiss parent company of a financial group, such as Credit Suisse Group AG. These broad powers include the power to open restructuring proceedings with respect to Credit Suisse AG, Credit Suisse (Schweiz) AG or Credit Suisse Group AG and, in connection therewith, cancel the outstanding equity of the entity subject to such proceedings, convert such entity's debt instruments and other liabilities into equity and/or cancel such debt instruments and other liabilities, in each case, in whole or in part, and stay (for a maximum of two business days) certain rights under contracts to which such entity is a party, as well as the power to order protective measures, including the deferment of payments, and institute liquidation proceedings with respect to Credit Suisse AG, Credit Suisse (Schweiz) AG or Credit Suisse Group AG. The scope of such powers and discretion and the legal mechanisms that would be utilized are subject to development and interpretation.

We are currently subject to resolution planning requirements in Switzerland, the US and the UK and may face similar requirements in other jurisdictions. If a resolution plan is determined by the relevant authority to be inadequate, relevant regulations may allow the authority to place limitations on the scope or size of our business in that jurisdiction, require us to hold higher amounts of capital or liquidity, require us to divest assets or subsidiaries or to change our legal structure or business to remove the relevant impediments to resolution.

> Refer to "Recent regulatory developments and proposals – Switzerland" and "Regulatory framework – Switzerland – Resolution regime" in Regulation and supervision for a description of the current resolution regime under Swiss banking laws as it applies to Credit Suisse AG, Credit Suisse (Schweiz) AG and Credit Suisse Group AG.

Any conversion of our convertible capital instruments would dilute the ownership interests of existing shareholders

Under Swiss regulatory capital rules, we are required to issue a significant amount of contingent capital instruments, certain of which would convert into common equity upon the occurrence of specified triggering events, including our CET1 ratio falling below prescribed thresholds (7% in the case of high-trigger instruments), or a determination by FINMA that conversion is necessary, or that we require extraordinary public sector capital support, to prevent us from becoming insolvent. As of December 31, 2018, we had 2,550.6 million common shares outstanding and we had issued in the aggregate an equivalent of CHF 1.5 billion in principal amount of such contingent convertible capital instruments, and we may issue more such contingent convertible capital instruments in the future. The conversion of some or all of our contingent convertible capital instruments due to the occurrence of any of such triggering events would result in the dilution of the ownership interests of our then existing shareholders, which dilution could be substantial. Additionally, any conversion, or the anticipation of the possibility of a conversion, could depress the market price of our ordinary shares.

> Refer to "Contingent convertible capital instruments" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Capital management – Capital instruments for more information on the triggering events related to our contingent convertible capital instruments.

Changes in monetary policy are beyond our control and difficult to predict

We are affected by the monetary policies adopted by the central banks and regulatory authorities of Switzerland, the US and other countries. The actions of the SNB and other central banking authorities directly impact our cost of funds for lending, capital raising and investment activities and may impact the value of financial instruments we hold and the competitive and operating environment for the financial services industry. Many central banks, including the Fed, have implemented significant changes to their monetary policy or have experienced significant changes in their management and may implement or experience further changes. We cannot predict whether these changes will have a material adverse effect on us or our operations. In addition, changes in monetary policy may affect the credit quality of our customers. Any changes in monetary policy are beyond our control and difficult to predict.

Legal restrictions on our clients may reduce the demand for our services

We may be materially affected not only by regulations applicable to us as a financial services company, but also by regulations and changes in enforcement practices applicable to our clients. Our business could be affected by, among other things, existing and proposed tax legislation, antitrust and competition policies, corporate governance initiatives and other governmental regulations and policies, and changes in the interpretation or enforcement of existing laws and rules that affect business and the financial markets. For example, focus on tax compliance and changes in enforcement practices could lead to further asset outflows from our private banking businesses.

Competition

We face intense competition

We face intense competition in all financial services markets and for the products and services we offer. Consolidation through mergers, acquisitions, alliances and cooperation, including as a result of financial distress, has increased competitive pressures. Competition is based on many factors, including the products and services offered, pricing, distribution systems, customer service, brand recognition, perceived financial strength and the willingness to use capital to serve client needs. Consolidation has created a number of firms that, like us, have the ability to offer a wide range of products, from loans and deposit-taking to brokerage,

investment banking and asset management services. Some of these firms may be able to offer a broader range of products than we do, or offer such products at more competitive prices. Current market conditions have resulted in significant changes in the competitive landscape in our industry as many institutions have merged, altered the scope of their business, declared bankruptcy, received government assistance or changed their regulatory status, which will affect how they conduct their business. In addition, current market conditions have had a fundamental impact on client demand for products and services. Some new competitors in the financial technology sector have sought to target existing segments of our businesses that could be susceptible to disruption by innovative or less regulated business models. Emerging technology may also result in further competition in the markets in which we operate. We can give no assurance that our results of operations will not be adversely affected.

Our competitive position could be harmed if our reputation is damaged

In the highly competitive environment arising from globalization and convergence in the financial services industry, a reputation for financial strength and integrity is critical to our performance, including our ability to attract and retain clients and employees. Our reputation could be harmed if our comprehensive procedures and controls fail, or appear to fail, to address conflicts of interest, prevent employee misconduct, produce materially accurate and complete financial and other information or prevent adverse legal or regulatory actions.

> Refer to “Reputational risk” in III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk coverage and management for more information.

We must recruit and retain highly skilled employees

Our performance is largely dependent on the talents and efforts of highly skilled individuals. Competition for qualified employees is intense. We have devoted considerable resources to recruiting, training and compensating employees. Our continued ability to compete effectively in our businesses depends on our ability to attract new employees and to retain and motivate our existing employees. The continued public focus on compensation practices in the financial services industry, and related regulatory changes, may have an adverse impact on our ability to attract and retain highly skilled employees. In particular, limits on the amount and form of executive compensation imposed by regulatory initiatives, including the Swiss Ordinance Against Excessive Compensation with respect to Listed Stock Corporations (Compensation Ordinance) in Switzerland and the implementation of CRD IV in the UK, could potentially have an adverse impact on our ability to retain certain of our most highly skilled employees and hire new qualified employees in certain businesses.

We face competition from new trading technologies

Our businesses face competitive challenges from new trading technologies, including trends towards direct access to automated and electronic markets, and the move to more automated trading platforms. Such technologies and trends may adversely affect our commission and trading revenues, exclude our businesses from certain transaction flows, reduce our participation in the trading markets and the associated access to market information and lead to the creation of new and stronger competitors. We have made, and may continue to be required to make, significant additional expenditures to develop and support new trading systems or otherwise invest in technology to maintain our competitive position.

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II – Operating and financial review
Operating environment
Credit Suisse
Swiss Universal Bank
International Wealth Management
Asia Pacific
Global Markets
Investment Banking & Capital Markets
Strategic Resolution Unit
Corporate Center
Assets under management
Critical accounting estimates

Operating environment

Global economic growth decelerated in 2018 as the year progressed. Global equity markets depreciated in the final quarter and ended the year lower and equity market volatility increased significantly. The US dollar outperformed against major currencies in 2018.

Economic environment

Global economic growth was strong at the start of 2018, but falling business surveys and weaker manufacturing data across a range of countries showed decelerating growth as the year progressed. The US economy outperformed the rest of the world, with growth supported by fiscal stimulus and strong private sector income. US core inflation remained close to its 2% target. In the eurozone, economic momentum slowed significantly and core inflation remained subdued. Chinese economic data suggested weaker domestic demand, particularly in the fourth quarter of 2018, despite policy stimulus measures implemented throughout the year. In a number of emerging economies, tighter financial conditions, trade tensions and domestic political turbulence caused growth to slow.

Global monetary policy tightened in 2018. The US Federal Reserve (Fed) raised the target range for the federal funds rate by 25 basis points in every quarter of 2018, finishing the year at 2.25-2.5%. The European Central Bank (ECB) ended its asset purchase program, but left interest rates unchanged. The Swiss National Bank (SNB) kept policy rates unchanged. Elsewhere in developed markets, the Bank of Canada, the Bank of England, and the central banks of Sweden and Norway all raised policy rates in 2018. In emerging markets, a growing number of central banks tightened monetary policy, including in Mexico and South Korea. Brazil was the exception as rates ended the year at a lower level than where they started.

Global equities corrected significantly in the fourth quarter of 2018 on mounting economic growth concerns, finishing 2018 in negative territory and reversing the gains made in the first nine months of the year. Despite strong earnings in the US, global equities lost more than 7% in 2018 as trade tensions and other political uncertainties led to significant declines from previously elevated valuation levels. Among regions, US and Australian equities outperformed, while European, Japanese, and emerging market equities lagged significantly (refer to the charts under “Equity markets”). Among sectors, healthcare was the top performer and the only sector with positive returns. Financials, materials, energy, and industrials were the bottom performers in 2018 as weaker global economic momentum, a flatter US Treasury yield curve, declining commodity prices and political risks weighed on these sectors. Equity market volatility, as measured by the Chicago Board Options Exchange Market Volatility Index (VIX), trended higher in 2018 reversing last year’s historically low levels. The Credit Suisse Hedge Fund Index declined 3% in 2018.

In fixed income, US dollar rates ended the year higher given the monetary tightening by the Fed during 2018. In the fourth quarter of 2018, the USD yield curve began to partially invert as a result of a more cautious outlook on economic growth (refer to the charts under “Yield curves”). For the euro, yields generally decreased and for the Swiss franc, the yield curve steepened. For global fixed income investment grade bonds (including both government and credit), the year ended with a positive performance of approximately 1.5% in US dollar hedged terms. In credits, spreads generally widened from the historically tight level at the beginning of the year (refer to the charts under “Credit spreads”). Emerging market bonds and convertible bonds were the weakest fixed income segments in 2018.

Among major currencies, the US dollar was one of the strongest currencies in 2018. It appreciated from weak levels at the beginning of 2018, and benefited from the continued tightening of US monetary policy and from global risk aversion. The euro depreciated, despite the tapering of quantitative easing by the ECB, as economic momentum slowed and political risks weighed on the currency, particularly following the Italian elections. The Swiss franc also depreciated against the US dollar over the year, but appreciated against the euro as economic and political risks in the eurozone dominated for large parts of the year. The British pound was particularly under pressure in 2018, as uncertainty around the process of the UK withdrawal from the EU led to a deterioration in market sentiment and an increase in volatility. Most emerging market currencies weakened significantly against the US dollar in 2018, particularly the Argentine peso and the Turkish lira. The Russian ruble, the Brazilian real and the South African rand also weakened. The Mexican peso, however, held up relatively well against the US dollar in 2018.

The Credit Suisse Commodities Benchmark ended the year with a negative return of more than 11%, after substantial gains at the beginning of 2018. Energy saw the most pronounced reversal as the sector changed from being the clear outperformer up until the end of the third quarter of 2018 to being among the worst performing segments in the fourth quarter of 2018 after oil and gas prices plunged. Demand concerns and a stronger than expected supply contributed to this weakness. Only industrial metals, which are particularly sensitive to growth and trade policies, fared worse on a full-year comparison. Precious metals were also down for the year amid a strong US dollar. Agricultural prices also declined.

Market volumes (growth in % year on year)

2018	Global	Europe
Equity trading volume [1]	9	5
Announced mergers and acquisitions [2]	19	31
Completed mergers and acquisitions [2]	13	22
Equity underwriting [2]	(14)	(34)
Debt underwriting [2]	(17)	(7)
Syndicated lending – investment grade [2]	31	–

1
London Stock Exchange, Borsa Italiana, Deutsche Börse and BME. Global also includes ICE and NASDAQ.

2
Dealogic.

Sector environment

World bank stocks had a difficult year and underperformed global equity markets in 2018. European bank stocks underperformed world bank stocks in particular in the second and third quarter of 2018. At the end of 2018, world bank stocks traded more than 17% lower compared to 2017 (refer to the charts under “Equity markets”).

In private banking, the industry has experienced a long-term fundamental growth trend fueled by economic growth and a generally supportive investment environment despite a market correction led by equity markets in the fourth quarter of 2018. Against these supportive market trends, challenges included political instability, worry over the threat from greater protectionism among the largest trade partners and the uncertainty over the impact of central banks’ withdrawal from a policy of quantitative easing. In addition, the private banking sector continued to face pressure as it adapts to structural and regulatory changes while pursuing new opportunities and efficiencies arising from digital technology.

In investment banking, global equity trading volumes increased 9% compared to 2017. Global announced mergers & acquisitions (M&A) volumes increased 19% and announced M&A in Europe increased 31%. Global completed M&A volumes increased 13%. In Europe, completed M&A volumes increased 22%. Global equity underwriting volumes decreased 14% and European volumes decreased 34%. Global debt underwriting decreased 17%. US fixed income trading volumes increased, mainly driven by an increase in treasury volumes.

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Credit Suisse

In 2018, we recorded net income attributable to shareholders of CHF 2,024 million. Return on equity and return on tangible equity were 4.7% and 5.4%, respectively. As of the end of 2018, our CET1 ratio was 12.6%.

Results

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net interest income	7,009	6,557	7,562	7	(13)
Commissions and fees	11,890	11,817	11,092	1	7
Trading revenues [1]	624	1,317	313	(53)	321
Other revenues	1,397	1,209	1,356	16	(11)
Net revenues	**20,920**	**20,900**	**20,323**	0	3
Provision for credit losses	**245**	**210**	**252**	17	(17)
Compensation and benefits	9,620	10,367	10,652	(7)	(3)
General and administrative expenses	5,798	6,645	9,690	(13)	(31)
Commission expenses	1,259	1,430	1,455	(12)	(2)
Restructuring expenses	626	455	540	38	(16)
Total other operating expenses	7,683	8,530	11,685	(10)	(27)
Total operating expenses	**17,303**	**18,897**	**22,337**	(8)	(15)
Income/(loss) before taxes	**3,372**	**1,793**	**(2,266)**	88	–
Income tax expense	1,361	2,741	441	(50)	–
Net income/(loss)	**2,011**	**(948)**	**(2,707)**	–	(65)
Net income/(loss) attributable to noncontrolling interests	(13)	35	3	–	–
Net income/(loss) attributable to shareholders	**2,024**	**(983)**	**(2,710)**	–	(64)
Statement of operations metrics (%)					
Return on regulatory capital	7.4	3.9	(4.7)	–	–
Cost/income ratio	82.7	90.4	109.9	–	–
Effective tax rate	40.4	152.9	(19.5)	–	–
Earnings per share (CHF)					
Basic earnings/(loss) per share	0.79	(0.41)	(1.27)	–	(68)
Diluted earnings/(loss) per share	0.77	(0.41)	(1.27)	–	(68)
Return on equity (%)					
Return on equity	4.7	(2.3)	(6.1)	–	–
Return on tangible equity [2]	5.4	(2.6)	(6.9)	–	–
Balance sheet statistics (CHF million)					
Total assets	768,916	796,289	819,861	(3)	(3)
Risk-weighted assets [3]	284,582	271,680	268,045	5	1
Leverage exposure [3]	881,386	916,525	950,763	(4)	(4)
Number of employees (full-time equivalents)					
Number of employees	45,680	46,840	47,170	(2)	(1)

1

Represent revenues on a product basis which are not representative of business results within our business segments as segment results utilize financial instruments across various product types. In the fourth quarter of 2018, we were involved in a tender offer of an issuer with respect to its own common shares that resulted in negative trading revenues, offset by positive net interest income as a result of a related dividend distribution by the same issuer.

2
Based on tangible shareholders' equity, a non-GAAP financial measure, which is calculated by deducting goodwill and other intangible assets from total shareholders' equity as presented in our balance sheet. Management believes that the return on tangible equity is meaningful as it allows consistent measurement of the performance of businesses without regard to whether the businesses were acquired.
3
Disclosed on a look-through basis.
61

Results summary

2018 results

In 2018, Credit Suisse reported net income attributable to shareholders of CHF 2,024 million compared to a net loss attributable to shareholders of CHF 983 million in 2017. The 2017 results included income tax expenses of CHF 2,741 million, mainly reflecting the re-assessment of deferred tax assets with an associated tax charge of CHF 2.3 billion, primarily resulting from a reduction in the US federal corporate tax rate following the enactment of the Tax Cuts and Jobs Act in the US during the fourth quarter of 2017. In 2018, Credit Suisse reported income before taxes of CHF 3,372 million compared to CHF 1,793 million in 2017 and adjusted income before taxes of CHF 4,194 million compared to CHF 2,762 million in 2017.

2017 results

In 2017, Credit Suisse reported a net loss attributable to shareholders of CHF 983 million compared to a net loss attributable to shareholders of CHF 2,710 million in 2016. The 2017 results included income tax expenses of CHF 2,741 million, mainly reflecting the re-assessment of deferred tax assets due to the US tax reform. The 2016 results included net litigation provisions of CHF 2,986 million, primarily relating to the settlement with the US Department of Justice (DOJ) regarding our legacy residential mortgage-backed securities (RMBS) business. In 2017, Credit Suisse reported income before taxes of CHF 1,793 million and an adjusted income before taxes of CHF 2,762 million.

2018 results details

Net revenues

Compared to 2017, net revenues of CHF 20,920 million were stable, primarily reflecting higher net revenues in International Wealth Management and Swiss Universal Bank and lower negative net revenues in the Strategic Resolution Unit, partially offset by lower net revenues in Global Markets and Asia Pacific. The increase in net revenues in International Wealth Management reflected higher revenues across all revenue categories. The increase in net revenues in Swiss Universal Bank was mainly due to higher recurring commissions and fees, an increase in other revenues, reflecting a gain on the sale of its investment in Euroclear and gains on the sale of real estate, and slightly higher net interest income. The decrease in negative net revenues in the Strategic Resolution Unit was primarily driven by lower overall funding costs and lower exit costs, partially offset by a reduction in fee-based revenues as a result of business exits and higher negative valuation adjustments. The decrease in net revenues in Global Markets primarily reflected lower results across fixed income trading and underwriting and reduced cash equities revenues due to less favorable market conditions, partially offset by increased International Trading Solutions (ITS) performance due to substantially higher equity derivatives revenues. The decrease in net revenues in Asia Pacific was driven by lower revenues in its Markets business across all revenue categories.

Provision for credit losses

In 2018, we recorded provision for credit losses of CHF 245 million, primarily reflecting provisions of CHF 126 million in Swiss Universal Bank, CHF 35 million in International Wealth Management and CHF 35 million in Asia Pacific.

Total operating expenses

We reported total operating expenses of CHF 17,303 million in 2018, a decrease of 8% compared to 2017, primarily due to a 7% decrease in compensation and benefits and a 13% decrease in general and administrative expenses. The decrease in compensation and benefits was mainly due to lower salaries and variable compensation. The decrease in general and administrative expenses was primarily due to lower professional services and lower litigation provisions.

Income tax expense

In 2018, we recorded income tax expense of CHF 1,361 million. The Credit Suisse effective tax rate was 40.4% in 2018, compared to 152.9% in 2017. The effective tax rate for 2018 mainly reflected the impact of the geographical mix of results, non-deductible funding costs and tax on own credit gains. Overall, net deferred tax assets decreased CHF 623 million to CHF 4,505 million during 2018, mainly driven by earnings.

US tax reform – Tax Cuts and Jobs Act

The US tax reform enacted on December 22, 2017 resulted in a reduction of the federal corporate income tax rate from 35% to 21%, effective as of January 1, 2018. The reform also introduced the US base erosion and anti-abuse tax (BEAT), effective as of January 1, 2018. It is broadly levied on tax deductions created by certain payments, e.g. for interest and services, to affiliated group companies outside the US, in the case where the calculated tax based on a modified taxable income exceeds the amount of ordinary federal corporate income taxes paid. The standard tax rates applicable under BEAT are 5% for 2018, 10% for 2019 until 2025 and 12.5% from 2026 onward. For certain banking entities, which management believes will include Credit Suisse, these rates are increased by 1% resulting in rates of 6% for 2018, 11% for 2019 until 2025 and 13.5% from 2026 onward. On the basis of the current analysis of the BEAT tax regime, following the draft regulations issued by the US Department of Treasury on December 13, 2018, Credit Suisse considers it as more likely than not that the Group will be subject to this regime in 2018. On this basis, CHF 65 million has been accrued in the fourth quarter of 2018 in relation to BEAT. The finalization of US BEAT regulations is expected to occur in 2019, at which point the above BEAT position for the tax year 2018 will need to be re-assessed. Prospectively, additional tax regulations of the US tax reform relating to interest deductibility may also impact Credit Suisse.

> Refer to “Note 28 – Tax” in VI – Consolidated financial statements – Credit Suisse Group for further information.

Subsequent event

In March 2019, the Group reached a tentative settlement related to an existing dispute. As a result, the Group increased its 2018 litigation provision by CHF 33 million in the Corporate & Institutional Banking business within the Swiss Universal Bank division and decreased its estimate of the aggregate range of reasonably possible losses not covered by existing provisions from zero to CHF 1.5 billion to zero to CHF 1.4 billion.

2017 results details

Net revenues

Compared to 2016, net revenues of CHF 20,900 million increased 3%, primarily reflecting higher net revenues in International Wealth Management and Investment Banking & Capital Markets and lower negative net revenues in the Strategic Resolution Unit, partially offset by lower net revenues in Swiss Universal Bank. The increase in net revenues in International Wealth Management was driven by higher recurring commissions and fees, higher transaction- and performance-based revenues and higher net interest income, partially offset by lower other revenues. The increase in net revenues in Investment Banking & Capital Markets was due to higher revenues from debt underwriting and equity underwriting, partially offset by lower revenues in advisory and other fees. The decrease in negative net revenues in the Strategic Resolution Unit was driven by lower negative valuation adjustments, a reduction in overall funding costs and lower exit losses primarily related to the sale of loan and financing portfolios, partially offset by a reduction in fee-based revenues as a result of accelerated business exits. The decrease in net revenues in Swiss Universal Bank was mainly due to gains on the sale of real estate in 2016 of CHF 366 million.

Provision for credit losses

In 2017, we recorded provision for credit losses of CHF 210 million, primarily reflecting provisions of CHF 75 million in Swiss Universal Bank, CHF 32 million in the Strategic Resolution Unit, CHF 31 million in Global Markets and CHF 30 million in Investment Banking & Capital Markets.

Total operating expenses

We reported total operating expenses of CHF 18,897 million in 2017, a decrease of 15% compared to 2016, primarily due to a 31% decrease in general and administrative expenses and a 3% decrease in compensation and benefits. The decrease in general and administrative expenses was primarily due to lower litigation provisions, mainly due to the settlements in 2016 with the DOJ and the National Credit Union Administration Board (NCUA) regarding our legacy RMBS business, and lower professional services fees. The decrease in compensation and benefits was mainly due to lower salaries and lower discretionary compensation expenses.

Income tax expense

In 2017, we recorded income tax expense of CHF 2,741 million. The Credit Suisse effective tax rate was 152.9% in 2017, compared to (19.5)% in 2016. The effective tax rate for 2017 mainly reflected the re-assessment of deferred tax assets, with an associated tax charge of CHF 2.3 billion primarily resulting from the US tax reform, the non-deductible penalty relating to the settlement with the New York State Department of Financial Services (DFS) relating to certain areas of our foreign exchange trading business and the impact from recognizing tax contingency accruals, partially offset by the impact of the geographical mix of results. Overall, net deferred tax assets decreased CHF 571 million to CHF 5,128 million during 2017, mainly driven by the re-assessment of deferred taxes, earnings and a foreign exchange impact, partially offset by the adoption of new accounting standards relating to intra-entity asset transfers rules and share-based payment. Net deferred tax assets on net operating losses increased CHF 35 million to CHF 2,213 million during 2017.

Overview of Results

in / end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Corporate Center	Core Results	Strategic Resolution Unit	Credit Suisse
2018 (CHF million)									
Net revenues	**5,564**	**5,414**	**3,393**	**4,980**	**2,177**	**100**	**21,628**	**(708)**	**20,920**
Provision for credit losses	**126**	**35**	**35**	**24**	**24**	**0**	**244**	**1**	**245**
Compensation and benefits	1,887	2,303	1,503	2,296	1,249	128	9,366	254	9,620
Total other operating expenses	1,426	1,371	1,191	2,506	560	211	7,265	418	7,683
of which general and administrative expenses	1,097	1,029	887	1,773	467	160	5,413	385	5,798
of which restructuring expenses	101	115	61	242	84	2	605	21	626
Total operating expenses	**3,313**	**3,674**	**2,694**	**4,802**	**1,809**	**339**	**16,631**	**672**	**17,303**
Income/(loss) before taxes	**2,125**	**1,705**	**664**	**154**	**344**	**(239)**	**4,753**	**(1,381)**	**3,372**
Return on regulatory capital	16.8	30.7	12.0	1.2	10.9	–	11.0	–	7.4
Cost/income ratio	59.5	67.9	79.4	96.4	83.1	–	76.9	–	82.7
Total assets	224,301	91,835	99,809	211,530	16,156	104,411	748,042	20,874	768,916
Goodwill	615	1,544	1,506	463	638	0	4,766	0	4,766
Risk-weighted assets [1]	76,475	40,116	37,156	59,016	24,190	29,703	266,656	17,926	284,582
Leverage exposure [1]	255,480	98,556	106,375	245,664	40,485	105,247	851,807	29,579	881,386
2017 (CHF million)									
Net revenues	**5,396**	**5,111**	**3,504**	**5,551**	**2,139**	**85**	**21,786**	**(886)**	**20,900**
Provision for credit losses	**75**	**27**	**15**	**31**	**30**	**0**	**178**	**32**	**210**
Compensation and benefits	1,957	2,278	1,602	2,532	1,268	398	10,035	332	10,367
Total other operating expenses	1,599	1,455	1,158	2,538	472	423	7,645	885	8,530
of which general and administrative expenses	1,251	1,141	831	1,839	423	364	5,849	796	6,645

of which restructuring expenses	59	70	63	150	42	14	398	57	455
Total operating expenses	**3,556**	**3,733**	**2,760**	**5,070**	**1,740**	**821**	**17,680**	**1,217**	**18,897**
Income/(loss) before taxes	**1,765**	**1,351**	**729**	**450**	**369**	**(736)**	**3,928**	**(2,135)**	**1,793**
Return on regulatory capital	13.7	25.8	13.8	3.2	13.7	–	9.3	–	3.9
Cost/income ratio	65.9	73.0	78.8	91.3	81.3	–	81.2	–	90.4
Total assets	228,857	94,753	96,497	242,159	20,803	67,591	750,660	45,629	796,289
Goodwill	610	1,544	1,496	459	633	0	4,742	0	4,742
Risk-weighted assets [1]	65,572	38,256	31,474	58,858	20,058	23,849	238,067	33,613	271,680
Leverage exposure [1]	257,054	99,267	105,585	283,809	43,842	67,034	856,591	59,934	916,525
2016 (CHF million)									
Net revenues	**5,759**	**4,698**	**3,597**	**5,497**	**1,972**	**71**	**21,594**	**(1,271)**	**20,323**
Provision for credit losses	**79**	**20**	**26**	**(3)**	**20**	**(1)**	**141**	**111**	**252**
Compensation and benefits	2,031	2,168	1,665	2,688	1,218	270	10,040	612	10,652
Total other operating expenses	1,624	1,389	1,181	2,764	473	489	7,920	3,765	11,685
of which general and administrative expenses	1,281	1,096	836	2,038	443	406	6,100	3,590	9,690
of which restructuring expenses	60	54	53	217	28	7	419	121	540
Total operating expenses	**3,655**	**3,557**	**2,846**	**5,452**	**1,691**	**759**	**17,960**	**4,377**	**22,337**
Income/(loss) before taxes	**2,025**	**1,121**	**725**	**48**	**261**	**(687)**	**3,493**	**(5,759)**	**(2,266)**
Return on regulatory capital	16.5	23.3	13.7	0.4	10.7	–	8.5	–	(4.7)
Cost/income ratio	63.5	75.7	79.1	99.2	85.8	–	83.2	–	109.9
Total assets	228,363	91,083	97,221	239,700	20,784	62,413	739,564	80,297	819,861
Goodwill	623	1,612	1,546	476	656	0	4,913	0	4,913
Risk-weighted assets [1]	65,669	35,252	34,605	51,713	18,027	17,338	222,604	45,441	268,045
Leverage exposure [1]	252,889	94,092	108,926	284,143	45,571	59,374	844,995	105,768	950,763

1

Disclosed on a look-through basis.

Regulatory capital

As of the end of 2018, our Bank for International Settlements (BIS) common equity tier 1 (CET1) ratio was 12.6% and our risk-weighted assets were CHF 284.6 billion.

The Swiss Financial Market Supervisory Authority FINMA (FINMA) imposed regulatory changes, primarily in respect of credit multipliers and banking book securitizations, which resulted in additional risk-weighted assets relating to credit risk of CHF 6.9 billion in 2018.

As a result of the significant reduction in the size of the Strategic Resolution Unit over the last two years, in the first quarter of 2018 we agreed with FINMA on a change to the methodology for the allocation of risk-weighted assets relating to operational risk to our businesses to reflect the changed portfolio in the Strategic Resolution Unit. Such risk-weighted assets relating to operational risk were reduced in the Strategic Resolution Unit by CHF 8.9 billion and allocated primarily to the Corporate Center, Global Markets, Investment Banking & Capital Markets and Asia Pacific.

As previously disclosed, Credit Suisse approached FINMA with a request to review the appropriateness of the level of the risk-weighted assets relating to operational risk in the Strategic Resolution Unit, given the progress in exiting businesses and reducing the size of the division over the last two years, with the aim of aligning reductions to the accelerated closure of the Strategic Resolution Unit by the end of 2018. In the first quarter of 2018, we concluded discussions with FINMA and reduced the level of risk-weighted assets relating to operational risk by CHF 2.5 billion, primarily in connection with the external transfer of our US private banking business, which was reflected in the Corporate Center.

In the first quarter of 2018, we realigned the allocation of high-quality liquid assets (HQLA) to the divisions to match their actual business usage in line with our internal risk management guidelines. Any excess HQLA held by legal entities above those levels for local regulatory purposes or economic requirements were allocated to the Corporate Center. HQLA allocated to the Corporate Center and Asia Pacific increased CHF 35.5 billion and CHF 5.0 billion, respectively, as a result of these measures and decreased CHF 13.8 billion, CHF 12.6 billion, CHF 6.7 billion, CHF 6.2 billion and CHF 1.2 billion in Swiss Universal Bank, Strategic Resolution Unit, International Wealth Management, Investment Banking & Capital Management and Global Markets, respectively.

> Refer to “Capital management” in III – Treasury, Risk, Balance sheet and Off-balance sheet for further information.

Core Results

2018 results

In 2018, Core Results net revenues of CHF 21,628 million were stable compared to 2017, primarily reflecting lower net revenues in Global Markets and Asia Pacific, partially offset by higher net revenues in International Wealth Management and Swiss Universal Bank. Provision for credit losses was CHF 244 million, primarily related to Swiss Universal Bank, International Wealth Management and Asia Pacific. Total operating expenses of CHF 16,631 million decreased 6% compared to 2017, mainly reflecting a 7% decrease in compensation and benefits and an 7% decrease in general and administrative expenses, partially offset by a 52% increase in restructuring expenses. The decrease in compensation and benefits was primarily related to the Corporate Center, Global Markets and Asia Pacific. The decrease in general and administrative expenses was mainly related to the Corporate Center, Swiss Universal Bank and International Wealth Management. In 2018, we incurred CHF 605 million of restructuring expenses, primarily related to Global Markets, International Wealth Management, Swiss Universal Bank and Investment Banking & Capital Markets.

2017 results

In 2017, Core Results net revenues of CHF 21,786 million were stable compared to 2016, primarily reflecting higher net revenues in International Wealth Management and Investment Banking & Capital Markets, offset by lower net revenues in Swiss Universal Banking and Asia Pacific. Provision for credit losses was CHF 178 million, primarily reflecting net provisions of CHF 75 million in Swiss Universal Bank, CHF 31 million in Global Markets and CHF 30 million in Investment Banking & Capital Markets. Total operating expenses of CHF 17,680 million decreased slightly compared to 2016, mainly due to slightly lower general and administrative expenses.

Reconciliation of adjusted results

Adjusted results referred to in this document are non-GAAP financial measures that exclude goodwill impairment and certain other revenues and expenses included in our reported results. Management believes that adjusted results provide a useful presentation of our operating results for purposes of assessing our Group and divisional performance consistently over time, on a basis that excludes items that management does not consider representative of our underlying performance. Provided below is a reconciliation of our adjusted results to the most directly comparable US GAAP measures.

Reconciliation of adjusted results

in	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Corporate Center	Core Results	Strategic Resolution Unit	Credit Suisse
2018 (CHF million)									
Net revenues	**5,564**	**5,414**	**3,393**	**4,980**	**2,177**	**100**	**21,628**	**(708)**	**20,920**
Real estate gains	(21)	(2)	0	0	0	(4)	(27)	(1)	(28)
(Gains)/losses on business sales	(37)	(55)	0	0	0	21	(71)	0	(71)
Net revenues adjusted	**5,506**	**5,357**	**3,393**	**4,980**	**2,177**	**117**	**21,530**	**(709)**	**20,821**
Provision for credit losses	**126**	**35**	**35**	**24**	**24**	**0**	**244**	**1**	**245**
Total operating expenses	**3,313**	**3,674**	**2,694**	**4,802**	**1,809**	**339**	**16,631**	**672**	**17,303**
Restructuring expenses	(101)	(115)	(61)	(242)	(84)	(2)	(605)	(21)	(626)
Major litigation provisions	(37)	0	(79)	(10)	(1)	0	(127)	(117)	(244)
Expenses related to business sales	0	(47)	0	0	0	0	(47)	(4)	(51)
Total operating expenses adjusted	**3,175**	**3,512**	**2,554**	**4,550**	**1,724**	**337**	**15,852**	**530**	**16,382**
Income/(loss) before taxes	**2,125**	**1,705**	**664**	**154**	**344**	**(239)**	**4,753**	**(1,381)**	**3,372**
Total adjustments	80	105	140	252	85	19	681	141	822
Adjusted income/(loss) before taxes	**2,205**	**1,810**	**804**	**406**	**429**	**(220)**	**5,434**	**(1,240)**	**4,194**
Adjusted return on regulatory capital (%)	17.4	32.6	14.5	3.1	13.6	–	12.5	–	9.2
2017 (CHF million)									
Net revenues	**5,396**	**5,111**	**3,504**	**5,551**	**2,139**	**85**	**21,786**	**(886)**	**20,900**
(Gains)/losses on business sales	0	28	0	0	0	23	51	(38)	13
Net revenues adjusted	**5,396**	**5,139**	**3,504**	**5,551**	**2,139**	**108**	**21,837**	**(924)**	**20,913**
Provision for credit losses	**75**	**27**	**15**	**31**	**30**	**0**	**178**	**32**	**210**
Total operating expenses	**3,556**	**3,733**	**2,760**	**5,070**	**1,740**	**821**	**17,680**	**1,217**	**18,897**

Restructuring expenses	(59)	(70)	(63)	(150)	(42)	(14)	(398)	(57)	(455)
Major litigation provisions	(49)	(48)	0	0	0	(127)	(224)	(269)	(493)
Expenses related to business sales	0	0	0	(8)	0	0	(8)	0	(8)
Total operating expenses adjusted	**3,448**	**3,615**	**2,697**	**4,912**	**1,698**	**680**	**17,050**	**891**	**17,941**
Income/(loss) before taxes	**1,765**	**1,351**	**729**	**450**	**369**	**(736)**	**3,928**	**(2,135)**	**1,793**
Total adjustments	108	146	63	158	42	164	681	288	969
Adjusted income/(loss) before taxes	**1,873**	**1,497**	**792**	**608**	**411**	**(572)**	**4,609**	**(1,847)**	**2,762**
Adjusted return on regulatory capital (%)	14.6	28.6	15.0	4.3	15.2	–	10.9	–	6.0
2016 (CHF million)									
Net revenues	**5,759**	**4,698**	**3,597**	**5,497**	**1,972**	**71**	**21,594**	**(1,271)**	**20,323**
Real estate gains	(366)	(54)	0	0	0	0	(420)	(4)	(424)
(Gains)/losses on business sales	0	0	0	0	0	52	52	6	58
Net revenues adjusted	**5,393**	**4,644**	**3,597**	**5,497**	**1,972**	**123**	**21,226**	**(1,269)**	**19,957**
Provision for credit losses	**79**	**20**	**26**	**(3)**	**20**	**(1)**	**141**	**111**	**252**
Total operating expenses	**3,655**	**3,557**	**2,846**	**5,452**	**1,691**	**759**	**17,960**	**4,377**	**22,337**
Restructuring expenses	(60)	(54)	(53)	(217)	(28)	(7)	(419)	(121)	(540)
Major litigation provisions	(19)	12	0	(7)	0	0	(14)	(2,693)	(2,707)
Total operating expenses adjusted	**3,576**	**3,515**	**2,793**	**5,228**	**1,663**	**752**	**17,527**	**1,563**	**19,090**
Income/(loss) before taxes	**2,025**	**1,121**	**725**	**48**	**261**	**(687)**	**3,493**	**(5,759)**	**(2,266)**
Total adjustments	(287)	(12)	53	224	28	59	65	2,816	2,881
Adjusted income/(loss) before taxes	**1,738**	**1,109**	**778**	**272**	**289**	**(628)**	**3,558**	**(2,943)**	**615**
Adjusted return on regulatory capital (%)	14.2	23.1	14.8	2.0	11.9	–	8.6	–	1.3

Adjusted return on regulatory capital is calculated using adjusted results, applying the same methodology used to calculate return on regulatory capital.

Core Results by business activity

in	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Corporate Center	2018 Core Results	2017 Core Results	2016 Core Results
Related to private banking (CHF million)									
Net revenues	2,989	3,890	1,612	–	–	–	8,491	8,107	8,003
of which net interest income	1,717	1,568	628	–	–	–	3,913	3,739	3,571
of which recurring	835	1,227	420	–	–	–	2,482	2,393	2,232
of which transaction-based	397	1,054	563	–	–	–	2,014	1,972	1,801
Provision for credit losses	30	35	6	–	–	–	71	73	91
Total operating expenses	1,899	2,522	1,058	–	–	–	5,479	5,668	5,615
Income before taxes	**1,060**	**1,333**	**548**	**–**	**–**	**–**	**2,941**	**2,366**	**2,297**
Related to corporate & institutional banking									
Net revenues	2,575	–	–	–	–	–	2,575	2,499	2,501
of which net interest income	1,229	–	–	–	–	–	1,229	1,226	1,223
of which recurring	680	–	–	–	–	–	680	634	626
of which transaction-based	699	–	–	–	–	–	699	694	702
Provision for credit losses	96	–	–	–	–	–	96	33	40
Total operating expenses	1,414	–	–	–	–	–	1,414	1,502	1,531
Income before taxes	**1,065**	**–**	**–**	**–**	**–**	**–**	**1,065**	**964**	**930**
Related to investment banking									
Net revenues	–	–	1,781	4,980	2,177	–	8,938	9,587	9,692
of which fixed income sales and trading	–	–	244	2,649	–	–	2,893	3,184	3,130
of which equity sales and trading	–	–	859	1,709	–	–	2,568	2,670	3,319
of which underwriting and advisory [1]	–	–	678	1,047	2,198	–	3,923	4,016	3,582
Provision for credit losses	–	–	29	24	24	–	77	72	11
Total operating expenses	–	–	1,636	4,802	1,809	–	8,247	8,508	9,008
Income before taxes	**–**	**–**	**116**	**154**	**344**	**–**	**614**	**1,007**	**673**

Related to asset management									
Net revenues	–	1,524	–	–	–	–	1,524	1,508	1,327
Total operating expenses	–	1,152	–	–	–	–	1,152	1,181	1,047
Income before taxes	**–**	**372**	**–**	**–**	**–**	**–**	**372**	**327**	**280**
Related to corporate center									
Net revenues	–	–	–	–	–	100	100	85	71
Provision for credit losses	–	–	–	–	–	0	0	0	(1)
Total operating expenses	–	–	–	–	–	339	339	821	759
Loss before taxes	**–**	**–**	**–**	**–**	**–**	**(239)**	**(239)**	**(736)**	**(687)**
Total									
Net revenues	5,564	5,414	3,393	4,980	2,177	100	21,628	21,786	21,594
Provision for credit losses	126	35	35	24	24	0	244	178	141
Total operating expenses	3,313	3,674	2,694	4,802	1,809	339	16,631	17,680	17,960
Income/(loss) before taxes	**2,125**	**1,705**	**664**	**154**	**344**	**(239)**	**4,753**	**3,928**	**3,493**

1 Certain transaction-based revenues in Swiss Universal Bank and certain fixed income and equity sales and trading revenues in Global Markets relate to the Group's global advisory and underwriting business. Refer to "Global advisory and underwriting revenues" in Investment Banking & Capital Markets for further information.

Employees and other headcount

As of December 31, 2018, we had 45,680 employees worldwide, of which 15,840 were in Switzerland and 29,840 were abroad.

The number of employees decreased by 1,160 compared to the end of 2017. The decrease primarily reflected the decreases in Swiss Universal Bank, Global Markets and the Strategic Resolution Unit as a result of our cost efficiency measures and the right-sizing of business activities, partially offset by an increase in Asia Pacific, primarily due to contractor conversions and strategic hiring. The number of outsourced roles, contractors and consultants decreased by 2,020 compared to the end of 2017.

Employees and other headcount

end of	2018	2017
Employees		
Swiss Universal Bank	11,950	12,600
International Wealth Management	10,210	10,250
Asia Pacific	7,440	7,230
Global Markets	11,350	11,740
Investment Banking & Capital Markets	3,100	3,190
Strategic Resolution Unit	1,320	1,530
Corporate Center	310	300
Total employees	**45,680**	**46,840**
of which Switzerland	15,840	16,490
of which all other regions	29,840	30,350
Other headcount		
Outsourced roles, contractors and consultants	19,490	21,510
Total employees and other headcount	65,170	68,350

Based on full-time equivalents.

Other information

Format of presentation

In managing our business, revenues are evaluated in the aggregate, including an assessment of trading gains and losses and the related interest income and expense from financing and hedging positions. For this reason, specific individual revenue categories in isolation may not be indicative of performance. Certain reclassifications have been made to prior periods to conform to the current presentation.

Accounting developments

In 2018, the Group adopted Accounting Standard Update 2014-09 “Revenue from Contracts with Customers”, a new US generally accepted accounting principles (US GAAP) standard pertaining to revenue recognition, which was implemented using the modified retrospective approach with a transition adjustment reducing retained earnings by CHF 45 million, net of tax, without restating comparative periods. The new revenue recognition criteria require a change in the gross and net presentation of certain revenues and expenses, including in relation to certain underwriting and brokerage transactions, with most of the impact reflected in our Investment Banking & Capital Markets, Global Markets and Asia Pacific divisions. Both revenues and expenses increased CHF 59 million in Investment Banking & Capital Markets and CHF 32 million in Global Markets and decreased CHF 26 million in Asia Pacific.

In 2018, the Group also adopted a new US GAAP standard pertaining to the presentation of net periodic benefit costs of pension and other post-retirement costs, which was implemented retrospectively by restating comparative periods. The new presentation criteria require the service cost component of the net periodic benefit cost to be presented as a compensation expense while other components are to be presented as non-compensation expenses.

International Trading Solutions

As previously disclosed, effective July 1, 2017 the Global Markets division entered into an agreement with Swiss Universal Bank and International Wealth Management whereby it provides centralized trading and sales services across the three divisions. These services are now managed as a single business within the Global Markets division, referred to as ITS. Effective in the first quarter of 2018, the reporting according to the agreement was updated.

With a continued focus on developing our ITS business and to more closely reflect levels of client usage and the downsizing of our wholesale US rates business, we recalibrated the risk-weighted assets and leverage exposure allocations from ITS in Global Markets to Swiss Universal Bank and International Wealth Management.

Return on regulatory capital

Credit Suisse measures firm-wide returns against total shareholders' equity and tangible shareholders' equity (a non-GAAP financial measure). In addition, it also measures the efficiency of the firm and its divisions with regard to the usage of capital as determined by the minimum requirements set by regulators. This regulatory capital is calculated as the worst of 10% of risk-weighted assets and 3.5% of leverage exposure. Return on regulatory capital is calculated using income/(loss) after tax and assumes a tax rate of 30% and capital allocated based on the worst of 10% of average risk-weighted assets and 3.5% of average leverage exposure. These percentages are used in the calculation in order to reflect the 2019 fully phased-in Swiss regulatory minimum requirements for Basel III CET1 capital and leverage ratio. For Global Markets and Investment Banking & Capital Markets, return on regulatory capital is based on US dollar denominated numbers. Adjusted return on regulatory capital is calculated using adjusted results, applying the same methodology used to calculate return on regulatory capital.

Capital distribution proposal

Our Board of Directors will propose to the shareholders at the Annual General Meeting on April 26, 2019 a distribution of CHF 0.2625 per share out of capital contribution reserves for the financial year 2018. The distribution will be free of Swiss withholding tax and will not be subject to income tax for Swiss resident individuals holding the shares as a private investment. The distribution will be payable in cash.

Presentation currency

We are evaluating the appropriateness of a transition of the Group's presentation currency from Swiss francs to US dollars. We are currently analyzing the potential benefits and impacts of such a transition, which will be discussed with our Board of Directors in due course.

Potential replacement of interbank offered rates

There is significant international and regulatory pressure to replace the current interbank offered rates benchmarks (IBORs), including LIBOR, with alternative reference rates. In December 2018, the Swiss Financial Market Supervisory Authority FINMA (FINMA) referenced the legal risks, valuation risks and risks in relation to operational readiness involved and will further discuss these risks with the institutions it supervises. Additionally, from January 2019 onward, FINMA is contacting the supervised institutions that are particularly affected and is reviewing how these risks are identified, mitigated and monitored.

We have a significant number of liabilities and assets linked to certain indices, such as IBORs. There is ongoing work through numerous industry bodies and working groups to determine replacement benchmarks, including assessing the practicability of using alternative rates. We have established a global governance structure and change program to manage the transition.

Compensation and benefits

Compensation and benefits for a given year reflect the strength and breadth of the business results and staffing levels and include fixed components, such as salaries, benefits and the amortization of share-based and other deferred compensation from prior-year awards, and a discretionary variable component. The variable component reflects the performance-based variable compensation for the current year. The portion of the performance-based compensation for the current year deferred through share-based and other awards is expensed in future periods and is subject to vesting and other conditions.

Our shareholders' equity reflects the effect of share-based compensation. Share-based compensation expense (which is generally based on fair value at the time of grant) reduces equity; however, the recognition of the obligation to deliver the shares increases equity by a corresponding amount. Equity is generally unaffected by the granting and vesting of share-based awards and by the settlement of these awards through the issuance of shares from approved conditional capital. The Group may issue shares from conditional capital to meet its obligations to deliver share-based compensation awards. If Credit Suisse purchases shares from the market to meet its obligation to employees, these purchased treasury shares reduce equity by the amount of the purchase price.

> Refer to "Compensation" in V – Compensation for further information.

> Refer to "Consolidated statements of changes in equity" and "Note 29 – Employee deferred compensation" in VI – Consolidated financial statements – Credit Suisse Group for further information.

> Refer to "Tax benefits associated with share-based compensation" in Note 28 – Tax in VI – Consolidated financial statements – Credit Suisse Group for further information.

Allocations and funding

Revenue sharing

Responsibility for each product is allocated to a specific segment, which records all related revenues and expenses. Revenue-sharing and service level agreements govern the compensation received by one segment for generating revenue or providing services on behalf of another. These agreements are negotiated periodically by the relevant segments on a product-by-product basis. The aim of revenue-sharing and service level agreements is to reflect the pricing structure of unrelated third-party transactions.

Cost allocation

Corporate services and business support, including in finance, operations, human resources, legal, compliance, risk management and IT, are provided by corporate functions, and the related costs are allocated to the segments and the Corporate Center based on their respective requirements and other relevant measures.

Funding

We centrally manage our funding activities. New securities for funding and capital purposes are issued primarily by the Bank.

> Refer to Note 4 – Segment information in VI – Consolidated financial statements – Credit Suisse Group for further information.

Fair valuations

Fair value can be a relevant measurement for financial instruments when it aligns the accounting for these instruments with how we manage our business. The levels of the fair value hierarchy as defined by the relevant accounting guidance are not a measurement of economic risk, but rather an indication of the observability of prices or valuation inputs.

> Refer to “Note 1 – Summary of significant accounting policies” and “Note 35 – Financial instruments” in VI – Consolidated financial statements – Credit Suisse Group for further information.

The fair value of the majority of the Group’s financial instruments is based on quoted prices in active markets (level 1) or observable inputs (level 2). These instruments include government and agency securities, certain commercial paper, most investment grade corporate debt, certain high yield debt securities, exchange-traded and certain over-the-counter (OTC) derivative instruments and most listed equity securities.

In addition, the Group holds financial instruments for which no prices are available and which have few or no observable inputs (level 3). For these instruments, the determination of fair value requires subjective assessment and judgment depending on liquidity, pricing assumptions, the current economic and competitive environment and the risks affecting the specific instrument. In such circumstances, valuation is determined based on management’s own judgments about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk). These instruments include certain OTC derivatives, including interest rate, foreign exchange, equity and credit derivatives, certain corporate equity-linked securities, mortgage-related and collateralized debt obligation (CDO) securities, private equity investments, certain loans and credit products, including leveraged finance, certain syndicated loans and certain high yield bonds.

Models were used to value financial instruments for which no prices are available and which have little or no observable inputs (level 3). Models are developed internally and are reviewed by functions independent of the front office to ensure they are appropriate for current market conditions. The models require subjective assessment and varying degrees of judgment depending on liquidity, concentration, pricing assumptions and risks affecting the specific instrument. The models consider observable and unobservable parameters in calculating the value of these products, including certain indices relating to these products. Consideration of these indices is more significant in periods of lower market activity.

As of the end of 2018, 37% and 25% of our total assets and total liabilities, respectively, were measured at fair value. The majority of our level 3 assets are recorded in our investment banking businesses. Total assets at fair value recorded as level 3 instruments decreased CHF 0.3 billion to CHF 16.3 billion as of the end of 2018, primarily reflecting net settlements, mainly in loans, loans held-for-sale and investment securities, partially offset by net transfers, mainly in loans, and realized/unrealized gains/(losses), mainly in trading assets and investments securities. As of the end of 2018, these assets comprised 2% of total assets and 6% of total assets measured at fair value, stable compared to the end of 2017.

We believe that the range of any valuation uncertainty, in the aggregate, would not be material to our financial condition; however, it may be material to our operating results for any particular period, depending, in part, upon the operating results for such period.

Group and Bank differences

The business of the Bank is substantially the same as the business of Credit Suisse Group, and substantially all of the Bank's operations are conducted through the Swiss Universal Bank, International Wealth Management, Asia Pacific, Global Markets, Investment Banking & Capital Markets and, until December 31, 2018, the Strategic Resolution Unit segments. Certain Corporate Center activities of the Group, such as hedging activities relating to share-based compensation awards, are not applicable to the Bank. Certain other assets, liabilities and results of operations, primarily relating to Credit Suisse Services AG (our Swiss service company) and its subsidiary, are managed as part of the activities of the Group's segments. However, they are legally owned by the Group and are not part of the Bank's consolidated financial statements.

> Refer to "Note 41 – Subsidiary guarantee information" in VI – Consolidated financial statements – Credit Suisse Group for further information on the Bank.

Comparison of consolidated statements of operations

			Group			Bank
in	2018	2017	2016	2018	2017	2016
Statements of operations (CHF million)						
Net revenues	20,920	20,900	20,323	20,820	20,965	20,393
Provision for credit losses	245	210	252	245	210	252
Total operating expenses	17,303	18,897	22,337	17,719	19,202	22,630
Income/(loss) before taxes	**3,372**	**1,793**	**(2,266)**	**2,856**	**1,553**	**(2,489)**
Income tax expense	1,361	2,741	441	1,134	2,781	400
Net income/(loss)	**2,011**	**(948)**	**(2,707)**	**1,722**	**(1,228)**	**(2,889)**
Net income/(loss) attributable to noncontrolling interests	(13)	35	3	(7)	27	(6)
Net income/(loss) attributable to shareholders	**2,024**	**(983)**	**(2,710)**	**1,729**	**(1,255)**	**(2,883)**

Comparison of consolidated balance sheets

		Group		Bank
end of	2018	2017	2018	2017
Balance sheet statistics (CHF million)				
Total assets	768,916	796,289	772,069	798,372
Total liabilities	724,897	754,100	726,075	754,822

Capitalization and indebtedness

		Group		Bank
end of	2018	2017	2018	2017
Capitalization and indebtedness (CHF million)				
Due to banks	15,220	15,413	15,220	15,411
Customer deposits	363,925	361,162	365,263	362,303
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	24,623	26,496	24,623	26,496
Long-term debt	154,308	173,032	153,433	172,042
Other liabilities	166,821	177,997	167,536	178,570
Total liabilities	**724,897**	**754,100**	**726,075**	**754,822**
Total equity	44,019	42,189	45,994	43,550
Total capitalization and indebtedness	**768,916**	**796,289**	**772,069**	**798,372**

Dividends from the Bank to the Group for the financial year	2018	2017	2016	2015	2014
Dividends (CHF million)					
Dividends	10[1]	10	10	10	10

1
The Bank’s total share capital is fully paid and consisted of 4,399,680,200 registered shares as of December 31, 2018. Dividends are determined in accordance with Swiss law and the Bank's articles of incorporation. Proposal of the Board of Directors to the annual general meeting of the Bank.

BIS capital metrics

	Group		Bank	
end of	2018	2017	2018	2017
Capital and risk-weighted assets (CHF million)				
CET1 capital	35,824	36,711	38,915	38,433
Tier 1 capital	46,040	51,482	48,231	52,378
Total eligible capital	50,239	56,696	52,431	57,592
Risk-weighted assets	284,582	272,815	286,081	272,720
Capital ratios (%)				
CET1 ratio	12.6	13.5	13.6	14.1
Tier 1 ratio	16.2	18.9	16.9	19.2
Total capital ratio	17.7	20.8	18.3	21.1

Swiss Universal Bank

In 2018, we reported income before taxes of CHF 2,125 million and net revenues of CHF 5,564 million. Income before taxes increased 20% compared to 2017, reflecting lower total operating expenses and slightly higher net revenues.

Results summary

2018 results

In 2018, income before taxes of CHF 2,125 million increased 20% compared to 2017. Net revenues of CHF 5,564 million increased slightly compared to 2017, mainly due to higher recurring commissions and fees, the increase in other revenues, reflecting a gain on the sale of our investment in Euroclear of CHF 37 million and gains on the sale of real estate of CHF 21 million, and slightly higher net interest income. Higher recurring commissions and fees were mainly driven by higher wealth structuring solution fees, higher fees from lending activities and increased investment advisory fees. Slightly higher net interest income reflected higher deposit margins on slightly lower average deposit volumes and stable loan margins on stable average loan volumes. Transaction-based revenues were stable. Provision for credit losses was CHF 126 million in 2018 on a net loan portfolio of CHF 168.4 billion. Total operating expenses decreased 7%, primarily driven by lower professional and contractor services fees, decreased allocated corporate function costs and lower salary expenses, partially offset by higher restructuring expenses, reflecting targeted headcount reductions and charges relating to reductions in office space. Adjusted income before taxes of CHF 2,205 million increased 18% compared to 2017.

Divisional results

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**5,564**	**5,396**	**5,759**	3	(6)
Provision for credit losses	**126**	**75**	**79**	68	(5)
Compensation and benefits	1,887	1,957	2,031	(4)	(4)
General and administrative expenses	1,097	1,251	1,281	(12)	(2)
Commission expenses	228	289	283	(21)	2
Restructuring expenses	101	59	60	71	(2)
Total other operating expenses	1,426	1,599	1,624	(11)	(2)
Total operating expenses	**3,313**	**3,556**	**3,655**	(7)	(3)
Income before taxes	**2,125**	**1,765**	**2,025**	20	(13)
Statement of operations metrics (%)					
Return on regulatory capital	16.8	13.7	16.5	–	–
Cost/income ratio	59.5	65.9	63.5	–	–
Number of employees and relationship managers					
Number of employees (full-time equivalents)	11,950	12,600	13,140	(5)	(4)
Number of relationship managers	1,780	1,840	1,970	(3)	(7)

Divisional results (continued)

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Net revenues (CHF million)					
Private Clients	2,989	2,897	3,258	3	(11)
Corporate & Institutional Clients	2,575	2,499	2,501	3	0
Net revenues	**5,564**	**5,396**	**5,759**	3	(6)
Net revenue detail (CHF million)					
Net interest income	2,946	2,896	2,884	2	0
Recurring commissions and fees	1,515	1,446	1,446	5	0
Transaction-based revenues	1,096	1,107	1,112	(1)	0
Other revenues	7	(53)	317	–	–
Net revenues	**5,564**	**5,396**	**5,759**	3	(6)
Provision for credit losses (CHF million)					
New provisions	201	158	150	27	5
Releases of provisions	(75)	(83)	(71)	(10)	17
Provision for credit losses	**126**	**75**	**79**	68	(5)
Balance sheet statistics (CHF million)					
Total assets	224,301	228,857	228,363	(2)	0
Net loans	168,393	165,041	165,685	2	0
of which Private Clients	113,403	111,222	109,554	2	2
Risk-weighted assets	76,475	65,572	65,669	17	0
Leverage exposure	255,480	257,054	252,889	(1)	2

Net interest income includes a term spread credit on stable deposit funding and a term spread charge on loans. Recurring commissions and fees includes investment product management, discretionary mandate and other asset management-related fees, fees for general banking products and services and revenues from wealth structuring solutions. Transaction-based revenues arise primarily from brokerage fees, fees from foreign exchange client transactions, trading and sales income, equity participations income and other transaction-based income. Other revenues include fair value gains/(losses) on synthetic securitized loan portfolios and other gains and losses.

2017 results

In 2017, income before taxes of CHF 1,765 million decreased 13% compared to 2016. Net revenues of CHF 5,396 million were 6% lower compared to 2016, mainly due to gains on the sale of real estate in 2016 of CHF 366 million reflected in other revenues. All other revenue categories were stable. Provision for credit losses was CHF 75 million in 2017 on a net loan portfolio of CHF 165.0 billion. Total operating expenses decreased slightly, primarily driven by lower compensation and benefits reflecting lower salary expenses and lower pension expenses. General and administrative expenses decreased slightly, mainly due to lower contractor and professional services fees, lower occupancy expenses and decreased advertising and marketing expenses. Adjusted income before taxes of CHF 1,873 million was 8% higher compared to 2016.

Capital and leverage metrics

As of the end of 2018, we reported risk-weighted assets of CHF 76.5 billion, an increase of CHF 10.9 billion compared to the end of 2017, primarily driven by business growth and methodology changes, mainly reflecting the phase-in of the Swiss mortgage multipliers. Leverage exposure was CHF 255.5 billion, stable compared to the end of 2017, with a decrease in HQLA offset by business growth.

Reconciliation of adjusted results

	Private Clients			Corporate & Institutional Clients			Swiss Universal Bank		
in	2018	2017	2016	2018	2017	2016	2018	2017	2016
Adjusted results (CHF million)									
Net revenues	**2,989**	**2,897**	**3,258**	**2,575**	**2,499**	**2,501**	**5,564**	**5,396**	**5,759**
Real estate gains	(21)	0	(366)	0	0	0	(21)	0	(366)
Gains on business sales	(19)	0	0	(18)	0	0	(37)	0	0
Adjusted net revenues	**2,949**	**2,897**	**2,892**	**2,557**	**2,499**	**2,501**	**5,506**	**5,396**	**5,393**
Provision for credit losses	**30**	**42**	**39**	**96**	**33**	**40**	**126**	**75**	**79**
Total operating expenses	**1,899**	**2,054**	**2,124**	**1,414**	**1,502**	**1,531**	**3,313**	**3,556**	**3,655**
Restructuring expenses	(66)	(53)	(51)	(35)	(6)	(9)	(101)	(59)	(60)
Major litigation provisions	0	(6)	0	(37)	(43)	(19)	(37)	(49)	(19)
Adjusted total operating expenses	**1,833**	**1,995**	**2,073**	**1,342**	**1,453**	**1,503**	**3,175**	**3,448**	**3,576**
Income before taxes	**1,060**	**801**	**1,095**	**1,065**	**964**	**930**	**2,125**	**1,765**	**2,025**
Total adjustments	26	59	(315)	54	49	28	80	108	(287)
Adjusted income before taxes	**1,086**	**860**	**780**	**1,119**	**1,013**	**958**	**2,205**	**1,873**	**1,738**
Adjusted return on regulatory capital (%)	–	–	–	–	–	–	17.4	14.6	14.2

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

Private Clients

2018 results details

Income before taxes of CHF 1,060 million increased 32% compared to 2017, driven by lower total operating expenses and slightly higher net revenues. Adjusted income before taxes of CHF 1,086 million increased 26% compared to 2017.

Net revenues

In 2018, net revenues of CHF 2,989 million were slightly higher, reflecting slightly higher net interest income, the increase in other revenues, reflecting gains on the sale of real estate of CHF 21 million and a gain on the sale of our investment in Euroclear of CHF 19 million, and slightly higher recurring commissions and fees, partially offset by lower transaction-based revenues. Net interest income of CHF 1,717 million was slightly higher, with higher deposit margins on higher average deposit volumes and stable loan margins on slightly higher average loan volumes. Recurring commissions and fees of CHF 835 million were slightly higher, with higher wealth structuring solution fees, increased investment advisory fees and higher revenues from our investment in Swisscard, partially offset by slightly lower banking services fees. Transaction-based revenues of CHF 397 million decreased 4%, mainly due to a gain from the sale of an investment reflected in 2017 and lower brokerage fees, partially offset by higher revenues from ITS and slightly higher fees from foreign exchange client business.

Provision for credit losses

The Private Clients loan portfolio is substantially comprised of residential mortgages in Switzerland and loans collateralized by securities and, to a lesser extent, consumer finance loans.

In 2018, Private Clients recorded provision for credit losses of CHF 30 million compared to CHF 42 million in 2017. The provision was primarily related to our consumer finance business.

Total operating expenses

Compared to 2017, total operating expenses of CHF 1,899 million decreased 8%, reflecting lower general and administrative expenses, lower commission expenses and slightly lower compensation and benefits, partially offset by higher restructuring expenses. General and administrative expenses of CHF 663 million decreased 14% compared to 2017, driven by lower professional and contractor services fees, lower allocated corporate function costs, decreased occupancy expenses and lower advertising and marketing expenses. Compensation and benefits of CHF 1,066 million decreased slightly, with lower salary expenses, partially offset by higher deferred compensation expenses from prior-year awards.

Margins

Our **gross margin** was 144 basis points in 2018, one basis point higher compared to 2017, reflecting slightly higher net interest income, slightly higher recurring commissions and fees, the gains on the sale of real estate and the gain on the sale of our investment in Euroclear, partially offset by slightly higher average assets under management. On the basis of adjusted net revenues, our gross margin was 142 basis points, one basis point lower compared to 2017.

> Refer to “Assets under management” for further information.

Results – Private Clients

	2018	2017	in 2016	% change 18 / 17	% change 17 / 16
Statements of operations (CHF million)					
Net revenues	**2,989**	**2,897**	**3,258**	3	(11)
Provision for credit losses	**30**	**42**	**39**	(29)	8
Compensation and benefits	1,066	1,088	1,184	(2)	(8)
General and administrative expenses	663	772	777	(14)	(1)
Commission expenses	104	141	112	(26)	26
Restructuring expenses	66	53	51	25	4
Total other operating expenses	833	966	940	(14)	3
Total operating expenses	**1,899**	**2,054**	**2,124**	(8)	(3)
Income before taxes	**1,060**	**801**	**1,095**	32	(27)
Statement of operations metrics (%)					
Cost/income ratio	63.5	70.9	65.2	–	–
Net revenue detail (CHF million)					
Net interest income	1,717	1,670	1,661	3	1
Recurring commissions and fees	835	812	820	3	(1)
Transaction-based revenues	397	413	410	(4)	1
Other revenues	40	2	367	–	(99)
Net revenues	**2,989**	**2,897**	**3,258**	3	(11)
Margins on assets under management (bp)					
Gross margin [1]	144	143	171	–	–
Net margin [2]	51	40	58	–	–
Number of relationship managers					
Number of relationship managers	1,260	1,300	1,430	(3)	(9)

1
Net revenues divided by average assets under management.
2
Income before taxes divided by average assets under management.

Our **net margin** was 51 basis points in 2018, eleven basis points higher compared to 2017, mainly reflecting lower total operating expenses and slightly higher net revenues, partially offset by slightly higher average assets under management. On the basis of adjusted income before taxes, our net margin was 52 basis points, nine basis points higher compared to 2017.

2017 results details

Income before taxes of CHF 801 million decreased 27% compared to 2016, driven by lower net revenues, partially offset by slightly lower total operating expenses. Adjusted income before taxes of CHF 860 million increased 10% compared to 2016.

Net revenues

In 2017, net revenues of CHF 2,897 million decreased 11%, mainly due to the gains on the sale of real estate of CHF 366 million in 2016 reflected in other revenues. Net interest income of CHF 1,670 million was stable, with slightly higher deposit margins on higher average deposit volumes and slightly higher loan margins on slightly higher average loan volumes. Transaction-based revenues of CHF 413 million were stable, reflecting a gain from the sale of an investment and higher brokerage fees, reflecting increased client activity, offset by lower revenues from ITS and lower equity participations income. Recurring commissions and fees of CHF 812 million were stable with lower revenues from discretionary mandate management fees offset by higher revenues from wealth structuring solutions, higher investment product management fees and increased investment advisory fees. Adjusted net revenues of CHF 2,897 million were stable compared to 2016.

Provision for credit losses

The Private Clients loan portfolio is substantially comprised of residential mortgages in Switzerland and loans collateralized by securities and, to a lesser extent, consumer finance loans.

In 2017, Private Clients recorded provision for credit losses of CHF 42 million compared to CHF 39 million in 2016. The provision was primarily related to our consumer finance business.

Total operating expenses

Compared to 2016, total operating expenses of CHF 2,054 million decreased slightly, primarily reflecting lower compensation and benefits, partially offset by higher commission expenses. Compensation and benefits of CHF 1,088 million decreased 8%, primarily reflecting lower salary expenses and lower pension expenses. General and administrative expenses of CHF 772 million were stable compared to 2016, driven by decreased occupancy expenses and lower advertising and marketing expenses, offset by higher allocated corporate function costs. Adjusted total operating expenses of CHF 1,995 million were 4% lower compared to 2016.

Assets under management

As of the end of **2018**, assets under management of CHF 198.0 billion were CHF 10.3 billion lower compared to the end of 2017, mainly driven by unfavorable market movements, partially offset by net new assets of CHF 3.0 billion. Net new assets reflected positive contributions from all businesses.

As of the end of **2017**, assets under management of CHF 208.3 billion increased CHF 16.1 billion compared to the end of 2016, primarily driven by favorable market movements and net new assets of CHF 4.7 billion, with good performance across all businesses and strong contributions from ultra-high-net-worth individuals and entrepreneurs.

Assets under management – Private Clients

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Assets under management (CHF billion)					
Assets under management	198.0	208.3	192.2	(4.9)	8.4
Average assets under management	207.7	202.2	190.0	2.7	6.4
Assets under management by currency (CHF billion)					
USD	28.9	30.5	28.7	(5.2)	6.3
EUR	20.1	22.9	19.0	(12.2)	20.5
CHF	140.0	145.0	136.7	(3.4)	6.1
Other	9.0	9.9	7.8	(9.1)	26.9
Assets under management	**198.0**	**208.3**	**192.2**	(4.9)	8.4
Growth in assets under management (CHF billion)					
Net new assets	3.0	4.7	0.1	–	–
Other effects	(13.3)	11.4	2.3	–	–
of which market movements	(10.6)	12.4	2.1	–	–
of which foreign exchange	(0.8)	0.8	0.3	–	–
of which other	(1.9)	(1.8)	(0.1)	–	–
Growth in assets under management	**(10.3)**	**16.1**	**2.4**	–	–
Growth in assets under management (%)					
Net new assets	1.4	2.4	0.1	–	–
Other effects	(6.3)	6.0	1.2	–	–
Growth in assets under management	**(4.9)**	**8.4**	**1.3**	–	–

Corporate & Institutional Clients

2018 results details

Income before taxes of CHF 1,065 million increased 10% compared to 2017, reflecting lower total operating expenses and slightly higher net revenues, partially offset by higher provision for credit losses.

Net revenues

Compared to 2017, net revenues of CHF 2,575 million increased slightly, mainly driven by higher recurring commissions and fees and the increase in other revenues, reflecting a gain on the sale of our investment in Euroclear of CHF 18 million. Recurring commissions and fees of CHF 680 million increased 7%, mainly reflecting higher wealth structuring solution fees and higher fees from lending activities, partially offset by lower security account and custody services fees. Net interest income of CHF 1,229 million was stable, with higher deposit margins on lower average deposit volumes and stable loan margins on stable average loan volumes. Transaction-based revenues of CHF 699 million were stable, reflecting higher revenues from ITS and higher fees from foreign exchange client business, offset by lower brokerage fees.

Provision for credit losses

The Corporate & Institutional Clients loan portfolio has relatively low concentrations and is mainly secured by real estate, securities and other financial collateral.

In 2018, Corporate & Institutional Clients recorded provision for credit losses of CHF 96 million compared to CHF 33 million in 2017. The increase is mainly related to several individual cases and lower releases of provision for credit losses.

Total operating expenses

Compared to 2017, total operating expenses of CHF 1,414 million decreased 6%, primarily reflecting lower compensation and benefits and lower general and administrative expenses. Compensation and benefits of CHF 821 million decreased 6%, driven by lower allocated corporate function costs, slightly lower salary expenses, decreased discretionary compensation expenses and lower pension expenses. General and administrative expenses of CHF 434 million decreased 9%, mainly driven by lower occupancy expenses and slightly lower allocated corporate function costs.

Results – Corporate & Institutional Clients

			in	% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**2,575**	**2,499**	**2,501**	3	0
Provision for credit losses	**96**	**33**	**40**	191	(18)
Compensation and benefits	821	869	847	(6)	3
General and administrative expenses	434	479	504	(9)	(5)
Commission expenses	124	148	171	(16)	(13)
Restructuring expenses	35	6	9	483	(33)
Total other operating expenses	593	633	684	(6)	(7)
Total operating expenses	**1,414**	**1,502**	**1,531**	(6)	(2)
Income before taxes	**1,065**	**964**	**930**	10	4
Statement of operations metrics (%)					
Cost/income ratio	54.9	60.1	61.2	–	–
Net revenue detail (CHF million)					
Net interest income	1,229	1,226	1,223	0	0
Recurring commissions and fees	680	634	626	7	1
Transaction-based revenues	699	694	702	1	(1)
Other revenues	(33)	(55)	(50)	(40)	10
Net revenues	**2,575**	**2,499**	**2,501**	3	0
Number of relationship managers					
Number of relationship managers	520	540	540	(4)	0

2017 results details

Income before taxes of CHF 964 million increased 4% compared to 2016, driven by slightly lower total operating expenses and lower provision for credit losses. Adjusted income before taxes of CHF 1,013 million increased 6% compared to 2016.

Net revenues

Compared to 2016, net revenues of CHF 2,499 million were stable, with stable revenues across all revenue categories. Recurring commissions and fees of CHF 634 million were stable, reflecting higher fees from lending activities and higher investment product management fees, offset by lower discretionary mandate management fees. Net interest income of CHF 1,226 million was stable, with slightly higher loan margins on stable average loan volumes, offset by lower deposit margins on higher average deposit volumes. Transaction-based revenues of CHF 694 million were stable, with lower revenues from ITS, offset by increased revenues from our Swiss investment banking business and our profit share from the sale of an investment from our Swiss venture capital vehicle.

Provision for credit losses

The Corporate & Institutional Clients loan portfolio has relatively low concentrations and is mainly secured by real estate, securities and other financial collateral.

In 2017, Corporate & Institutional Clients recorded provision for credit losses of CHF 33 million compared to CHF 40 million in 2016. The decrease reflected higher releases of provision for credit losses relating to several individual cases and a recovery case of CHF 8 million, partially offset by higher new provisions.

Total operating expenses

Compared to 2016, total operating expenses of CHF 1,502 million decreased slightly, primarily reflecting lower general and administrative expenses and lower commission expenses, partially offset by slightly higher compensation and benefits. General and administrative expenses of CHF 479 million decreased 5%, mainly driven by lower allocated corporate function costs. Compensation and benefits of CHF 869 million were slightly higher, driven by higher allocated corporate function costs, partially offset by lower discretionary compensation expenses and lower pension expenses.

Assets under management

As of the end of **2018**, assets under management of CHF 348.7 billion were CHF 6.0 billion lower compared to the end of 2017, mainly driven by unfavorable market movements, partially offset by net new assets of CHF 8.6 billion. Net new assets primarily reflected positive contributions from our pension business.

As of the end of **2017**, assets under management of CHF 354.7 billion were CHF 15.4 billion higher compared to the end of 2016, mainly driven by favorable market movements. Net asset outflows of CHF 13.9 billion were primarily due to redemptions of CHF 13.3 billion from a single public sector mandate in the third quarter of 2017.

International Wealth Management

In 2018, we reported income before taxes of CHF 1,705 million and net revenues of CHF 5,414 million. Income before taxes increased 26% compared to 2017, primarily reflecting higher net revenues.

Results summary

2018 results

In 2018, income before taxes of CHF 1,705 million increased 26% compared to 2017. Net revenues of CHF 5,414 million increased 6% compared to 2017, reflecting higher revenues across all revenue categories. Higher net interest income reflected higher deposit margins and lower loan margins on higher average deposit and loan volumes. Higher recurring commissions and fees were mainly driven by higher asset management fees and higher fees from lending activities. Other revenues in 2018 reflected a gain on the sale of our investment in Euroclear of CHF 37 million in Private Banking and revenues from a business disposal in Asset Management. Other revenues in 2017 included an investment loss from Asset Management Finance LLC (AMF) and a loss from a business disposal relating to our systematic market making business. Transaction- and performance-based revenues increased CHF 14 million, mainly reflecting increased client activity, higher revenues from ITS and higher corporate advisory fees related to integrated solutions in Private Banking. This increase was offset by lower performance and placement revenues mainly from Asset Management. Provision for credit losses was CHF 35 million on a net loan portfolio of CHF 51.7 billion. Total operating expenses decreased slightly compared to 2017, primarily driven by lower litigation provisions, slightly lower salary expenses and decreased professional and contractor services fees, partially offset by higher restructuring expenses, reflecting the results of our cost efficiency measures. Adjusted income before taxes of CHF 1,810 million increased 21% compared to 2017.

Divisional results

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**5,414**	**5,111**	**4,698**	6	9
Provision for credit losses	**35**	**27**	**20**	30	35
Compensation and benefits	2,303	2,278	2,168	1	5
General and administrative expenses	1,029	1,141	1,096	(10)	4
Commission expenses	227	244	239	(7)	2
Restructuring expenses	115	70	54	64	30
Total other operating expenses	1,371	1,455	1,389	(6)	5
Total operating expenses	**3,674**	**3,733**	**3,557**	(2)	5
Income before taxes	**1,705**	**1,351**	**1,121**	26	21
Statement of operations metrics (%)					
Return on regulatory capital	30.7	25.8	23.3	–	–
Cost/income ratio	67.9	73.0	75.7	–	–
Number of employees (full-time equivalents)					
Number of employees	10,210	10,250	10,300	0	0

Divisional results (continued)

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Net revenues (CHF million)					
Private Banking	3,890	3,603	3,371	8	7
Asset Management	1,524	1,508	1,327	1	14
Net revenues	**5,414**	**5,111**	**4,698**	6	9
Net revenue detail (CHF million)					
Net interest income	1,568	1,449	1,308	8	11
Recurring commissions and fees	2,233	2,135	1,914	5	12
Transaction- and performance-based revenues	1,630	1,616	1,426	1	13
Other revenues	(17)	(89)	50	(81)	–
Net revenues	**5,414**	**5,111**	**4,698**	6	9
Provision for credit losses (CHF million)					
New provisions	56	49	55	14	(11)
Releases of provisions	(21)	(22)	(35)	(5)	(37)
Provision for credit losses	**35**	**27**	**20**	30	35
Balance sheet statistics (CHF million)					
Total assets	91,835	94,753	91,083	(3)	4
Net loans	51,695	50,474	44,965	2	12
of which Private Banking	51,684	50,429	44,952	2	12
Risk-weighted assets	40,116	38,256	35,252	5	9
Leverage exposure	98,556	99,267	94,092	(1)	5

2017 results

In 2017, income before taxes of CHF 1,351 million increased 21% compared to 2016. Net revenues of CHF 5,111 million increased 9% compared to 2016 driven by higher recurring commissions and fees, higher transaction- and performance-based revenues and higher net interest income. These increases were partially offset by lower other revenues. Higher recurring commissions and fees were mainly driven by higher asset management fees, higher investment product management fees and higher average assets under management. These increases were partially offset by lower discretionary mandate management fees. Higher transaction- and performance-based revenues mainly reflected higher performance and placement fees in Asset Management and higher brokerage and product issuing fees in Private Banking, partially offset by lower revenues from ITS. Higher net interest income reflected higher loan and deposit margins on higher average loan and deposit volumes. Other revenues were lower mainly as 2016 included a gain on the sale of real estate in Private Banking compared to the investment loss from AMF and the loss from the business disposal relating to our systematic market making business in 2017 in Asset Management. Provision for credit losses was CHF 27 million on a net loan portfolio of CHF 50.5 billion. The 5% increase in total operating expenses compared to 2016 was primarily driven by higher discretionary compensation expenses, higher litigation provisions and higher salary expenses, partially offset by lower contractor and professional services fees. Adjusted income before taxes of CHF 1,497 million increased 35% compared to 2016.

Capital and leverage metrics

As of the end of 2018, we reported risk-weighted assets of CHF 40.1 billion, an increase of CHF 1.9 billion compared to the end of 2017, mainly driven by model and parameter updates and business growth. Leverage exposure of CHF 98.6 billion was stable compared to the end of 2017.

Reconciliation of adjusted results

in	Private Banking 2018	Private Banking 2017	Private Banking 2016	Asset Management 2018	Asset Management 2017	Asset Management 2016	International Wealth Management 2018	International Wealth Management 2017	International Wealth Management 2016
Adjusted results (CHF million)									
Net revenues	**3,890**	**3,603**	**3,371**	**1,524**	**1,508**	**1,327**	**5,414**	**5,111**	**4,698**
Real estate gains	(2)	0	(54)	0	0	0	(2)	0	(54)
(Gains)/losses on business sales	(37)	0	0	(18)	28	0	(55)	28	0
Adjusted net revenues	**3,851**	**3,603**	**3,317**	**1,506**	**1,536**	**1,327**	**5,357**	**5,139**	**4,644**
Provision for credit losses	**35**	**27**	**20**	**0**	**0**	**0**	**35**	**27**	**20**
Total operating expenses	**2,522**	**2,552**	**2,510**	**1,152**	**1,181**	**1,047**	**3,674**	**3,733**	**3,557**
Restructuring expenses	(89)	(44)	(47)	(26)	(26)	(7)	(115)	(70)	(54)
Major litigation provisions	0	(48)	12	0	0	0	0	(48)	12
Expenses related to business sales	0	0	0	(47)	0	0	(47)	0	0
Adjusted total operating expenses	**2,433**	**2,460**	**2,475**	**1,079**	**1,155**	**1,040**	**3,512**	**3,615**	**3,515**
Income before taxes	**1,333**	**1,024**	**841**	**372**	**327**	**280**	**1,705**	**1,351**	**1,121**
Total adjustments	50	92	(19)	55	54	7	105	146	(12)
Adjusted income before taxes	**1,383**	**1,116**	**822**	**427**	**381**	**287**	**1,810**	**1,497**	**1,109**
Adjusted return on regulatory capital (%)	–	–	–	–	–	–	32.6	28.6	23.1

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

Private Banking

2018 results details

Income before taxes of CHF 1,333 million increased 30% compared to 2017, primarily reflecting higher net revenues. Adjusted income before taxes of CHF 1,383 million increased 24% compared to 2017.

Net revenues

Compared to 2017, net revenues of CHF 3,890 million were 8% higher, reflecting higher revenues across all revenue categories. Net interest income of CHF 1,568 million increased 8%, reflecting higher deposit margins on higher average deposit volumes and lower loan margins on higher average loan volumes. Transaction- and performance-based revenues of CHF 1,054 million increased 11%, mainly reflecting higher client activity and higher revenues from ITS. Other revenues reflected the gain on the sale of our investment in Euroclear of CHF 37 million. Recurring commissions and fees of CHF 1,227 million increased slightly, mainly driven by higher fees from lending activities and higher investment product management fees, partially offset by lower discretionary mandate management fees.

Provision for credit losses

In 2018, Private Banking recorded provision for credit losses of CHF 35 million, compared to CHF 27 million in 2017, including a small number of cases related to emerging markets and ship finance.

Total operating expenses

Compared to 2017, total operating expenses of CHF 2,522 million were stable, with lower general and administrative expenses and decreased commission expenses, offset by higher compensation and benefits and higher restructuring

expenses. General and administrative expenses of CHF 680 million decreased 13%, primarily reflecting lower litigation provisions and lower allocated corporate function costs. Compensation and benefits of CHF 1,599 million increased 4%, mainly reflecting higher allocated corporate function costs and higher deferred compensation expenses from prior-year awards, partially offset by lower salary expenses. Restructuring expenses increased CHF 45 million, reflecting the results of our cost efficiency measures.

Margins

Our **gross margin** was 106 basis points in 2018, one basis point higher compared to 2017, mainly reflecting higher net interest income and transaction- and performance-based revenues, mostly offset by an increase of 7.0% in average assets under management. On the basis of adjusted net revenues, our gross margin was 105 basis points, stable compared to 2017.

> Refer to “Assets under management” for further information.

Our **net margin** was 36 basis points in 2018, six basis points higher compared to 2017, mainly reflecting higher net revenues, partially offset by the 7.0% higher average assets under management. On the basis of adjusted income before taxes, our net margin was 38 basis points, six basis points higher compared to 2017.

Results – Private Banking

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**3,890**	**3,603**	**3,371**	8	7
Provision for credit losses	**35**	**27**	**20**	30	35
Compensation and benefits	1,599	1,540	1,502	4	3
General and administrative expenses	680	782	788	(13)	(1)
Commission expenses	154	186	173	(17)	8
Restructuring expenses	89	44	47	102	(6)
Total other operating expenses	923	1,012	1,008	(9)	–
Total operating expenses	**2,522**	**2,552**	**2,510**	(1)	2
Income before taxes	**1,333**	**1,024**	**841**	30	22
Statement of operations metrics (%)					
Cost/income ratio	64.8	70.8	74.5	–	–
Net revenue detail (CHF million)					
Net interest income	1,568	1,449	1,308	8	11
Recurring commissions and fees	1,227	1,200	1,093	2	10
Transaction- and performance-based revenues	1,054	953	922	11	3
Other revenues	41	1	48	–	(98)
Net revenues	**3,890**	**3,603**	**3,371**	8	7
Margins on assets under management (bp)					
Gross margin [1]	106	105	112	–	–
Net margin [2]	36	30	28	–	–
Number of relationship managers					
Number of relationship managers	1,110	1,130	1,140	(2)	(1)

Net interest income includes a term spread credit on stable deposit funding and a term spread charge on loans. Recurring commissions and fees includes investment product management, discretionary mandate and other asset management-related fees, fees for general banking products and services and revenues from wealth structuring solutions. Transaction- and performance-based revenues arise primarily from brokerage and product issuing fees, fees from foreign exchange client transactions, trading and sales income, equity participations income and other transaction- and performance-based income.

1 Net revenues divided by average assets under management.

2 Income before taxes divided by average assets under management.

2017 results details

Income before taxes of CHF 1,024 million increased 22% compared to 2016, reflecting higher net revenues, partially offset by slightly higher total operating expenses. Adjusted income before taxes of CHF 1,116 million increased 36% compared to 2016.

Net revenues

Compared to 2016, net revenues of CHF 3,603 million were 7% higher, reflecting higher net interest income, higher recurring commissions and fees and slightly higher transaction- and performance-based revenues. These increases were partially offset by lower other revenues. Net interest income of CHF 1,449 million increased 11%, reflecting higher loan and deposit margins on higher average loan and deposit volumes. Recurring commissions and fees of CHF 1,200 million increased 10%, mainly reflecting higher investment product management fees and higher security

account and custody services fees, partially offset by lower discretionary mandate management fees. Transaction- and performance-based revenues of CHF 953 million increased slightly, mainly reflecting higher brokerage and product issuing fees, partially offset by lower revenues from ITS. Other revenues were significantly lower as 2016 included the gain on the sale of real estate of CHF 54 million. Adjusted net revenues of CHF 3,603 million increased 9% compared to 2016.

Provision for credit losses

In 2017, Private Banking recorded provision for credit losses of CHF 27 million, compared to CHF 20 million in 2016, including a small number of cases in Europe and related to ship finance.

Total operating expenses

Compared to 2016, total operating expenses of CHF 2,552 million increased slightly, mainly reflecting slightly higher compensation and benefits and higher commission expenses. Compensation and benefits of CHF 1,540 million increased slightly, mainly reflecting higher discretionary compensation expenses, higher deferred compensation expenses from prior-year awards and increased social security expenses, partially offset by lower salary expenses. General and administrative expenses of CHF 782 million were stable with higher litigation provisions offset by lower professional services fees. Adjusted total operating expenses of CHF 2,460 million were stable compared to 2016.

Assets under management

As of the end of **2018**, assets under management of CHF 357.5 billion were CHF 9.4 billion lower compared to the end of 2017, reflecting unfavorable market and foreign exchange-related movements, partially offset by net new assets of CHF 14.2 billion. Net new assets mainly reflected inflows from emerging markets and Europe.

As of the end of **2017**, assets under management of CHF 366.9 billion were CHF 43.7 billion higher compared to the end of 2016, primarily reflecting favorable market movements and net new assets of CHF 15.6 billion. Net new assets reflected solid inflows from emerging markets and Europe.

Assets under management – Private Banking

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Assets under management (CHF billion)					
Assets under management	357.5	366.9	323.2	(2.6)	13.5
Average assets under management	368.1	343.9	300.3	7.0	14.5
Assets under management by currency (CHF billion)					
USD	170.3	162.9	149.0	4.5	9.3
EUR	106.7	114.1	93.2	(6.5)	22.4
CHF	17.5	23.0	21.0	(23.9)	9.5
Other	63.0	66.9	60.0	(5.8)	11.5
Assets under management	**357.5**	**366.9**	**323.2**	(2.6)	13.5
Growth in assets under management (CHF billion)					
Net new assets	14.2	15.6	15.6	–	–
Other effects	(23.6)	28.1	18.0	–	–
of which market movements	(12.0)	24.3	10.1	–	–
of which foreign exchange	(7.8)	1.0	7.8	–	–
of which other	(3.8)	2.8	0.1	–	–
Growth in assets under management	**(9.4)**	**43.7**	**33.6**	–	–
Growth in assets under management (%)					
Net new assets	3.9	4.8	5.4	–	–
Other effects	(6.5)	8.7	6.2	–	–
Growth in assets under management	**(2.6)**	**13.5**	**11.6**	–	–

Asset Management

2018 results details

Income before taxes of CHF 372 million increased 14% compared to 2017, primarily reflecting slightly lower total operating expenses. Adjusted income before taxes of CHF 427 million increased 12% compared to 2017.

In the first quarter of 2018 we completed the spin-off of a management company for a quantitative fund relating to our systematic market making business while retaining an economic interest in the management company and the fund. Revenues from this interest are recognized as investment and partnership income rather than management fees and performance and placement revenues as previously reported. Prior periods have been reclassified to conform to the current presentation.

Net revenues

Compared to 2017, net revenues of CHF 1,524 million were stable, with higher management fees and investment and partnership income, partially offset by significantly lower performance and placement revenues. Management fees of CHF 1,107 million increased 9%, mainly reflecting higher average assets under management. Investment and partnership income of CHF 224 million increased 10%, mainly driven by a gain on the partial sale of an economic interest in a third-party manager relating to a private equity investment and the investment loss of CHF 43 million from AMF in 2017. These increases were partially offset by the absence of revenues from the systematic market making business due to the spin-off. Performance and placement revenues of CHF 193 million decreased 34%,

reflecting lower performance fees due to a strong investment performance of a fund in 2017, investment-related losses compared to gains in 2017 and lower placement

fees, partially offset by revenues from the business disposal in 2018. Adjusted net revenues of CHF 1,506 million decreased slightly compared to 2017.

Total operating expenses

Compared to 2017, total operating expenses of CHF 1,152 million decreased slightly, driven by lower compensation and benefits and slightly lower general and administrative expenses. Compensation and benefits of CHF 704 million decreased 5%, mainly reflecting lower discretionary compensation expenses and lower deferred compensation expenses from prior-year awards. General and administrative expenses of CHF 349 million decreased slightly, mainly reflecting lower allocated corporate function costs and lower professional services fees. Adjusted total operating expenses of CHF 1,079 million decreased 7% compared to 2017.

2017 results details

Income before taxes of CHF 327 million increased 17% compared to 2016, with higher net revenues partially offset by higher total operating expenses. Adjusted income before taxes of CHF 381 million increased 33% compared to 2016.

Net revenues

Compared to 2016, net revenues of CHF 1,508 million increased 14%, with higher management fees and significantly higher performance and placement revenues, partially offset by lower investment and partnership income. Management fees of CHF 1,011 million increased 14%, mainly reflecting higher average assets under management. Performance and placement revenues of CHF 293 million increased 40%, mainly reflecting higher performance fees including the strong investment performance of a fund in 2017 and higher placement fees. Investment and partnership income of CHF 204 million decreased 12%, primarily reflecting the investment loss of CHF 43 million from AMF in 2017 compared to a residual gain from a private equity interest of CHF 45 million in 2016. Adjusted net revenues of CHF 1,536 million increased 16% compared to 2016.

Total operating expenses

Compared to 2016, total operating expenses of CHF 1,181 million increased 13%, driven by higher compensation and benefits and higher general and administrative expenses. Compensation and benefits of CHF 738 million increased 11%, reflecting higher salary expenses and higher discretionary compensation expenses, partially offset by lower deferred compensation expenses from prior-year awards. Higher salary expenses mainly reflected the strong investment performance of a fund and the transition of the systematic market making business from Global Markets to International Wealth Management. General and administrative expenses of CHF 359 million increased 17% mainly reflecting higher professional services fees. Adjusted total operating expenses of CHF 1,155 million increased 11% compared to 2016.

Results – Asset Management

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**1,524**	**1,508**	**1,327**	1	14
Provision for credit losses	**0**	**0**	**0**	–	–
Compensation and benefits	704	738	666	(5)	11
General and administrative expenses	349	359	308	(3)	17
Commission expenses	73	58	66	26	(12)
Restructuring expenses	26	26	7	0	271
Total other operating expenses	448	443	381	1	16
Total operating expenses	**1,152**	**1,181**	**1,047**	(2)	13
Income before taxes	**372**	**327**	**280**	14	17
Statement of operations metrics (%)					
Cost/income ratio	75.6	78.3	78.9	–	–
Net revenue detail (CHF million)					
Management fees	1,107	1,011	886	9	14
Performance and placement	193	293	209	(34)	40

revenues					
Investment and partnership income	224	204	232	10	(12)
Net revenues	**1,524**	**1,508**	**1,327**	1	14
of which recurring commissions and fees	1,006	935	821	8	14
of which transaction- and performance-based revenues	576	663	504	(13)	32
of which other revenues	(58)	(90)	2	(36)	–

Management fees include fees on assets under management, asset administration revenues and transaction fees related to the acquisition and disposal of investments in the funds being managed. Performance revenues relate to the performance or return of the funds being managed and includes investment-related gains and losses from proprietary funds. Placement revenues arise from our third-party private equity fundraising activities and secondary private equity market advisory services. Investment and partnership income includes equity participation income from seed capital returns and from minority investments in third-party asset managers, income from strategic partnerships and distribution agreements, and other revenues.

Assets under management

As of the end of **2018**, assets under management of CHF 388.7 billion were CHF 3.1 billion higher compared to the end of 2017, reflecting net new assets of CHF 22.2 billion, partially offset by unfavorable market and foreign exchange-related movements. Net new assets mainly reflected inflows from traditional and alternative investments.

As of the end of **2017**, assets under management of CHF 385.6 billion increased CHF 64.0 billion compared to the end of 2016, reflecting a structural effect from assets under management reported for multi-asset class solutions, favorable market movements and net new assets of CHF 20.3 billion. Net new assets primarily reflected inflows from traditional and alternative investments and from emerging market joint ventures.

Assets under management – Asset Management

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Assets under management (CHF billion)					
Traditional investments	218.9	217.6	159.9	0.6	36.1
Alternative investments	124.6	121.5	121.0	2.6	0.4
Investments and partnerships	45.2	46.5	40.7	(2.8)	14.3
Assets under management	**388.7**	**385.6**	**321.6**	0.8	19.9
Average assets under management	397.8	368.4	317.5	8.0	16.0
Assets under management by currency (CHF billion)					
USD	107.2	100.1	95.9	7.1	4.4
EUR	49.0	48.2	36.6	1.7	31.7
CHF	184.9	182.6	140.7	1.3	29.8
Other	47.6	54.7	48.4	(13.0)	13.0
Assets under management	**388.7**	**385.6**	**321.6**	0.8	19.9
Growth in assets under management (CHF billion)					
Net new assets [1]	22.2	20.3	5.6	–	–
Other effects	(19.1)	43.7	(5.3)	–	–
of which market movements	(9.1)	20.6	7.6	–	–
of which foreign exchange	(3.4)	(0.3)	3.9	–	–
of which other	(6.6)	23.4	(16.8)	–	–
Growth in assets under management	**3.1**	**64.0**	**0.3**	–	–
Growth in assets under management (%)					
Net new assets	5.8	6.3	1.7	–	–
Other effects	(5.0)	13.6	(1.6)	–	–
Growth in assets under management	**0.8**	**19.9**	**0.1**	–	–

1 Includes outflows for private equity assets reflecting realizations at cost and unfunded commitments on which a fee is no longer earned.

Asia Pacific

In 2018, we reported income before taxes of CHF 664 million and net revenues of CHF 3,393 million. Income before taxes decreased 9% compared to 2017, reflecting the challenging market conditions in the second half of 2018.

Results summary

2018 results

In 2018, income before taxes of CHF 664 million decreased 9% compared to 2017 due to lower net revenues and higher provision for credit losses, partially offset by lower total operating expenses. In 2018, the US GAAP accounting standard pertaining to revenue recognition was adopted. As a result, both net revenues and operating expenses in Asia Pacific decreased CHF 27 million. Lower net revenues of CHF 3,393 million were driven by lower revenues in our Markets business across all revenue categories. Lower equity sales and trading revenues were primarily driven by weaker results in equity derivatives, reflecting reduced client activity and a difficult trading environment in the second half of 2018. Lower fixed income sales and trading revenues were primarily driven by a weaker performance in rates, partially offset by higher revenues in foreign exchange products, structured products and credit products. Wealth Management & Connected revenues were stable, mainly reflecting lower transaction-based revenues and lower advisory, underwriting and financing revenues, offset by higher recurring commissions and fees. Financing revenues in 2017 included a gain of CHF 64 million from a pre-IPO financing and a positive net fair value impact of CHF 94 million from an impaired loan portfolio in recovery management. Compared to 2017, total operating expenses of CHF 2,694 million decreased slightly, primarily reflecting lower compensation and benefits and lower commission expenses, largely offset by higher general and administrative expenses, primarily driven by higher litigation provisions. Adjusted income before taxes of CHF 804 million increased slightly compared to 2017.

Divisional results

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**3,393**	**3,504**	**3,597**	(3)	(3)
Provision for credit losses	**35**	**15**	**26**	133	(42)
Compensation and benefits	1,503	1,602	1,665	(6)	(4)
General and administrative expenses	887	831	836	7	(1)
Commission expenses	243	264	292	(8)	(10)
Restructuring expenses	61	63	53	(3)	19
Total other operating expenses	1,191	1,158	1,181	3	(2)
Total operating expenses	**2,694**	**2,760**	**2,846**	(2)	(3)
Income before taxes	**664**	**729**	**725**	(9)	1
Statement of operations metrics (%)					
Return on regulatory capital	12.0	13.8	13.7	–	–
Cost/income ratio	79.4	78.8	79.1	–	–
Number of employees (full-time equivalents)					
Number of employees	7,440	7,230	6,980	3	4

1 Calculated using a return excluding interest costs for allocated goodwill.

Divisional results (continued)

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Net revenues (CHF million)					
Wealth Management & Connected	2,290	2,322	1,904	(1)	22
Markets	1,103	1,182	1,693	(7)	(30)
Net revenues	**3,393**	**3,504**	**3,597**	(3)	(3)
Provision for credit losses (CHF million)					
New provisions	42	28	72	50	(61)
Releases of provisions	(7)	(13)	(46)	(46)	(72)
Provision for credit losses	**35**	**15**	**26**	133	(42)
Balance sheet statistics (CHF million)					
Total assets	99,809	96,497	97,221	3	(1)
Net loans	43,713	43,080	40,134	1	7
of which Private Banking	32,877	35,331	33,405	(7)	6
Risk-weighted assets	37,156	31,474	34,605	18	(9)
Leverage exposure	106,375	105,585	108,926	1	(3)

2017 results

In 2017, income before taxes of CHF 729 million was stable compared to 2016 as lower net revenues were offset by lower total operating expenses and lower provision for credit losses. Lower net revenues of CHF 3,504 million were driven by lower fixed income and equity sales and trading revenues in our Markets business. Lower fixed income and trading revenues were primarily driven by decreased client activity in rates and lower revenues in foreign exchange products due to weaker trading performance. Lower equity sales and trading revenues were primarily driven by weaker results, reflecting a difficult trading environment that was characterized by persistently low levels of volatility and reduced client activity in equity derivatives, and the transition of the systematic market making business to International Wealth Management that was completed in the first quarter of 2017. These decreases were partially offset by higher net revenues in our Wealth Management & Connected business, reflecting higher Private Banking revenues, mainly from higher transaction-based revenues, and higher advisory, underwriting and financing revenues. Compared to 2016, total operating expenses of CHF 2,760 million decreased slightly, primarily reflecting lower compensation and benefits and lower commission expenses, mainly due to the transition of the systematic market making business, partially offset by higher restructuring expenses. Adjusted income before taxes of CHF 792 million increased slightly compared to 2016.

Capital and leverage metrics

As of the end of 2018, we reported risk-weighted assets of CHF 37.2 billion, an increase of CHF 5.7 billion compared to the end of 2017, primarily reflecting business growth in Wealth Management & Connected and methodology changes, partly offset by lower business usage in Markets. Leverage exposure was CHF 106.4 billion, an increase of CHF 0.8 billion compared to the end of 2017, reflecting higher HQLA, higher lending activities in Wealth Management & Connected and a foreign exchange impact, partially offset by lower business usage in Markets.

Reconciliation of adjusted results

	Wealth Management & Connected			Markets			Asia Pacific		
in	2018	2017	2016	2018	2017	2016	2018	2017	2016
Adjusted results (CHF million)									
Net revenues	**2,290**	**2,322**	**1,904**	**1,103**	**1,182**	**1,693**	**3,393**	**3,504**	**3,597**
Provision for credit losses	**25**	**15**	**29**	**10**	**–**	**(3)**	**35**	**15**	**26**
Total operating expenses	**1,574**	**1,508**	**1,386**	**1,120**	**1,252**	**1,460**	**2,694**	**2,760**	**2,846**
	(27)	(21)	(14)	(34)	(42)	(39)	(61)	(63)	(53)

Restructuring expenses									
Major litigation provisions	(79)	0	0	0	0	0	(79)	0	0
Adjusted total operating expenses	**1,468**	**1,487**	**1,372**	**1,086**	**1,210**	**1,421**	**2,554**	**2,697**	**2,793**
Income/(loss) before taxes	**691**	**799**	**489**	**(27)**	**(70)**	**236**	**664**	**729**	**725**
Total adjustments	106	21	14	34	42	39	140	63	53
Adjusted income/(loss) before taxes	**797**	**820**	**503**	**7**	**(28)**	**275**	**804**	**792**	**778**
Adjusted return on regulatory capital (%)	–	–	–	–	–	–	14.5	15.0	14.8

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

Wealth Management & Connected

2018 results details

Income before taxes of CHF 691 million decreased 14% compared to 2017, reflecting higher total operating expenses, lower net revenues and higher provision for credit losses. Adjusted income before taxes of CHF 797 million decreased slightly compared to 2017.

Net revenues

Net revenues of CHF 2,290 million were stable compared to 2017, reflecting higher Private Banking revenues, offset by lower advisory, underwriting and financing revenues. Recurring commissions and fees increased 10% to CHF 420 million, primarily reflecting higher investment product management fees, fees from lending activities, discretionary mandate management fees and investment advisory fees. Net interest income was stable. Transaction-based revenues decreased 7% to CHF 563 million, mainly due to lower brokerage and product issuing fees. Advisory, underwriting and financing revenues decreased 5% to CHF 678 million, primarily due to lower financing revenues and debt underwriting revenues, partially offset by higher fees from M&A transactions and equity underwriting revenues. Financing revenues in 2018 included a negative net fair value impact of CHF 10 million from an impaired loan portfolio in recovery management compared to 2017, which included a gain of CHF 64 million from a pre-IPO financing and a positive net fair value impact of CHF 94 million from an impaired loan portfolio in recovery management.

Provision for credit losses

The Wealth Management & Connected loan portfolio primarily comprises Private Banking lombard loans, mainly backed by listed securities, and secured and unsecured loans to corporates.

In 2018, Wealth Management & Connected recorded a provision for credit losses of CHF 25 million relating to several individual cases, compared to a provision for credit losses of CHF 15 million in 2017.

Total operating expenses

Total operating expenses of CHF 1,574 million increased 4% compared to 2017, mainly reflecting higher general and administrative expenses. General and administrative expenses increased 19% to CHF 500 million, mainly due to higher litigation provisions. Litigation provisions recorded in 2018 primarily related to the US Department of Justice and US Securities and Exchange Commission (SEC) investigations regarding our hiring practices in the Asia Pacific region between 2007 and 2013, which have now been resolved. Compensation and benefits were stable, primarily reflecting lower discretionary compensation expenses, offset by higher deferred compensation expenses from prior-year awards. Adjusted total operating expenses of CHF 1,468 million were stable compared to 2017.

Margins

Margin calculations are aligned with the performance metrics of our Private Banking business and its related assets under management within the Wealth Management & Connected business.

Our **gross margin** was 79 basis points in 2018, nine basis points lower compared to 2017, mainly reflecting an 11.5% increase in average assets under management.

> Refer to “Assets under management” for further information.

Our **net margin** was 27 basis points in 2018, three basis points lower compared to 2017, mainly reflecting the increase in average assets under management.

Results - Wealth Management & Connected

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**2,290**	**2,322**	**1,904**	(1)	22
Provision for credit losses	**25**	**15**	**29**	67	(48)
Compensation and benefits	988	1,002	941	(1)	6
General and administrative expenses	500	421	384	19	10
Commission expenses	59	64	47	(8)	36
Restructuring expenses	27	21	14	29	50
Total other operating expenses	586	506	445	16	14
Total operating expenses	**1,574**	**1,508**	**1,386**	4	9
Income before taxes	**691**	**799**	**489**	(14)	63
Statement of operations metrics (%)					
Cost/income ratio	68.7	64.9	72.8	–	–
Net revenue detail (CHF million)					
Private Banking	1,612	1,607	1,374	–	17
of which net interest income	628	620	602	1	3
of which recurring commissions and fees	420	381	319	10	19
of which transaction-based revenues	563	606	469	(7)	29
of which other revenues	1	0	(16)	–	100
Advisory, underwriting and financing	678	715	530	(5)	35
Net revenues	**2,290**	**2,322**	**1,904**	(1)	22
Private Banking margins on assets under management (bp)					
Gross margin [1]	79	88	86	–	–
Net margin [2]	27	30	23	–	–
Number of relationship managers					
Number of relationship managers	580	590	640	(2)	(8)

Net interest income includes a term spread credit on stable deposit funding and a term spread charge on loans. Recurring commissions and fees includes investment product management, discretionary mandate and other asset management-related fees, fees for general banking products and services and revenues from wealth structuring solutions. Transaction-based revenues arise primarily from brokerage and product issuing fees, fees from foreign exchange client transactions, trading and sales income, equity participations income and other transaction-based income.

1 Net revenues divided by average assets under management.

2 Income before taxes divided by average assets under management.

2017 results details

Income before taxes of CHF 799 million increased 63% compared to 2016, primarily reflecting significantly higher net revenues, partially offset by higher total operating expenses. Adjusted income before taxes of CHF 820 million increased 63% compared to 2016.

Net revenues

Net revenues of CHF 2,322 million increased 22% compared to 2016, reflecting higher Private Banking revenues,

mainly from higher transaction-based revenues and higher advisory, underwriting and financing revenues. Transaction-based revenues increased 29% to CHF 606 million, mainly due to higher brokerage and product issuing and corporate advisory fees arising from integrated solutions. Recurring commissions and fees increased 19% to CHF 381 million, primarily reflecting higher investment product management, discretionary mandate management and security account and custody services fees. Net interest income increased slightly to CHF 620 million, reflecting higher average deposit and loan volumes, partially offset by slightly lower deposit margins and lower loan margins. Advisory, underwriting and financing revenues increased 35% to CHF 715 million, primarily due to higher financing and debt and equity underwriting revenues, partially offset by lower fees from M&A transactions. Financing revenues in 2017 included a gain of CHF 64 million from a pre-IPO financing and a positive net fair value impact of CHF 94 million from an impaired loan portfolio in recovery management.

Provision for credit losses

The Wealth Management & Connected loan portfolio primarily comprises Private Banking lombard loans, mainly backed by listed securities, and secured and unsecured loans to corporates.

In 2017, Wealth Management & Connected recorded a provision for credit losses of CHF 15 million relating to several individual cases, compared to a provision for credit losses of CHF 29 million in 2016.

Total operating expenses

Total operating expenses of CHF 1,508 million increased 9% compared to 2016, mainly reflecting higher compensation and benefits, higher general and administrative expenses and higher commission expenses. Compensation and benefits increased 6% to CHF 1,002 million, primarily driven by higher compliance, risk and IT compensation related expenses and higher discretionary compensation, reflecting growth-related higher headcount. General and administrative expenses increased 10% to CHF 421 million, mainly due to higher risk, IT infrastructure, finance and compliance expenses. Commission expenses of CHF 64 million increased 36%, primarily reflecting higher transaction-based revenues.

Assets under management

As of the end of **2018**, assets under management of CHF 201.7 billion were CHF 4.9 billion higher compared to the end of 2017, mainly reflecting net new assets of CHF 17.2 billion, partially offset by unfavorable market movements. Net new assets reflected inflows across most of our markets.

As of the end of **2017**, assets under management of CHF 196.8 billion were CHF 29.9 billion higher compared to the end of 2016, mainly reflecting net new assets of CHF 16.9 billion and favorable market movements. Net new assets reflected inflows primarily from Greater China, South East Asia, Japan and Australia.

Assets under management – Private Banking

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Assets under management (CHF billion)					
Assets under management	201.7	196.8	166.9	2.5	17.9
Average assets under management	203.3	182.3	159.5	11.5	14.3
Assets under management by currency (CHF billion)					
USD	106.4	98.2	82.5	8.4	19.0
EUR	5.8	6.7	4.6	(13.4)	45.7
CHF	1.8	2.5	2.0	(28.0)	25.0
Other	87.7	89.4	77.8	(1.9)	14.9
Assets under management	**201.7**	**196.8**	**166.9**	2.5	17.9
Growth in assets under management (CHF billion)					
Net new assets	17.2	16.9	13.6	–	–
Other effects	(12.3)	13.0	2.9	–	–
of which market movements	(13.2)	16.8	1.0	–	–
of which foreign exchange	(0.4)	(3.9)	4.8	–	–
of which other	1.3	0.1	(2.9)	–	–
Growth in assets under management	**4.9**	**29.9**	**16.5**	–	–
Growth in assets under management (%)					
Net new assets	8.7	10.1	9.0	–	–
Other effects	(6.2)	7.8	2.0	–	–
Growth in assets under management	**2.5**	**17.9**	**11.0**	–	–

Markets

2018 results details

Loss before taxes of CHF 27 million in 2018 compared to a loss before taxes of CHF 70 million in 2017. The related decrease of CHF 43 million reflected lower total operating expenses, partially offset by lower net revenues and higher provision for credit losses. Adjusted income before taxes of CHF 7 million in 2018 compared to an adjusted loss before taxes of CHF 28 million in 2017.

Net revenues

Net revenues of CHF 1,103 million decreased 7% compared to 2017, primarily reflecting the difficult trading environment in the second half of 2018. Equity sales and trading revenues decreased 7% to CHF 859 million, mainly due to lower revenues from equity derivatives, reflecting decreased client activity and the difficult trading environment. Fixed income sales and trading revenues decreased 7% to CHF 244 million, mainly due to lower revenues from rates, reflecting the unfavorable trading environment, partially offset by higher revenues from foreign exchange products, due to a stronger trading performance, and increased client activity in structured products and credit products.

Provision for credit losses

In 2018, Markets recorded a provision for credit losses of CHF 10 million related to a single case. No provision for credit losses was recorded in 2017.

Total operating expenses

Total operating expenses of CHF 1,120 million decreased 11% compared to 2017, reflecting lower compensation and benefits, general and administrative expenses, commission expenses and restructuring expenses. Compensation and benefits decreased 14% to CHF 515 million, mainly due to lower discretionary compensation expenses, allocated corporate function costs, deferred compensation expenses from prior-year awards and salary expenses. General and administrative expenses decreased 6% to CHF 387 million, mainly due to lower professional services fees and a provision release.

Results – Markets

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**1,103**	**1,182**	**1,693**	(7)	(30)
Provision for credit losses	**10**	**–**	**(3)**	–	100
Compensation and benefits	515	600	724	(14)	(17)
General and administrative expenses	387	410	452	(6)	(9)
Commission expenses	184	200	245	(8)	(18)
Restructuring expenses	34	42	39	(19)	8
Total other operating expenses	605	652	736	(7)	(11)
Total operating expenses	**1,120**	**1,252**	**1,460**	(11)	(14)
Income/(loss) before taxes	**(27)**	**(70)**	**236**	(61)	–
Statement of operations metrics (%)					
Cost/income ratio	101.5	105.9	86.2	–	–
Net revenue detail (CHF million)					
Equity sales and trading	859	920	1,162	(7)	(21)
Fixed income sales and trading	244	262	531	(7)	(51)
Net revenues	**1,103**	**1,182**	**1,693**	(7)	(30)

2017 results details

Loss before taxes of CHF 70 million in 2017 compared to an income before taxes of CHF 236 million in 2016. The related decrease of CHF 306 million primarily reflected lower net revenues, partially offset by lower total operating expenses. Adjusted loss before taxes of CHF 28 million in 2017 compared to adjusted income before taxes of CHF 275 million in 2016.

Net revenues

Net revenues of CHF 1,182 million decreased 30% compared to 2016, due to lower fixed income and equity sales and trading revenues. Fixed income sales and trading revenues decreased 51% to CHF 262 million, mainly due to decreased client activity in rates and lower revenues in foreign exchange products due to weaker trading performance. Developed markets rates products revenue in 2016 included a positive impact of CHF 33 million resulting from an increase in the funding value of certain structured deposits originated in Asia Pacific. Equity sales and trading revenues decreased 21% to CHF 920 million, mainly due to lower revenues from equity derivatives from weaker trading performance and lower client activity, and the transition of the systematic market making business to International Wealth Management that was completed in the first quarter of 2017. In 2016, equity derivatives revenue included the positive impact of CHF 65 million in derivatives resulting from a recalibration of the valuation model for certain hybrid instruments.

Provision for credit losses

In 2017, Markets had no provision for credit losses, compared to a release of provision for credit losses of CHF 3 million in 2016.

Total operating expenses

Total operating expenses of CHF 1,252 million decreased 14% compared to 2016, mainly reflecting lower compensation and benefits, general and administrative expenses and commission expenses. Compensation and benefits decreased 17% to CHF 600 million, mainly due to lower deferred compensation expenses from prior-year awards and salary expenses, reflecting a decrease in headcount from the restructuring of the Markets business. General and administrative expenses decreased 9% to CHF 410 million, mainly due to lower regulatory-related allocations and lower withholding taxes. Commission expenses decreased 18% to CHF 200 million, primarily reflecting the transition of the systematic market making business. Adjusted total operating expenses of CHF 1,210 million decreased 15% compared to 2016.

Global Markets

In 2018, we reported income before taxes of CHF 154 million and net revenues of CHF 4,980 million. Net revenues decreased 10% compared to 2017, reflecting challenging operating conditions in our fixed income businesses.

Results summary

2018 results

In 2018, we reported income before taxes of CHF 154 million. Net revenues of CHF 4,980 million decreased 10% compared to 2017, primarily reflecting lower results across fixed income trading and underwriting and reduced cash equities revenues due to less favorable market conditions, partially offset by increased ITS performance due to substantially higher equity derivatives revenues. Fixed income sales and trading revenues decreased 9%, primarily driven by substantially lower revenues in our credit franchise, reflecting challenging operating conditions. Underwriting revenues decreased 6%, reflecting lower debt issuance activity due to higher market volatility. Equity sales and trading revenues decreased 2%, reflecting lower cash equities and prime services revenues, partially offset by substantially higher equity derivatives revenues. Total operating expenses of CHF 4,802 million decreased 5% compared to 2017, reflecting lower compensation and benefits, general and administrative expenses and commission expenses, partially offset by higher restructuring expenses. We reported an adjusted income before taxes of CHF 406 million in 2018.

Divisional results

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**4,980**	**5,551**	**5,497**	(10)	1
Provision for credit losses	**24**	**31**	**(3)**	(23)	–
Compensation and benefits	2,296	2,532	2,688	(9)	(6)
General and administrative expenses	1,773	1,839	2,038	(4)	(10)
Commission expenses	491	549	509	(11)	8
Goodwill impairment	0	0	0	–	–
Restructuring expenses	242	150	217	61	(31)
Total other operating expenses	2,506	2,538	2,764	(1)	(8)
Total operating expenses	**4,802**	**5,070**	**5,452**	(5)	(7)
Income before taxes	**154**	**450**	**48**	(66)	–
Statement of operations metrics (%)					
Return on regulatory capital	1.2	3.2	0.4	–	–
Cost/income ratio	96.4	91.3	99.2	–	–
Balance sheet statistics (CHF million, except where indicated)					
Total assets	211,530	242,159	239,700	(13)	1
Risk-weighted assets	59,016	58,858	51,713	0	14
Risk-weighted assets (USD)	59,836	60,237	50,556	(1)	19
Leverage exposure	245,664	283,809	284,143	(13)	0
Leverage exposure (USD)	249,076	290,461	277,787	(14)	5
Number of employees (full-time equivalents)					
Number of employees	11,350	11,740	11,530	(3)	2

1 Calculated using a return excluding interest costs for allocated goodwill.

Divisional results (continued)

			in	% change	
	2018	2017	2016	18 / 17	17 / 16
Net revenue detail (CHF million)					
Fixed income sales and trading	2,649	2,922	2,599	(9)	12
Equity sales and trading	1,709	1,750	2,157	(2)	(19)
Underwriting	1,047	1,115	957	(6)	17
Other	(425)	(236)	(216)	80	9
Net revenues	**4,980**	**5,551**	**5,497**	(10)	1

Reconciliation of adjusted results

	Global Markets		
in	2018	2017	2016
Adjusted results (CHF million)			
Net revenues	**4,980**	**5,551**	**5,497**
Provision for credit losses	**24**	**31**	**(3)**
Total operating expenses	**4,802**	**5,070**	**5,452**
Restructuring expenses	(242)	(150)	(217)
Major litigation provisions	(10)	0	(7)
Expenses related to business sales	0	(8)	0
Adjusted total operating expenses	**4,550**	**4,912**	**5,228**
Income before taxes	**154**	**450**	**48**
Total adjustments	252	158	224
Adjusted income before taxes	**406**	**608**	**272**
Adjusted return on regulatory capital (%)	3.1	4.3	2.0

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

2017 results

In 2017, we reported income before taxes of CHF 450 million. Net revenues of CHF 5,551 million were stable compared to 2016, as substantially higher securitized products revenues and increased underwriting activity were offset by challenging equity trading conditions which resulted in low levels of client activity, particularly in ITS. Fixed income sales and trading revenues increased 12%, underwriting revenues increased 17% and equity sales and trading revenues declined 19%. Total operating expenses were CHF 5,070 million, down 7% compared to 2016, reflecting lower compensation and benefits, reduced allocated corporate function costs and lower restructuring costs. We reported an adjusted income before taxes of CHF 608 million in 2017.

Capital and leverage metrics

As of the end of 2018, we reported risk-weighted assets of USD 59.8 billion, stable compared to 2017 and in line with our 2018 threshold of USD 60 billion. Leverage exposure was USD 249.1 billion, in line with our 2018 threshold of USD 290 billion. Leverage exposure decreased USD 41.4 billion compared to 2017, reflecting lower business activity and the ITS recalibration in the second quarter of 2018.

2018 results details

Revenues reflected a change in the intra-divisional funding cost allocation methodology between fixed income sales and trading and equity sales and trading in the fourth quarter of 2018 due to ongoing work on the implementation of the net stable funding ratio framework. In the first quarter of 2018, the US GAAP accounting standard pertaining to revenue recognition was adopted. As a result, both net revenues and operating expenses in Global Markets increased CHF 32 million in 2018.

Fixed income sales and trading

Fixed income sales and trading revenues of CHF 2,649 million decreased 9% compared to 2017, primarily driven by substantially lower revenues in our credit franchise reflecting challenging operating conditions. Securitized products revenues decreased significantly compared to a strong 2017, reflecting lower client activity across agency and non-agency trading, partially offset by continued momentum in our asset finance business and a significant gain from

the sale of an investment. Global credit products revenues decreased, primarily due to lower leveraged finance revenues, reflecting high levels of volatility and widening US high yield spreads in the second half of the year. Emerging markets revenues decreased, reflecting a substantial decline in Brazil trading due to significantly lower client activity and rationalization of

the business, partially offset by higher structured credit revenues across regions. In addition, macro products revenues decreased, reflecting the adverse impact of rationalizing the business partially offset by higher foreign exchange results.

Equity sales and trading

Equity sales and trading revenues of CHF 1,709 million decreased 2% compared to 2017, primarily reflecting lower cash equities and prime services revenues, partially offset by substantially higher equity derivatives revenues. Cash equities revenues decreased, reflecting lower trading activity. In addition, prime services revenues declined primarily reflecting lower prime brokerage in line with market indices and reduced client financing revenues, partially offset by higher commissions in listed derivatives. This was partially offset by significantly increased equity derivatives revenues, albeit compared to a subdued 2017, reflecting higher volatility and benefits from continued investments in the business.

Underwriting

Underwriting revenues of CHF 1,047 million decreased 6% compared to 2017, reflecting lower debt issuance activity due to higher market volatility. Debt underwriting revenues decreased, primarily due to lower leveraged finance and investment grade revenues. This was partially offset by higher equity underwriting revenues.

Provision for credit losses

Global Markets recorded a provision for credit losses of CHF 24 million in 2018 compared to CHF 31 million in 2017.

Total operating expenses

Compared to 2017, total operating expenses of CHF 4,802 million decreased 5%, reflecting lower compensation and benefits, reduced general and administrative expenses and lower commissions expenses, partially offset by higher restructuring expenses. Compensation and benefits decreased 9%, reflecting lower deferred compensation expenses from prior-year awards, reduced discretionary compensation and lower salary expenses. General and administrative expenses decreased, reflecting lower professional services fees and lower allocated corporate function costs. In addition, we incurred restructuring expenses of CHF 242 million, reflecting the results of our cost efficiency measures.

2017 results details

Revenues reflected a change in the intra-divisional funding cost allocation methodology between fixed income sales and trading and equity sales and trading in the fourth quarter of 2017 due to ongoing work on the implementation of the net stable funding ratio framework.

Fixed income sales and trading

Fixed income sales and trading revenues of CHF 2,922 million increased 12% compared to 2016, primarily due to substantially higher securitized products revenues reflecting strength across all products. This was partially offset by substantially lower macro products revenues reflecting weak US rates results due to subdued volatility and our reduced issuance of structured notes. Emerging markets revenues decreased, reflecting a substantial decline in Brazil financing due to significantly lower client activity compared to more favorable market conditions in 2016. In addition, global credit products revenues decreased, driven by lower investment grade trading and leveraged finance revenues in light of continued low volatility and tighter credit spreads.

Equity sales and trading

Equity sales and trading revenues of CHF 1,750 million decreased 19% compared to 2016, reflecting lower systematic market revenues driven by the transition of the business to International Wealth Management that was completed in the first quarter of 2017, coupled with a difficult trading environment. Equity derivatives revenues decreased significantly due to continued low levels of volatility, which negatively impacted flow derivatives. Prime services revenues declined primarily reflecting lower client financing revenues given a low trading volume environment. Cash equities revenues were stable in a difficult trading environment.

Underwriting

Underwriting revenues of CHF 1,115 million increased 17% compared to 2016, reflecting increased issuance activity due to a low volatility market environment. Debt underwriting revenues increased, primarily due to significantly higher leveraged finance revenues. In addition, equity underwriting revenues increased, due to significantly higher primary issuance volumes.

Provision for credit losses

Global Markets recorded a provision for credit losses of CHF 31 million in 2017. In 2016 we recorded a release of provision for credit losses of CHF 3 million. The release of provision reflected the stabilization in the energy sector.

Total operating expenses

Compared to 2016, total operating expenses of CHF 5,070 million decreased 7%, reflecting lower compensation and benefits, reduced general and administrative expenses and lower restructuring costs. Compensation and benefits decreased 6%, reflecting lower deferred compensation expenses from prior-year awards, lower salary and reduced discretionary compensation expenses. General and administrative expenses decreased, primarily due to lower allocated corporate function costs. In addition, we incurred restructuring expenses of CHF 150 million.

Investment Banking & Capital Markets

In 2018, we reported income before taxes of CHF 344 million and net revenues of CHF 2,177 million. Net revenues increased 2% compared to 2017, driven by strong M&A performance but with lower financing activity across the market.

Results summary

2018 results

In 2018, we reported income before taxes of CHF 344 million. Net revenues of CHF 2,177 million increased 2% compared to 2017, due to higher revenues from advisory and other fees, partially offset by lower debt and equity underwriting revenues. Advisory and other fees of CHF 950 million increased 23%, mainly reflecting higher revenues from completed M&A transactions. Debt underwriting revenues of CHF 934 million decreased 9%, driven by lower leveraged finance and debt capital market revenues, partially offset by higher derivatives financing revenues. Equity underwriting revenues of CHF 314 million decreased 19%, driven by decreased follow-on activity, including a loss on a single block trade, and lower rights offerings, partially offset by higher revenues from equity derivatives and initial public offering (IPO) issuances. Total operating expenses of CHF 1,809 million increased 4%, primarily due to higher general and administrative expenses and restructuring expenses. Adjusted income before taxes was CHF 429 million in 2018.

Divisional results

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**2,177**	**2,139**	**1,972**	2	8
Provision for credit losses	**24**	**30**	**20**	(20)	50
Compensation and benefits	1,249	1,268	1,218	(1)	4
General and administrative expenses	467	423	443	10	(5)
Commission expenses	9	7	2	29	250
Goodwill impairment	0	0	0	–	–
Restructuring expenses	84	42	28	100	50
Total other operating expenses	560	472	473	19	–
Total operating expenses	**1,809**	**1,740**	**1,691**	4	3
Income before taxes	**344**	**369**	**261**	(7)	41
Statement of operations metrics (%)					
Return on regulatory capital	10.9	13.7	10.7	–	–
Cost/income ratio	83.1	81.3	85.8	–	–
Balance sheet statistics (CHF million, except where indicated)					
Total assets	16,156	20,803	20,784	(22)	0
Risk-weighted assets	24,190	20,058	18,027	21	11
Risk-weighted assets (USD)	24,526	20,528	17,624	19	16
Leverage exposure	40,485	43,842	45,571	(8)	(4)
Leverage exposure (USD)	41,047	44,870	44,552	(9)	1
Number of employees (full-time equivalents)					
Number of employees	3,100	3,190	3,090	(3)	3

1 Calculated using a return excluding interest costs for allocated goodwill.

Divisional results (continued)

			in	% change	
	2018	2017	2016	18 / 17	17 / 16
Net revenue detail (CHF million)					
Advisory and other fees	950	770	849	23	(9)
Debt underwriting	934	1,030	934	(9)	10
Equity underwriting	314	386	312	(19)	24
Other	(21)	(47)	(123)	(55)	(62)
Net revenues	**2,177**	**2,139**	**1,972**	2	8

Reconciliation of adjusted results

	Investment Banking & Capital Markets		
in	2018	2017	2016
Adjusted results (CHF million)			
Net revenues	**2,177**	**2,139**	**1,972**
Provision for credit losses	**24**	**30**	**20**
Total operating expenses	**1,809**	**1,740**	**1,691**
Restructuring expenses	(84)	(42)	(28)
Major litigation provisions	(1)	0	0
Adjusted total operating expenses	**1,724**	**1,698**	**1,663**
Income before taxes	**344**	**369**	**261**
Total adjustments	85	42	28
Adjusted income before taxes	**429**	**411**	**289**
Adjusted return on regulatory capital (%)	13.6	15.2	11.9

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

2017 results

In 2017, we reported income before taxes of CHF 369 million. Net revenues of CHF 2,139 million increased 8% compared to 2016, due to higher revenues from debt underwriting and equity underwriting, partially offset by lower revenues in advisory and other fees. Debt underwriting revenues of CHF 1,030 million increased 10%, driven by higher leveraged finance revenues, partially offset by lower derivatives financing revenues. Equity underwriting revenues of CHF 386 million increased 24%, primarily reflecting an increase in the overall industry-wide fee pool driven by strong IPO activity. Advisory and other fees of CHF 770 million decreased 9%, mainly reflecting lower revenues from completed M&A transactions. Total operating expenses of CHF 1,740 million increased 3%, primarily due to higher compensation and benefits and restructuring expenses. Adjusted income before taxes was CHF 411 million in 2017.

Capital and leverage metrics

As of the end of 2018, risk-weighted assets were USD 24.5 billion, an increase of USD 4.0 billion compared to the end of 2017. The change was primarily driven by growth in the lending portfolio and underwriting commitments, the new operational risk allocation key in the first quarter of 2018 and the impact of methodology changes. We reported leverage exposure of USD 41.0 billion, a decrease of USD 3.8 billion compared to the end of 2017, primarily driven by the realignment of our HQLA allocations in the first quarter of 2018.

2018 results details

In the first quarter of 2018, the US GAAP accounting standard pertaining to revenue recognition was adopted. As a result, both net revenues and operating expenses in Investment Banking & Capital Markets increased CHF 59 million in 2018.

Advisory and other fees

In 2018, revenues from advisory and other fees of CHF 950 million increased 23% compared to 2017, primarily driven by higher revenues from completed M&A transactions across the Americas and EMEA regions, with share of wallet gains in EMEA. Share of wallet refers to our share of the industry-wide fee pool for the respective products.

Debt underwriting

In 2018, debt underwriting revenues of CHF 934 million decreased 9% compared to 2017, primarily driven by lower leveraged finance activity and lower revenues from debt capital markets, partially offset by increased derivatives financing revenues.

Equity underwriting

In 2018, equity underwriting revenues of CHF 314 million decreased 19% compared to 2017, reflecting a decrease in the overall industry-wide fee pool. Performance was impacted by lower revenues from follow-on activity, including the loss on a single block trade, and rights offerings, partially offset by higher revenues from equity derivatives and IPO issuances.

Provision for credit losses

In 2018, Investment Banking & Capital Markets recorded a provision for credit losses of CHF 24 million, driven by adverse developments on non-fair valued loans in our corporate lending portfolio, partially offset by a release of provisions relating to two counterparties.

Total operating expenses

Total operating expenses of CHF 1,809 million increased 4% compared to 2017, primarily due to higher general and administrative expenses and restructuring expenses. General and administrative expenses increased 10%, mainly driven by higher costs due to the adoption of the new revenue recognition accounting standard. During 2018 we incurred restructuring expenses of CHF 84 million, compared to CHF 42 million incurred in 2017, reflecting targeted headcount reductions.

2017 results details

Advisory and other fees

In 2017, revenues from advisory and other fees of CHF 770 million decreased 9% compared to 2016, mainly reflecting lower revenues from completed M&A transactions, despite an increase in our share of wallet for those transactions. Share of wallet refers to our share of the industry-wide fee pool for the respective products.

Debt underwriting

In 2017, debt underwriting revenues of CHF 1,030 million increased 10% compared to 2016, driven by significantly higher leveraged finance revenues partially offset by lower derivatives financing revenues.

Equity underwriting

In 2017, equity underwriting revenues of CHF 386 million increased 24% compared to 2016, primarily reflecting an increase in the overall industry-wide fee pool driven by strong IPO activity.

Provision for credit losses

In 2017, Investment Banking & Capital Markets recorded a provision for credit losses of CHF 30 million including increased provisions reflecting a methodology change for probable losses inherent in the portfolio relating to the period of time expected to identify defaults once they have occurred and provisions relating to a single counterparty.

Total operating expenses

Total operating expenses of CHF 1,740 million increased 3% compared to 2016, primarily due to higher deferred compensation expenses from prior year awards, allocated corporate function costs, mainly reflecting targeted investments in our IT and compliance functions, and restructuring expenses. These increases were partially offset by a lower discretionary compensation accrual.

Global advisory and underwriting revenues

The Group's global advisory and underwriting business operates across multiple business divisions that work in close collaboration with each other to generate these revenues. In order to reflect the global performance and capabilities of this business and for enhanced comparability versus its peers, the following table aggregates total advisory and underwriting revenues for the Group into a single metric in US dollar terms before cross-divisional revenue sharing agreements.

	2018	in 2017	% change YoY
Global advisory and underwriting revenues (USD million)			
Advisory and other fees	1,163	935	24
Debt underwriting	2,050	2,292	(11)
Equity underwriting	830	906	(8)
Global advisory and underwriting revenues	**4,043**	**4,133**	**(2)**

Strategic Resolution Unit

In 2018, we reported a loss before taxes of CHF 1,381 million and decreased risk-weighted assets by USD 16.2 billion and leverage exposure by USD 31.3 billion compared to the end of 2017.

Results summary

2018 results

In 2018, we reported a loss before taxes of CHF 1,381 million and negative net revenues of CHF 708 million compared to a loss before taxes of CHF 2,135 million and negative net revenues of CHF 886 million in 2017. In 2018, we reported an adjusted loss before taxes of CHF 1,240 million, compared to CHF 1,847 million in 2017. Negative net revenues of CHF 708 million in 2018 were primarily driven by overall funding costs and valuation adjustments across our legacy investment banking portfolio, partially offset by revenues from our legacy cross-border and small markets businesses. Provision for credit losses was CHF 1 million in 2018 compared to CHF 32 million in 2017. Total operating expenses were CHF 672 million in 2018, including CHF 385 million of general and administrative expenses, of which CHF 132 million were litigation provisions, and CHF 254 million of compensation and benefits. In 2018, we reported adjusted total operating expenses of CHF 530 million.

Divisional results

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Net revenues	**(708)**	**(886)**	**(1,271)**	(20)	(30)
of which from noncontrolling interests without significant economic interest	(8)	45	27	–	67
Provision for credit losses	**1**	**32**	**111**	(97)	(71)
Compensation and benefits	254	332	612	(23)	(46)
General and administrative expenses	385	796	3,590	(52)	(78)
of which litigation provisions	132	300	2,792	(56)	(89)
Commission expenses	12	32	54	(63)	(41)
Restructuring expenses	21	57	121	(63)	(53)
Total other operating expenses	418	885	3,765	(53)	(76)
Total operating expenses	**672**	**1,217**	**4,377**	(45)	(72)
of which from noncontrolling interests without significant economic interest	4	10	23	(60)	(57)
Income/(loss) before taxes	**(1,381)**	**(2,135)**	**(5,759)**	(35)	(63)
of which from noncontrolling interests without significant economic interest	(12)	35	4	–	–
Balance sheet statistics (CHF million, except where indicated)					
Total assets	20,874	45,629	80,297	(54)	(43)
Risk-weighted assets	17,926	33,613	45,441	(47)	(26)
Risk-weighted assets (USD)	18,175	34,401	44,425	(47)	(23)
Leverage exposure	29,579	59,934	105,768	(51)	(43)
Leverage exposure (USD)	29,990	61,339	103,402	(51)	(41)
Number of employees (full-time equivalents)					
Number of employees	1,320	1,530	1,830	(14)	(16)

Divisional results (continued)

			in	% change	
	2018	2017	2016	18 / 17	17 / 16
Net revenue detail (CHF million)					
Restructuring of select onshore businesses	1	31	154	(97)	(80)
Legacy cross-border and small markets businesses	53	121	194	(56)	(38)
Legacy asset management positions	12	(79)	(90)	–	(12)
Legacy investment banking portfolio	(453)	(697)	(1,253)	(35)	(44)
Legacy funding costs	(315)	(337)	(315)	(7)	7
Other	2	30	12	(93)	150
Noncontrolling interests without significant economic interest	(8)	45	27	–	67
Net revenues	**(708)**	**(886)**	**(1,271)**	(20)	(30)

Reconciliation of adjusted results

	Strategic Resolution Unit		
in	2018	2017	2016
Adjusted results (CHF million)			
Net revenues	**(708)**	**(886)**	**(1,271)**
Real estate gains	(1)	0	(4)
(Gains)/losses on business sales	0	(38)	6
Adjusted net revenues	**(709)**	**(924)**	**(1,269)**
Provision for credit losses	**1**	**32**	**111**
Total operating expenses	**672**	**1,217**	**4,377**
Restructuring expenses	(21)	(57)	(121)
Major litigation provisions	(117)	(269)	(2,693)
Expenses related to business sales	(4)	0	0
Adjusted total operating expenses	**530**	**891**	**1,563**
Income/(loss) before taxes	**(1,381)**	**(2,135)**	**(5,759)**
Total adjustments	141	288	2,816
Adjusted income/(loss) before taxes	**(1,240)**	**(1,847)**	**(2,943)**

Adjusted results are non-GAAP financial measures. Refer to "Reconciliation of adjusted results" in Credit Suisse for further information.

2017 results

In 2017, we reported a loss before taxes of CHF 2,135 million, compared to a loss before taxes of CHF 5,759 million in 2016 that included significant litigation provisions of CHF 2,792 million, primarily related to the settlements with the DOJ and the NCUA regarding our legacy RMBS business. In 2017, we reported an adjusted loss before taxes of CHF 1,847 million, compared to CHF 2,943 million in 2016. Negative net revenues of CHF 886 million in 2017 were driven by overall funding costs, valuation adjustments and exit costs, partially offset by revenues from our legacy cross-border and small markets businesses. Valuation adjustments in 2017 primarily reflected mark-to-market losses on our legacy investment banking portfolio. Provision for credit losses was CHF 32 million in 2017 compared to CHF 111 million in 2016. Total operating expenses were CHF 1,217 million in 2017, including CHF 796 million of general and administrative expenses, of which CHF 300 million were litigation provisions, and CHF 332 million of compensation and benefits. In 2017, we reported adjusted total operating expenses of CHF 891 million.

Capital and leverage metrics

As of the end of 2018, we reported risk-weighted assets of USD 18.2 billion, a decrease of USD 16.2 billion compared to the end of 2017. Leverage exposure was USD 30.0 billion as of the end of 2018, reflecting a decrease of USD 31.3 billion compared to the end of 2017. These decreases were primarily achieved through a broad range of transactions,

including restructuring, compression and unwinds in the derivatives portfolio, the sale of emerging markets and residual ship finance loans and mitigation of certain residual illiquid asset management exposures.

Development of the Strategic Resolution Unit

In the fourth quarter of 2015, we formed the Strategic Resolution Unit to oversee the effective wind-down of businesses and positions that did not fit our strategic direction in the most efficient manner possible. Beginning in 2019, the Strategic Resolution Unit has ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and will be separately disclosed within the Corporate Center.

> Refer to “Development of the Strategic Resolution Unit” in I – Information on the company – Divisions – Strategic Resolution Unit for further information.

2018 results details

Net revenues

We reported negative net revenues of CHF 708 million in 2018 compared to negative net revenues of CHF 886 million in 2017. The improvement was primarily driven by lower overall funding costs and lower exit costs, partially offset by a reduction in fee-based revenues as a result of business exits and higher negative valuation adjustments.

Provision for credit losses

Provision for credit losses was CHF 1 million in 2018 compared to CHF 32 million in 2017. Provisions in 2017 were primarily related to corporate loans, the disposal of a portfolio of senior financing on US middle market loans and ship finance exposures.

Total operating expenses

Total operating expenses of CHF 672 million decreased by CHF 545 million, a decline of 45% compared to 2017, primarily due to lower general and administrative expenses and lower compensation and benefits. General and administrative expenses of CHF 385 million decreased 52%, including lower litigation provisions, mainly in connection with mortgage-related matters, and a reduction in costs related to the settlements with US authorities regarding US cross-border matters, some of which related to the work performed by the DFS monitor. Compensation and benefits of CHF 254 million decreased 23%, primarily as a result of the reduced size of the division and various cost reduction initiatives. Adjusted total operating expenses were CHF 530 million in 2018, compared to CHF 891 million in 2017, a decline of 41%.

2017 results details

Net revenues

We reported negative net revenues of CHF 886 million in 2017 compared to negative net revenues of CHF 1,271 million in 2016. The improvement was driven by lower negative valuation adjustments, a reduction in overall funding costs and lower exit losses primarily related to the sale of loan and financing portfolios, partially offset by a reduction in fee-based revenues as a result of accelerated business exits.

Provision for credit losses

Provision for credit losses was CHF 32 million in 2017 compared to CHF 111 million in 2016. Provisions in 2017 were primarily related to corporate loans, the disposal of a portfolio of senior financing on US middle market loans and ship finance exposures. Provisions in 2016 were primarily related to the ship finance sector.

Total operating expenses

Total operating expenses of CHF 1,217 million decreased CHF 3,160 million, a decline of 72% compared to 2016, primarily due to lower general and administrative expenses and lower compensation and benefits. General and administrative expenses of CHF 796 million decreased 78%, including significantly lower litigation provisions, a decrease of CHF 2,492 million as 2016 included significant litigation provisions of CHF 2,792 million, primarily related to the RMBS settlements. Compensation and benefits of CHF 332 million decreased 46%, primarily from the restructuring of select onshore businesses, including cost reduction initiatives relating to the exit of our US onshore and Western European private banking businesses. Total operating expenses in 2017 included costs of CHF 177 million to meet requirements related to the settlements with US authorities regarding US cross-border matters, some of which relates to the work performed by the DFS monitor. Adjusted total operating expenses were CHF 891 million in 2017, compared to CHF 1,563 million in 2016, a decline of 43%.

Corporate Center

In 2018, we reported a loss before taxes of CHF 239 million compared to a loss of CHF 736 million in 2017.

Corporate Center composition

Corporate Center includes parent company operations such as Group financing, expenses for projects sponsored by the Group, including costs associated with the evolution of our legal entity structure to meet developing and future regulatory requirements, and certain other expenses and revenues that have not been allocated to the segments. Corporate Center also includes consolidation and elimination adjustments required to eliminate intercompany revenues and expenses.

Treasury results include the impact of volatility in the valuations of certain central funding transactions such as structured notes issuances and swap transactions. Since the second quarter of 2017, treasury results have also included additional interest charges from transfer pricing to align funding costs to assets held in the Corporate Center.

Other revenues include required elimination adjustments associated with trading in own shares, treasury commissions charged to divisions and, since the third quarter of 2017, the cost of certain hedging transactions executed in connection with the Group's risk-weighted assets.

Compensation and benefits include fair value adjustments on certain deferred compensation plans not allocated to the segments and certain deferred compensation retention awards intended to support the restructuring of the Group, mainly relating to Global Markets and Investment Banking & Capital Markets predominantly through the end of 2017 and to Asia Pacific predominantly through the end of 2018. Since the third quarter of 2018, compensation and benefits have also included fair value adjustments on certain other long-dated legacy deferred compensation and retirement programs mainly relating to former employees.

Results summary

2018 results

In 2018, we reported a loss before taxes of CHF 239 million compared to CHF 736 million in 2017. The decreased loss before taxes in 2018 was primarily driven by lower total operating expenses.

Net revenues of CHF 100 million increased CHF 15 million compared to 2017. Treasury results of CHF 13 million in 2018 mainly reflected gains of CHF 200 million with respect to structured notes volatility, of which CHF 165 million related to valuation model enhancements, gains of CHF 123 million relating to hedging volatility and gains of CHF 61 million relating to fair value option volatility on own debt, partially offset by negative revenues of CHF 362 million relating to funding activities. Other revenues of CHF 87 million increased CHF 58 million compared to 2017, mainly reflecting reduced costs relating to hedging transactions executed in connection with the Group's risk-weighted assets and the elimination of losses from trading in own shares compared to gains in 2017, partially offset by a negative valuation impact from long-dated legacy deferred compensation and retirement programs and a loss relating to the final liquidation of our subsidiary in Johannesburg.

Corporate Center results

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Statements of operations (CHF million)					
Treasury results	13	56	(160)	(77)	–
Other	87	29	231	200	(87)
Net revenues	**100**	**85**	**71**	18	20
Provision for credit losses	**0**	**0**	**(1)**	–	100
Compensation and benefits	128	398	270	(68)	47
General and administrative expenses	160	364	406	(56)	(10)
Commission expenses	49	45	76	9	(41)
Restructuring expenses	2	14	7	(86)	100
Total other operating expenses	211	423	489	(50)	(13)
Total operating expenses	**339**	**821**	**759**	(59)	8
Income/(loss) before taxes	**(239)**	**(736)**	**(687)**	(68)	7
Balance sheet statistics (CHF million)					
Total assets	104,411	67,591	62,413	54	8

Risk-weighted assets [1]	29,703	23,849	17,338	25	38
Leverage exposure [1]	105,247	67,034	59,374	57	13

1 Disclosed on a look-through basis.

Total operating expenses of CHF 339 million decreased 59% compared to 2017, primarily reflecting decreases in compensation and benefits and general and administrative expenses. Compensation and benefits of CHF 128 million decreased 68%, primarily reflecting lower deferred compensation expenses from prior-year awards and lower retention award expenses. General and administrative expenses of CHF 160 million decreased 56%, mainly due to the absence of the impact from the settlement with the DFS in 2017 relating to certain areas of our foreign exchange trading business and reduced expenses relating to the continuing evolution of our legal entity structure. In 2018, we recorded expenses of CHF 159 million, compared to CHF 240 million in 2017, with respect to the evolution of our legal entity structure.

Capital and leverage metrics

As of the end of 2018, we reported risk-weighted assets of CHF 29.7 billion, reflecting an increase of CHF 5.9 billion compared to the end of 2017. The increase was primarily driven by methodology and policy changes, increased risk levels and model and parameter updates.

Leverage exposure was CHF 105.2 billion as of the end of 2018, reflecting an increase of CHF 38.2 billion compared to December 31, 2017, mainly reflecting a CHF 35.5 billion impact from the realignment of our HQLA allocations in the first quarter of 2018.

> Refer to “Regulatory capital” in Credit Suisse for further information.

2017 results

In 2017, we reported a loss before taxes of CHF 736 million compared to CHF 687 million in 2016. The increased loss before taxes in 2017 was primarily driven by higher total operating expenses, partially offset by an increase in net revenues.

Net revenues of CHF 85 million increased CHF 14 million compared to 2016. Treasury results of CHF 56 million in 2017 reflected gains with respect to structured notes volatility of CHF 503 million, partially offset by negative revenues of CHF 257 million relating to funding activities, losses of CHF 118 million relating to hedging volatility and losses of CHF 74 million relating to fair-valued money market instruments. The 2017 structured notes volatility was substantially composed of the positive impact of CHF 412 million from the enhancements in the third and fourth quarters of 2017 to the valuation methodology relating to the instrument-specific credit risk on fair value option elected structured notes, of which CHF 338 million was reallocated between accumulated other comprehensive income/(loss) (AOCI) and net income. In 2017, we were in the process of migrating our structured notes portfolio to a new target operating model that allows for a more granular and precise valuation of the individual notes. This migration became sufficiently advanced during the third and fourth quarters of 2017 with respect to the rates sub-portfolio to allow for this change in estimate.

Total operating expenses of CHF 821 million increased 8% compared to 2016, primarily reflecting an increase in compensation and benefits, partially offset by a decrease in general and administrative expenses. Compensation and benefits of CHF 398 million increased 47%, mainly reflecting higher deferred compensation expenses from prior year awards. General and administrative expenses of CHF 364 million decreased 10%, mainly due to lower expenses related to the evolution of our legal entity structure, partially offset by a CHF 127 million impact from the settlement with the DFS relating to certain areas of our foreign exchange trading business and the impact from a provision for indirect taxes.

Expense allocation to divisions

	in / end of			% change	
	2018	2017	2016	18 / 17	17 / 16
Expense allocation to divisions (CHF million)					
Compensation and benefits	2,748	3,076	2,924	(11)	5
General and administrative expenses	2,212	2,573	2,962	(14)	(13)
Commission expenses	49	45	76	9	(41)
Restructuring expenses	372	158	166	135	(5)
Total other operating expenses	2,633	2,776	3,204	(5)	(13)
Total operating expenses before allocations to divisions	**5,381**	**5,852**	**6,128**	(8)	(5)
Net allocation to divisions	5,042	5,031	5,369	0	(6)

of which Swiss Universal Bank	1,056	1,078	1,071	(2)	1
of which International Wealth Management	876	864	841	1	3
of which Asia Pacific	780	777	702	0	11
of which Global Markets	1,708	1,645	1,878	4	(12)
of which Investment Banking & Capital Markets	358	346	304	3	14
of which Strategic Resolution Unit	264	321	573	(18)	(44)
Total operating expenses	**339**	**821**	**759**	(59)	8

Corporate services and business support, including in finance, operations, human resources, legal, compliance, risk management and IT, are provided by corporate functions, and the related costs are allocated to the segments and the Corporate Center based on their requirements and other relevant measures.

Assets under management

As of the end of 2018, assets under management were CHF 1,347.3 billion, 2.1% lower compared to the end of 2017, with net new assets of CHF 56.5 billion.

Assets under management

Assets under management comprise assets that are placed with us for investment purposes and include discretionary and advisory counterparty assets.

Discretionary assets are assets for which the client fully transfers the discretionary power to a Credit Suisse entity with a management mandate. Discretionary assets are reported in the business in which the advice is provided as well as in the business in which the investment decisions take place. Assets managed by the Asset Management business of International Wealth Management for other businesses are reported in each applicable business and eliminated at the Group level.

Advisory assets include assets placed with us where the client is provided access to investment advice but retains discretion over investment decisions.

Assets under management and net new assets include assets managed by consolidated entities, joint ventures and strategic participations. Assets from joint ventures and participations are counted in proportion to our share in the respective entity.

Assets under management and client assets

			end of	% change	
	2018	2017	2016	18 / 17	17 / 16
Assets under management (CHF billion)					
Swiss Universal Bank – Private Clients	198.0	208.3	192.2	(4.9)	8.4
Swiss Universal Bank – Corporate & Institutional Clients	348.7	354.7	339.3	(1.7)	4.5
International Wealth Management – Private Banking	357.5	366.9	323.2	(2.6)	13.5
International Wealth Management – Asset Management	388.7	385.6	321.6	0.8	19.9
Asia Pacific – Private Banking	201.7	196.8	166.9	2.5	17.9
Strategic Resolution Unit	0.5	5.0	13.7	(90.0)	(63.5)
Assets managed across businesses [1]	(147.8)	(141.2)	(105.8)	4.7	33.5
Assets under management	**1,347.3**	**1,376.1**	**1,251.1**	(2.1)	10.0
of which discretionary assets	442.9	452.5	404.3	(2.1)	11.9
of which advisory assets	904.4	923.6	846.8	(2.1)	9.1
Client assets (CHF billion) [2]					
Swiss Universal Bank – Private Clients	231.2	241.0	218.5	(4.1)	10.3
Swiss Universal Bank – Corporate & Institutional Clients	454.5	463.8	447.8	(2.0)	3.6
International Wealth Management – Private Banking	430.5	466.0	423.4	(7.6)	10.1
International Wealth Management – Asset Management	388.7	385.6	321.6	0.8	19.9
Asia Pacific – Private Banking	245.4	255.5	202.8	(4.0)	26.0
Strategic Resolution Unit	2.4	8.5	19.8	(71.8)	(57.1)
Assets managed across businesses [1]	(147.7)	(141.2)	(105.8)	4.6	33.5
Client assets	**1,605.0**	**1,679.2**	**1,528.1**	(4.4)	9.9

1 Represents assets managed by Asset Management within International Wealth Management for the other businesses.

2
Client assets is a broader measure than assets under management as it includes transactional accounts and assets under custody (assets held solely for transaction-related or safekeeping/custody purposes) and assets of corporate clients and public institutions used primarily for cash management or transaction-related purposes.
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Net new assets

Net new assets include individual cash payments, delivery of securities and cash flows resulting from loan increases or repayments.

Interest and dividend income credited to clients and commissions, interest and fees charged for banking services as well as changes in assets under management due to currency and market volatility are not taken into account when calculating net new assets. Any such changes are not directly related to the Group's success in acquiring assets under management. Similarly structural effects mainly relate to asset inflows and outflows due to acquisition or divestiture, exit from businesses or markets or exits due to new regulatory requirements and are not taken into account when calculating net new assets. The Group reviews relevant policies regarding client assets on a regular basis. Following such reviews in 2018, with effect from January 1, 2019, the Group updated its assets under management policy primarily to introduce more specific criteria to evaluate whether client assets qualify as assets under management. The introduction of this updated policy is expected to result in a reclassification of approximately CHF 19 billion of assets under management to assets under custody which will be reflected as a structural effect in the first quarter of 2019.

Results summary

2018 results

As of the end of 2018, assets under management were CHF 1,347.3 billion, a decrease of CHF 28.8 billion compared to the end of 2017. The decrease was driven by unfavorable market movements, structural effects and foreign exchange-related movements, partially offset by net new assets of CHF 56.5 billion.

Net new assets of CHF 56.5 billion mainly reflected net new assets of CHF 22.2 billion in the Asset Management business of International Wealth Management, mainly reflecting inflows from traditional and alternative investments, net new assets of CHF 17.2 billion in the Private Banking business of Asia Pacific, reflecting inflows across most of our markets in this region, net new assets of CHF 14.2 billion in the Private Banking business of International Wealth Management, mainly reflecting inflows from emerging markets and Europe, and net new assets of CHF 8.6 billion in the Corporate & Institutional Clients business of Swiss Universal Bank, primarily reflecting positive contributions from our pension business.

2017 results

As of the end of 2017, assets under management were CHF 1,376.1 billion, an increase of CHF 125.0 billion compared to the end of 2016. The increase was mainly driven by favorable market movements and net new assets of CHF 37.8 billion.

Net new assets of CHF 37.8 billion mainly reflected net new assets of CHF 20.3 billion in the Asset Management business of International Wealth Management, primarily reflecting inflows from traditional and alternative investments and from emerging market joint ventures, net new assets of CHF 16.9 billion in the Private Banking business of Asia Pacific, reflecting inflows primarily from Greater China, South East Asia, Japan and Australia and net new assets of CHF 15.6 billion in the Private Banking business of International Wealth Management, reflecting solid inflows from emerging markets and Europe. These were partially offset by net asset outflows of CHF 13.9 billion in the Corporate & Institutional Clients business of Swiss Universal Bank, primarily due to redemptions of CHF 13.3 billion from a single public sector mandate in the third quarter 2017.

> Refer to "Swiss Universal Bank", "International Wealth Management" and "Asia Pacific" and "Note 38 – Assets under management" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Growth in assets under management in	2018	2017	2016
Growth in assets under management (CHF billion)			
Net new assets	**56.5**	**37.8**	**26.8**
of which Swiss Universal Bank – Private Clients	3.0	4.7	0.1
of which Swiss Universal Bank – Corporate & Institutional Clients	8.6	(13.9)	2.5
of which International Wealth Management – Private Banking	14.2	15.6	15.6
of which International Wealth Management – Asset Management [1]	22.2	20.3	5.6
of which Asia Pacific – Private Banking	17.2	16.9	13.6
of which Strategic Resolution Unit	(0.3)	(2.5)	(8.5)
of which assets managed across businesses [2]	(8.4)	(3.3)	(2.1)
Other effects	**(85.3)**	**87.2**	**10.2**
of which Swiss Universal Bank – Private Clients	(13.3)	11.4	2.3
of which Swiss Universal Bank – Corporate & Institutional Clients	(14.6)	29.3	9.8
of which International Wealth Management – Private Banking	(23.6)	28.1	18.0
of which International Wealth Management – Asset Management	(19.1)	43.7	(5.3)
of which Asia Pacific – Private Banking	(12.3)	13.0	2.9
of which Strategic Resolution Unit	(4.2)	(6.2)	(5.1)
of which assets managed across businesses [2]	1.8	(32.1)	(12.4)
Growth in assets under management	**(28.8)**	**125.0**	**37.0**
of which Swiss Universal Bank – Private Clients	(10.3)	16.1	2.4
of which Swiss Universal Bank – Corporate & Institutional Clients	(6.0)	15.4	12.3
of which International Wealth Management – Private Banking	(9.4)	43.7	33.6
of which International Wealth Management – Asset Management [1]	3.1	64.0	0.3
of which Asia Pacific – Private Banking	4.9	29.9	16.5
of which Strategic Resolution Unit	(4.5)	(8.7)	(13.6)
of which assets managed across businesses [2]	(6.6)	(35.4)	(14.5)
Growth in assets under management (%)			
Net new assets	**4.1**	**3.0**	**2.2**
of which Swiss Universal Bank – Private Clients	1.4	2.4	0.1
of which Swiss Universal Bank – Corporate & Institutional Clients	2.4	(4.1)	0.8
of which International Wealth Management – Private Banking	3.9	4.8	5.4
of which International Wealth Management – Asset Management [1]	5.8	6.3	1.7
of which Asia Pacific – Private Banking	8.7	10.1	9.0
of which Strategic Resolution Unit	(6.0)	(18.2)	(31.1)
of which assets managed across businesses [2]	5.9	3.1	2.3
Other effects	**(6.2)**	**7.0**	**0.8**
of which Swiss Universal Bank – Private Clients	(6.3)	6.0	1.2

of which Swiss Universal Bank – Corporate & Institutional Clients	(4.1)	8.6	3.0
of which International Wealth Management – Private Banking	(6.5)	8.7	6.2
of which International Wealth Management – Asset Management	(5.0)	13.6	(1.6)
of which Asia Pacific – Private Banking	(6.2)	7.8	2.0
of which Strategic Resolution Unit	(84.0)	(45.3)	(18.7)
of which assets managed across businesses [2]	(1.2)	30.4	13.6
Growth in assets under management	**(2.1)**	**10.0**	**3.0**
of which Swiss Universal Bank – Private Clients	(4.9)	8.4	1.3
of which Swiss Universal Bank – Corporate & Institutional Clients	(1.7)	4.5	3.8
of which International Wealth Management – Private Banking	(2.6)	13.5	11.6
of which International Wealth Management – Asset Management [1]	0.8	19.9	0.1
of which Asia Pacific – Private Banking	2.5	17.9	11.0
of which Strategic Resolution Unit	(90.0)	(63.5)	(49.8)
of which assets managed across businesses [2]	4.7	33.5	15.9

1
Includes outflows for private equity assets reflecting realizations at cost and unfunded commitments on which a fee is no longer earned.

2
Represents assets managed by Asset Management within International Wealth Management for the other businesses.

Critical accounting estimates

In order to prepare the consolidated financial statements in accordance with US GAAP, management is required to make certain accounting estimates to ascertain the value of assets and liabilities. These estimates are based upon judgment and the information available at the time, and actual results may differ materially from these estimates. Management believes that the estimates and assumptions used in the preparation of the consolidated financial statements are prudent, reasonable and consistently applied.

We believe that the critical accounting estimates discussed below involve the most complex judgments and assessments.

> Refer to “Note 1 – Summary of significant accounting policies” and “Note 2 – Recently issued accounting standards” in VI – Consolidated financial statements – Credit Suisse Group for further information on significant accounting policies and new accounting pronouncements. For financial information relating to the Bank, refer to the corresponding notes in the consolidated financial statements of the Bank.

Fair value

A significant portion of our financial instruments is carried at fair value. The fair value of the majority of these financial instruments is based on quoted prices in active markets or observable inputs.

In addition, we hold financial instruments for which no prices are available and which have few or no observable inputs. For these instruments, the determination of fair value requires subjective assessment and judgment, depending on liquidity, pricing assumptions, the current economic and competitive environment and the risks affecting the specific instrument. In such circumstances, valuation is determined based on management’s own judgments about the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk. These instruments include certain OTC derivatives including interest rate, foreign exchange, equity and credit derivatives, certain corporate equity-linked securities, mortgage-related and CDO securities, private equity investments and certain loans and credit products, including leveraged finance, certain syndicated loans and certain high yield bonds.

We have availed ourselves of the simplification in accounting offered under the fair value option guidance. This has been accomplished generally by electing the fair value option, both at initial adoption and for subsequent transactions, on items impacted by the hedge accounting requirements of US GAAP. For instruments for which hedge accounting could not be achieved but for which we are economically hedged, we have generally elected the fair value option. Where we manage an activity on a fair value basis but previously have been unable to achieve fair value accounting, we have generally utilized the fair value option to align our financial accounting to our risk management reporting.

Control processes are applied to ensure that the fair values of the financial instruments reported in the consolidated financial statements, including those derived from pricing models, are appropriate and determined on a reasonable basis.

> Refer to “Note 35 – Financial instruments” in VI – Consolidated financial statements – Credit Suisse Group for further information.

Variable interest entities

As a normal part of our business, we engage in various transactions which include entities that are considered variable interest entities (VIEs). VIEs are special purpose entities that typically lack sufficient equity to finance their activities without additional subordinated financial support or are structured such that the holders of the voting rights do not substantively participate in the gains and losses of the entity. Such entities are required to be assessed for consolidation under US GAAP, compelling the primary beneficiary to consolidate the VIE. The primary beneficiary is the party that has the power to direct the activities that most significantly affect the economics of the VIE and has the right to receive benefits or the obligation to absorb losses of the entity that could be potentially significant to the VIE. We consolidate all VIEs where we are the primary beneficiary. Application of the accounting requirements for consolidation of VIEs, including ongoing re-assessment of VIEs for possible consolidation, may require the exercise of significant management judgment.

> Refer to “Note 1 – Summary of significant accounting policies” and “Note 34 – Transfers of financial assets and variable interest entities” in VI – Consolidated financial statements – Credit Suisse Group for further information on VIEs.

Contingencies and loss provisions

A contingency is an existing condition that involves a degree of uncertainty that will ultimately be resolved upon the occurrence or non-occurrence of future events.

Litigation contingencies

We are involved in a number of judicial, regulatory and arbitration proceedings concerning matters arising in connection with the conduct of our businesses. Some of these proceedings have been brought on behalf of various classes of claimants and seek damages of material and/or indeterminate amounts. We accrue loss contingency litigation provisions and take a charge to our consolidated statements of operations in connection with certain proceedings when losses, additional losses or ranges of loss are probable and reasonably estimable. We also accrue litigation provisions for the estimated fees and expenses of external lawyers and other service providers in relation to such proceedings, including in cases for which we have not accrued a loss contingency provision. We accrue these fee and expense litigation provisions and take a charge to income in connection therewith when such fees and expenses are probable and reasonably estimable. We review our legal proceedings each quarter to determine the adequacy of our litigation provisions and may increase or release provisions based on management's judgment and the advice of counsel. The establishment of additional provisions or releases of

litigation provisions may be necessary in the future as developments in such proceedings warrant.
It is inherently difficult to determine whether a loss is probable or even reasonably possible or to estimate the amount of any loss or loss range for many of our legal proceedings. Estimates, by their nature, are based on judgment and currently available information and involve a variety of factors, including, but not limited to, the type and nature of the proceeding, the progress of the matter, the advice of counsel, our defenses and our experience in similar matters, as well as our assessment of matters, including settlements, involving other defendants in similar or related cases or proceedings. Factual and legal determinations, many of which are complex, must be made before a loss, additional losses or ranges of loss can be reasonably estimated for any proceeding. We do not believe that we can estimate an aggregate range of reasonably possible losses for certain of our proceedings because of their complexity, the novelty of some of the claims, the early stage of the proceedings, the limited amount of discovery that has occurred and/or other factors. Most matters pending against us seek damages of an indeterminate amount. While certain matters specify the damages claimed, such claimed amount may not represent our reasonably possible losses.
> Refer to “Note 39 – Litigation” in VI – Consolidated financial statements – Credit Suisse Group for further information on legal proceedings.
Allowance and provision for credit losses
As a normal part of our business, we are exposed to credit risk through our lending relationships, commitments and letters of credit as well as counterparty risk on derivatives, foreign exchange and other transactions. Credit risk is the possibility of a loss being incurred as a result of a borrower or counterparty failing to meet its financial obligations or as a result of deterioration in the credit quality of the borrower or counterparty. In the event of a default, we generally incur a loss equal to the amount owed by the debtor, less any recoveries resulting from foreclosure, liquidation of collateral or the restructuring of the debtor company. The allowance for loan losses is considered a reasonable estimate of credit losses existing at the dates of the consolidated balance sheets. This allowance is for probable credit losses inherent in existing exposures and credit exposures specifically identified as impaired.
> Refer to “Note 1 – Summary of significant accounting policies” and “Note 19 – Loans, allowance for loan losses and credit quality” in VI – Consolidated financial statements – Credit Suisse Group for further information on allowance for loan losses.
Inherent loan loss allowance
The inherent loan loss allowance is for all credit exposures not specifically identified as impaired and that, on a portfolio basis, are considered to contain probable inherent loss. The estimate of this component of the allowance for the consumer loans portfolio involves applying historical and current default probabilities, historical recovery experience and related current assumptions to homogenous loans based on internal risk rating and product type. To estimate this component of the allowance for the corporate and institutional loans portfolio, the Group segregates loans by risk, industry or country rating. The methodology for determining the inherent loan loss allowance for loan portfolios in our investment banking businesses uses rating-specific default probabilities, which incorporate not only historic third-party data but also data implied from current quoted credit spreads.
Many factors are evaluated in estimating probable credit losses inherent in existing exposures. These factors include: the volatility of default probabilities; rating changes; the magnitude of the potential loss; internal risk ratings; geographic, industry and other economic factors; and imprecision in the methodologies and models used to estimate credit risk. Overall credit risk indicators are also considered, such as trends in internal risk-rated exposures, classified exposures, cash-basis loans, recent loss experience and forecasted write-offs, as well as industry and geographic concentrations and current developments within those segments or locations. Our current business strategy and credit process, including credit approvals and limits, underwriting criteria and workout procedures, are also important factors.
Significant judgment is exercised in the evaluation of these factors. For example, estimating the amount of potential loss requires an assessment of the period of the underlying data. Data that does not capture a complete credit cycle may compromise the accuracy of loss estimates. Determining which external data relating to default probabilities should be used and when it should be used also requires judgment. The use of market indices and ratings that do not sufficiently correlate to our specific exposure characteristics could also affect the accuracy of loss estimates.
Evaluating the impact of uncertainties regarding macroeconomic and political conditions, currency devaluations on cross-border exposures, changes in underwriting criteria, unexpected correlations among exposures and other factors all require significant judgment. Changes in our estimates of probable loan losses inherent in the portfolio could have

an impact on the provision and result in a change in the allowance.
Specific loan loss allowances
We make provisions for specific loan losses on impaired loans based on regular and detailed analysis of each loan in the portfolio. This analysis includes an estimate of the realizable value of any collateral, the costs associated with obtaining repayment and realization of any such collateral, the counterparty's overall financial condition, resources and payment record, the extent of our other commitments to the same counterparty and prospects for support from any financially responsible guarantors.
The methodology for calculating specific allowances involves judgments at many levels. First, it involves the early identification of deteriorating credit. Extensive judgment is required in order to properly evaluate the various indicators of the financial condition of a counterparty and likelihood of repayment. The failure to identify certain indicators or give them proper weight could lead to a different conclusion about the credit risk. The assessment of credit risk is subject to inherent limitations with respect to the completeness and accuracy of relevant information (for example, relating to the counterparty, collateral or guarantee) that is available at the time of the assessment. Significant judgment is

exercised in determining the amount of the allowance. Whenever possible, independent, verifiable data or our own historical loss experience is used in models for estimating loan losses. However, a significant degree of uncertainty remains when applying such valuation techniques. Under our loan policy, the classification of loan status also has a significant impact on the subsequent accounting for interest accruals.
> Refer to "Risk Management" in III – Treasury, Risk, Balance sheet and Off-balance sheet and "Note 19 – Loans, allowance for loan losses and credit quality" in VI – Consolidated financial statements – Credit Suisse Group for loan portfolio disclosures, valuation adjustment disclosures and certain other information relevant to the evaluation of credit risk and credit risk management.
Goodwill impairment
Under US GAAP, goodwill is not amortized, but is reviewed for potential impairment on an annual basis as of December 31 and at any other time that events or circumstances indicate that the carrying value of goodwill may not be recoverable.
For the purpose of testing goodwill for impairment, each reporting unit is assessed individually. A reporting unit is an operating segment or one level below an operating segment, also referred to as a component. A component of an operating segment is deemed to be a reporting unit if the component constitutes a business for which discrete financial information is available and management regularly reviews the operating results of that component.
The Group's reporting units are defined as follows: Swiss Universal Bank – Private Clients, Swiss Universal Bank – Corporate & Institutional Clients, International Wealth Management – Private Banking, International Wealth Management – Asset Management, Asia Pacific – Wealth Management & Connected, Asia Pacific – Markets, Global Markets, Investment Banking & Capital Markets and the Strategic Resolution Unit.
In accordance with US GAAP, the Group continually assesses whether or not there has been a triggering event requiring a review of goodwill. The Group determined in 2018 that a goodwill triggering event occurred for the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units.
Under Accounting Standards Update (ASU) 2011-08, "Testing Goodwill for Impairment", a qualitative assessment is permitted to evaluate whether a reporting unit's fair value is less than its carrying value. If on the basis of the qualitative assessment it is more likely than not that the reporting unit's fair value is higher than its carrying value, no quantitative goodwill impairment test is required. If on the basis of the qualitative assessment it is more likely than not that the reporting unit's fair value is lower than its carrying value, a quantitative goodwill impairment test must be performed, by calculating the fair value of the reporting unit and comparing that amount to its carrying value. If the fair value of a reporting unit exceeds its carrying value, there is no goodwill impairment. If the carrying value exceeds the fair value, there is a goodwill impairment. The goodwill impairment is calculated as the difference between the carrying value and the fair value of the reporting unit up to a maximum of the goodwill amount recorded in that reporting unit.
The qualitative assessment is intended to be a simplification of the annual impairment test and can be bypassed for any reporting unit and any period to proceed directly to performing the quantitative goodwill impairment test. When bypassing the qualitative assessment in any period in accordance with the current practice of the Group, the preparation of a qualitative assessment can be resumed in any subsequent period.
Circumstances that could trigger an initial qualitative assessment of the goodwill impairment test include, but are not limited to: (i) macroeconomic conditions such as a deterioration in general economic conditions or other developments in equity and credit markets; (ii) industry and market considerations such as a deterioration in the environment in which the entity operates, an increased competitive environment, a decline in market-dependent multiples or metrics (considered in both absolute terms and relative to peers), and regulatory or political developments; (iii) other relevant entity-specific events such as changes in management, key personnel or strategy; (iv) a more-likely-than-not expectation of selling or disposing of all, or a portion, of a reporting unit; (v) results of testing for recoverability of a significant asset group within a reporting unit; (vi) recognition of a goodwill impairment in the financial statements of a subsidiary that is a component of a reporting unit; and (vii) a sustained decrease in share price (considered in both absolute terms and relative to peers).
The carrying value of each reporting unit for the purpose of the goodwill impairment test is determined by considering the reporting units' risk-weighted assets usage, leverage ratio exposure, deferred tax assets, goodwill and intangible assets. Any residual equity, after considering the total of these elements, is allocated to the reporting units on a pro-rata basis. As of December 31, 2018, such residual equity was equal to CHF 809 million.

In estimating the fair value of its reporting units, the Group applied a combination of the market approach and the income approach. Under the market approach, consideration was given to price to projected earnings multiples or price to book value multiples for similarly traded companies and prices paid in recent transactions that have occurred in its industry or in related industries. Under the income approach, a discount rate was applied that reflects the risk and uncertainty related to the reporting unit's projected cash flows, which were determined from the Group's financial plan. In determining the estimated fair value, the Group relied upon its latest five-year strategic business plan, which included significant management assumptions and estimates based on its view of current and future economic conditions and regulatory changes, and as approved by the Board of Directors.

Estimates of the Group's future earnings potential, and that of the reporting units, involve considerable judgment, including

management's view on future changes in market cycles, the regulatory environment and the anticipated result of the implementation of business strategies, competitive factors and assumptions concerning the retention of key employees. Adverse changes in the estimates and assumptions used to determine the fair value of the Group's reporting units may result in a goodwill impairment in the future.
An estimated balance sheet for each reporting unit is prepared on a quarterly basis. In January 2017, the Financial Accounting Standards Board issued ASU 2017-04 "Simplifying the Test for Goodwill Impairment" (ASU 2017-04). The guidance removed step two of the goodwill impairment test, which required a hypothetical purchase price allocation. A goodwill impairment is now defined as the amount by which a reporting unit's carrying value exceeds its fair value. An impairment loss shall be recognized in an amount equal to that excess, limited to the total amount of goodwill allocated to that reporting unit. Credit Suisse has decided to early adopt ASU 2017-04, simplifying the test for goodwill impairment as of January 1, 2017. This policy has also been early adopted for any goodwill impairment tests performed for any subsidiary of the Group.
Based on its goodwill impairment analysis performed as of December 31, 2018, the Group concluded that the estimated fair value for all of the reporting units with goodwill substantially exceeded their related carrying values and no impairment was necessary as of December 31, 2018.
The Group engaged the services of an independent valuation specialist to assist in the valuation of the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units as of December 31, 2018. The valuations were performed using a combination of the market approach and income approach.
The results of the impairment evaluation of each reporting unit's goodwill would be significantly impacted by adverse changes in the underlying parameters used in the valuation process. If actual outcomes adversely differ by a significant margin from our best estimates of the key economic assumptions and associated cash flows applied in the valuation of the reporting unit, we could potentially incur material impairment charges in the future.
> Refer to "Note 21 – Goodwill" in VI – Consolidated financial statements – Credit Suisse Group for further information on goodwill.
Taxes
Uncertainty of income tax positions
We follow the income tax guidance under US GAAP, which sets out a consistent framework to determine the appropriate level of tax reserves to maintain for uncertain income tax positions.
Significant judgment is required in determining whether it is more likely than not that an income tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. Further judgment is required to determine the amount of benefit eligible for recognition in the consolidated financial statements.
> Refer to "Note 28 – Tax" in VI – Consolidated financial statements – Credit Suisse Group for further information on income tax positions.
Deferred tax valuation allowances
Deferred tax assets and liabilities are recognized for the estimated future tax effects of operating loss carry-forwards and temporary differences between the carrying values of existing assets and liabilities and their respective tax bases at the dates of the consolidated balance sheets.
The realization of deferred tax assets on temporary differences is dependent upon the generation of taxable income during the periods in which those temporary differences become deductible. The realization of deferred tax assets on net operating losses is dependent upon the generation of taxable income during the periods prior to their expiration, if applicable. Management regularly evaluates whether deferred tax assets will be realized. If management considers it more likely than not that all or a portion of a deferred tax asset will not be realized, a corresponding valuation allowance is established. In evaluating whether deferred tax assets will be realized, management considers both positive and negative evidence, including projected future taxable income, the reversal of deferred tax liabilities which can be scheduled and tax planning strategies.
This evaluation requires significant management judgment, primarily with respect to projected taxable income. Future taxable income can never be predicted with certainty. It is derived from budgets and strategic business plans but is dependent on numerous factors, some of which are beyond management's control. Substantial variance of actual results from estimated future taxable profits, or changes in our estimate of future taxable profits and potential restructurings, could lead to changes in deferred tax assets being realizable, or considered realizable, and would

require a corresponding adjustment to the valuation allowance.
As part of its normal practice, management has conducted a detailed evaluation of its expected future results and also considered stress scenarios. This evaluation has indicated the expected future results that are likely to be earned in jurisdictions where the Group has significant gross deferred tax assets, such as the US, Switzerland and the UK. Management then compared those expected future results with the applicable law governing utilization of deferred tax assets. Swiss tax law allows for a seven-year carry-forward period for net operating losses. UK tax law allows for an unlimited carry-forward period for net operating losses, and even though there are restrictions on the use of tax losses carried forward, these are not expected to have a material impact on the recoverability of the net deferred tax assets. US tax law allows for a 20-year carry-forward period for existing net operating losses. Due to the US tax reform enacted on December 22, 2017, this

period limitation was removed and any new net operating losses will have an unlimited carry-forward period.
> Refer to “Note 28 – Tax” in VI – Consolidated financial statements – Credit Suisse Group for further information on deferred tax assets.
Pension plans
The Group
The Group covers pension requirements, in both Swiss and non-Swiss locations, through various defined benefit pension plans and defined contribution pension plans.
Our funding policy with respect to these pension plans is consistent with local government and tax requirements.
The calculation of the expense and liability associated with the defined benefit pension plans requires an extensive use of assumptions, which include the discount rate, expected return on plan assets and rate of future compensation increases. Management determines these assumptions based upon currently available market and industry data and historical experience of the plans. Management also consults with an independent actuarial firm to assist in selecting appropriate assumptions and valuing its related liabilities. Management regularly reviews the actuarial assumptions used to value and measure the defined benefit obligation on a periodic basis as required by US GAAP. The actuarial assumptions that we use may differ materially from actual results due to changing market and economic conditions and specific experience of the plans (such as investment management over or underperformance, higher or lower withdrawal rates and longer or shorter life spans of the participants). Any such differences could have a significant impact on the amount of pension expense recorded in future years.
The funded status of our defined benefit pension and other post-retirement defined benefit plans is recorded in the consolidated balance sheets. The impacts from re-measuring the funded status (reflected in actuarial gains or losses) and from amending the plan (reflected in prior service cost or credits) are recognized in equity as a component of AOCI.
The projected benefit obligation (PBO) of our total defined benefit pension plans included CHF 928 million and CHF 1,083 million related to our assumption for future salary increases as of December 31, 2018 and 2017. The accumulated benefit obligation (ABO) is defined as the PBO less the amount related to estimated future salary increases. The difference between the fair value of plan assets and the ABO was an overfunding of CHF 2,374 million for 2018, compared to CHF 2,892 million for 2017.
We are required to estimate the expected long-term rate of return on plan assets, which is then used to compute benefit costs recorded in the consolidated statements of operations. Estimating future returns on plan assets is particularly subjective, as the estimate requires an assessment of possible future market returns based on the plan asset mix. In calculating pension expense and in determining the expected long-term rate of return, we use the market-related value of assets. The assumptions used to determine the benefit obligation as of the measurement date are also used to calculate the net periodic benefit costs for the 12-month period following this date.
The expected weighted-average long-term rate of return used to determine the expected return on plan assets as a component of the net periodic benefit costs in 2018 and 2017 was 3.00% and 3.00%, respectively, for the Swiss plans and 3.22% and 3.88%, respectively, for the international plans. In 2018, if the expected long-term rate of return had been increased/decreased one percentage point, net pension expense for the Swiss plans would have decreased/increased CHF 161 million and net pension expense for the international plans would have decreased/increased CHF 35 million.
The discount rates used in determining the benefit obligation and the pension expense are based on yield curves, constructed from high-quality corporate bonds currently available and observable in the market and are expected to be available during the period to maturity of the pension benefits. In countries where there is no deep market in high-quality corporate bonds with longer durations, the best available market information, including governmental bond yields and risk premiums, is used to construct the yield curve. Credit Suisse uses the spot rate approach for determining the benefit obligation and for service and interest cost components of the pension expense for future years. Under the spot rate approach, individual spot rates along the yield curve are applied to each expected future benefit payment, whereas under the previous methodology a single weighted-average discount rate derived from the yield curve was applied.
For the Swiss plan, the weighted average discount rate for the PBO increased 0.17 percentage points, from 0.86% as of December 31, 2017 to 1.03% as of December 31, 2018, mainly due to an increase in Swiss bond market rates. The average discount rate for the PBO for the international plans increased 0.47 percentage points, from 2.83% as of

December 31, 2017 to 3.30% as of December 31, 2018, mainly due to an increase in bond market rates. For the year ended December 31, 2018, a one percentage point decline in the discount rates for the Swiss plans would have resulted in an increase in the PBO of CHF 1,634 million and an increase in pension expense of CHF 50 million, and a one percentage point increase in discount rates would have resulted in a decrease in the PBO of CHF 1,341 million and a decrease in the pension expense of CHF 69 million. A one percentage point decline in discount rates for the international plans as of December 31, 2018 would have resulted in an increase in the PBO of CHF 613 million and an increase in pension expense of CHF 58 million, and a one percentage point increase in discount rates would have resulted in a decrease in the PBO of CHF 470 million and a decrease in the pension expense of CHF 27 million.

Actuarial losses and prior service cost are amortized over the average remaining service period of active employees expected to receive benefits under the plan, which, as of December 31, 2018, was approximately 10 years for the Swiss plans and 3 to 20 years for the international plans. The pre-tax expense associated with the amortization of net actuarial losses and prior service cost for defined benefit pension plans for the years ended December 31, 2018, 2017 and 2016 was CHF 227 million, CHF 269 million and CHF 291 million, respectively. The amortization of recognized actuarial losses and prior service cost for defined benefit pension plans for the year ending December 31, 2019, which is assessed at the beginning of the year, is expected to be CHF 116 million, net of tax. The impact from deviations between our actuarial assumptions and the actual developments of such parameters observed for our pension plans further impacts the amount of net actuarial losses or gains recognized in equity, resulting in a higher or lower amount of amortization expense in periods after 2019.
> Refer to “Note 31 – Pension and other post-retirement benefits” in VI – Consolidated financial statements – Credit Suisse Group for further information.
The Bank
The Bank covers pension requirements for its employees in Switzerland through participation in a defined benefit pension plan sponsored by the Group (Group plan). Various legal entities within the Group participate in the Group plan, which is set up as an independent trust domiciled in Zurich. The Group accounts for the Group plan as a single-employer defined benefit pension plan and uses the projected unit credit actuarial method to determine the net periodic pension expense, PBO, ABO and the related amounts recognized in the consolidated balance sheets. The funded status of the Group plan is recorded in the consolidated balance sheets. The actuarial gains and losses and prior service costs or credits are recognized in equity as a component of AOCI.
The Bank accounts for the Group plan on a defined contribution basis whereby it only recognizes the amounts required to be contributed to the Group plan during the period as net periodic pension expense and only recognizes a liability for any contributions due and unpaid. No other expense or balance sheet amounts related to the Group plan are recognized by the Bank.
The Bank covers pension requirements for its employees in international locations through participation in various pension plans, which are accounted for as single-employer defined benefit pension plans or defined contribution pension plans.
In 2018 and 2017, the weighted-average expected long-term rate of return used to calculate the expected return on plan assets as a component of the net periodic benefit costs for the international single-employer defined benefit pension plans was 3.22% and 3.88%, respectively. In 2018, if the expected long-term rate of return had been increased/decreased one percentage point, net pension expense would have decreased/increased CHF 35 million.
The discount rate used in determining the benefit obligation is based either on high-quality corporate bond rates or government bond rates plus a premium in order to approximate high-quality corporate bond rates. The average discount rate for the PBO for the international plans increased 0.47 percentage points, from 2.83% as of December 31, 2017 to 3.30% as of December 31, 2018. A one percentage point decline in the discount rate for the international single-employer plans would have resulted in an increase in PBO of CHF 613 million and an increase in pension expense of CHF 58 million, and a one percentage point increase in discount rates would have resulted in a decrease in PBO of CHF 470 million and a decrease in pension expense of CHF 27 million.
Actuarial losses and prior service cost related to the international single-employer defined benefit pension plans are amortized over the average remaining service period of active employees expected to receive benefits under the plan. The pre-tax expense associated with the amortization of recognized net actuarial losses and prior service cost for the years ended December 31, 2018, 2017 and 2016 was CHF 47 million, CHF 60 million and CHF 41 million, respectively. The amortization of recognized actuarial losses and prior service cost for the year ending December 31, 2019, which is assessed at the beginning of the year, is expected to be CHF 16 million, net of tax.
> Refer to “Note 30 – Pension and other post-retirement benefits” in VIII – Consolidated financial statements – Credit Suisse (Bank) for further information.

III – Treasury, Risk, Balance sheet and Off-balance sheet
Liquidity and funding management
Capital management
Risk management
Balance sheet and off-balance sheet

Liquidity and funding management

During 2018, we maintained a strong liquidity and funding position. The majority of our unsecured funding was generated from core customer deposits and long-term debt.

Liquidity management

Securities for funding and capital purposes have historically been issued primarily by the Bank, our principal operating subsidiary and a US registrant. In response to regulatory reform, we have focused our issuance strategy on offering long-term debt securities at the Group level. Proceeds from issuances are lent to operating subsidiaries and affiliates on both a senior and subordinated basis, as needed; the latter typically to meet capital requirements and the former as desired by management to support business initiatives and liquidity needs.

Our liquidity and funding strategy is approved by the Capital Allocation & Risk Management Committee (CARMC) and overseen by the Board of Directors (Board). The implementation and execution of the liquidity and funding strategy is managed within the CFO division by Treasury and our global liquidity group. The global liquidity group was established in the second quarter of 2018 to centralize control of liability and collateral management with the aim of optimizing our liquidity sourcing, funding costs and high-quality liquid assets (HQLA) portfolio on behalf of Treasury. Treasury ensures adherence to our funding policy and the global liquidity group is focused on the efficient coordination of the short-term unsecured and secured funding desks. This approach enhances our ability to manage potential liquidity and funding risks and to promptly adjust our liquidity and funding levels to meet stress situations.

Our liquidity and funding profile is regularly reported to CARMC and the Board, who define our risk tolerance, including liquidity risk, and set parameters for the balance sheet and funding usage of our businesses. The Board is responsible for defining our overall risk tolerance in the form of a risk appetite statement.

Our liquidity and funding profile reflects our strategy and risk appetite and is driven by business activity levels and the overall operating environment. We have adapted our liquidity and funding profile to reflect lessons learned from the financial crisis, the subsequent changes in our business strategy and regulatory developments. We have been an active participant in regulatory and industry forums to promote best practice standards on quantitative and qualitative liquidity management. Our internal liquidity risk management framework is subject to review and monitoring by the Swiss Financial Market Supervisory Authority FINMA (FINMA), other regulators and rating agencies.

Regulatory framework

BIS liquidity framework

In 2010, the Basel Committee on Banking Supervision (BCBS) issued the Basel III international framework for liquidity risk measurement, standards and monitoring. The Basel III framework includes a liquidity coverage ratio (LCR) and a net stable funding ratio (NSFR). Credit Suisse is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks (Swiss Requirements).

The LCR, which was phased in from January 1, 2015 through January 1, 2019, addresses liquidity risk over a 30-day period. The LCR aims to ensure that banks have unencumbered HQLA available to meet short-term liquidity needs under a severe stress scenario. The LCR is comprised of two components, the value of HQLA in stressed conditions and the total net cash outflows calculated according to specified scenario parameters. Under the BCBS requirements, the ratio of liquid assets over net cash outflows was subject to an initial minimum requirement of 60% as of January 1, 2015, which was increased by 10% per year and is currently at 100% since January 1, 2019.

The NSFR establishes criteria for a minimum amount of stable funding based on the liquidity of a bank's on- and off-balance sheet activities over a one-year horizon. The NSFR is a complementary measure to the LCR and is structured to ensure that illiquid assets are funded with an appropriate amount of stable long-term funds. The NSFR is defined as the ratio of available stable funding over the amount of required stable funding and once implemented by national regulators, should always be at least 100%.

Swiss liquidity requirements

In 2012, the Swiss Federal Council adopted a liquidity ordinance (Liquidity Ordinance) that implements Basel III liquidity requirements into Swiss law subject, in part, to further rule-making, including with respect to the final Basel III LCR rules adopted in 2014. Effective January 1, 2018, the Swiss Federal Council amended the Liquidity Ordinance with minor adjustments to the LCR and relief for smaller banks. The amendments were not material to the LCR for the Group and relevant subsidiaries. Under the Liquidity Ordinance, as amended, certain Swiss banks became subject to an initial 60% LCR requirement, with incremental increases by 10% per year until January 1, 2019. Systemically relevant banks like Credit Suisse became subject to an initial minimum LCR requirement of 100% at all

times beginning on January 1, 2015 and the associated disclosure requirements.

In May 2015, FINMA required us to maintain a higher minimum LCR of 110%; in June 2018 this was lowered to the minimum requirement of 100%.
In connection with the implementation of Basel III, regulatory LCR disclosures for the Group and certain subsidiaries are required. Further details on our LCR can be found on our website.
> Refer to credit-suisse.com/regulatorydisclosures for additional information.
FINMA requires us to report the NSFR to FINMA on a monthly basis during an observation period that began in 2012. The reporting instructions are generally aligned with the final BCBS NSFR requirements. In November 2017, the Federal Council decided to postpone the introduction of the NSFR as a minimum standard, which was originally planned for January 1, 2018. In November 2018, the Federal Council decided to postpone the introduction of the NSFR again and will reconsider this matter at the end of 2019.
Our liquidity principles and our liquidity risk management framework as agreed with FINMA are in line with the Basel III liquidity framework.
Liquidity risk management
Our approach to liquidity risk management
Our liquidity and funding policy is designed to ensure that funding is available to meet all obligations in times of stress, whether caused by market events or issues specific to Credit Suisse. We achieve this through a conservative asset/liability management strategy aimed at maintaining long-term funding, including stable deposits, in excess of illiquid assets. To address short-term liquidity stress, we maintain a liquidity pool, described below, that covers unexpected outflows in the event of severe market and idiosyncratic stress. Our liquidity risk parameters reflect various liquidity stress assumptions that we believe are conservative. We manage our liquidity profile at a sufficient level such that, in the event we are unable to access unsecured funding, we expect to have sufficient liquidity to sustain operations for a period of time in excess of our minimum limit. This includes potential currency mismatches, which are not deemed to be a major risk but are monitored and subject to limits, particularly in the significant currencies of euro, Japanese yen, pound sterling, Swiss franc and US dollar.
Although the compliance with a minimum NSFR is not yet required, we began using the NSFR in 2012 as one of our primary tools, in parallel with the internal liquidity barometer, and in 2014 the LCR, to monitor our structural liquidity position and plan funding.
We use our internal liquidity barometer to manage liquidity to internal targets and as a basis to model both Credit Suisse-specific and market-wide stress scenarios and their impact on liquidity and funding. Our internal barometer framework supports the management of our funding structure. It allows us to manage the time horizon over which the stressed market value of unencumbered assets (including cash) exceeds the aggregate value of contractual outflows of unsecured liabilities plus a conservative forecast of anticipated contingent commitments. This internal barometer framework enables us to manage liquidity to a desired profile under a Credit Suisse-specific or market-wide stress that permits us to continue business activities for a period of time (also known as a liquidity horizon) without changing business plans. Under this framework, we also have short-term targets based on additional stress scenarios to ensure uninterrupted liquidity for short time frames. At the beginning of 2017, we introduced a new version of our internal liquidity barometer, which includes enhanced functionalities to manage entity-specific liquidity under newly defined and more conservative stress scenarios for redefined short and long-term time horizons.
In the second quarter of 2014, we began allocating the majority of the balance sheet usage related to our Treasury-managed HQLA portfolio to the business divisions to allow for a more efficient management of their business activities from an overall Group perspective with respect to LCR and Swiss leverage requirements.
Our overall liquidity management framework allows us to run stress analyses on our balance sheet and off-balance sheet positions, which include, but are not limited to, the following:
- A multiple-notch downgrade in the Bank’s long-term debt credit ratings, which would require additional funding as a result of certain contingent off-balance sheet obligations;
- Significant withdrawals from private banking client deposits;
- Potential cash outflows associated with the prime brokerage business;
- Over-collateralization of available secured funding;
- Limited availability of capital markets, certificates of deposit and commercial paper;
- Other money market access will be significantly reduced;
- A reduction in funding value of unencumbered assets;

- The inaccessibility of assets held by subsidiaries due to regulatory, operational and other constraints;
- The possibility of providing non-contractual liquidity support in times of market stress, including purchasing our unsecured debt;
- Monitoring the concentration in sources of wholesale funding and thus encourage funding diversification;
- Monitoring the composition and analysis of the unencumbered assets;
- Restricted availability of foreign currency swap markets; and
- Other scenarios as deemed necessary from time to time.

Governance

Funding, liquidity, capital and our foreign exchange exposures in the banking book are managed centrally by Treasury. Oversight of these activities is provided by CARMC, a committee that includes the chief executive officers (CEOs) of the Group and the divisions, the Chief Financial Officer (CFO), the Chief Risk Officer (CRO), the Chief Compliance and Regulatory Affairs Officer (CCRO), or the Chief Compliance Officer since the organizational change on February 26, 2019, and the Treasurer.

It is CARMC's responsibility to review the capital position, balance sheet development, current and prospective funding, interest rate risk and foreign exchange exposure and to define and monitor adherence to internal risk limits. CARMC regularly reviews the methodology and assumptions of our liquidity risk management framework and determines the liquidity horizon to be maintained.

All liquidity stress tests are coordinated and overseen by the CRO to ensure a consistent and coordinated approach across all risk disciplines.

Contingency funding planning

In the event of a liquidity crisis, our Contingency Funding Plan provides for specific actions to be taken depending on the nature of the crisis. Our plan is designed to address ever-increasing liquidity and funding stresses and has pre-defined escalation levels aimed at maximizing the likelihood that we can take certain measures to address liquidity or funding shortfalls. In order to identify a deteriorating liquidity situation, we monitor a set of regulatory and economic liquidity metrics while also seeking the views of our subject matter experts as well as senior management, who retain at all times the authority to take remedial actions promptly. In all cases, the plan's primary objectives are to strengthen liquidity (immediate), reduce funding needs (medium term) and assess recovery options (longer term).

Liquidity metrics

Liquidity pool

Treasury manages a sizeable portfolio of liquid assets, comprised of cash held at central banks and securities. A portion of the liquidity pool is generated through reverse repurchase agreements with top-rated counterparties. We are mindful of potential credit risk and therefore focus our liquidity holdings strategy on cash held at central banks and highly rated government bonds and on short-term reverse repurchase agreements. These government bonds are eligible as collateral for liquidity facilities with various central banks including the Swiss National Bank (SNB), the US Federal Reserve (Fed), the European Central Bank (ECB) and the Bank of England. Our direct exposure on these bonds is limited to highly liquid, top-rated sovereign entities or fully guaranteed agencies of sovereign entities. The liquidity pool may be used to meet the liquidity requirements of our operating companies.

All securities, including those obtained from reverse repurchase agreements, are subject to a stress level haircut in our barometer to reflect the risk that emergency funding may not be available at market value in a stress scenario.

We centrally manage this liquidity pool and hold it at our main operating entities. Holding securities in these entities ensures that we can make liquidity and funding available to local entities in need without delay.

As of December 31, 2018, our liquidity pool managed by Treasury and the global liquidity group had an HQLA value of CHF 159.9 billion. The liquidity pool consisted of CHF 85.5 billion of cash held at major central banks, primarily the SNB, the Fed and the ECB, and CHF 74.4 billion market value of securities issued by governments and government agencies, primarily from the US, UK and France.

In addition to the liquidity portfolio, there is also a portfolio of unencumbered liquid assets managed by the global liquidity group and by various businesses, primarily in the Global Markets and APAC divisions. These assets generally include high-grade bonds and highly liquid equity securities that form part of major indices. In coordination with the businesses and the global liquidity group, Treasury can access these assets to generate liquidity if required. As of December 31, 2018, the portfolio of liquid assets that is not managed by Treasury had a market value of CHF 28.7 billion, consisting of CHF 9.9 billion of high-grade bonds and CHF 18.8 billion of highly liquid equity securities. Under our internal model, an average stress-level haircut of 17% is applied to these assets. The haircuts applied to these portfolios reflect our assessment of overall market risk at the time of measurement, potential monetization capacity taking into account increased haircuts, market volatility and the quality of the relevant securities.

Liquidity pool – Group

					2018	2017
end of	Swiss franc	US dollar	Euro	Other currencies	Total	Total
Liquid assets (CHF million)						
Cash held at central banks	61,471	14,831	6,654	2,538	85,494	96,594
Securities	7,531	39,895	7,603	19,331	74,360	66,778
Liquid assets [1]	**69,002**	**54,726**	**14,257**	**21,869**	**159,854**	**163,372**

1
Reflects a pre-cancellation view.
116

Liquidity Coverage Ratio

Our calculation methodology for the LCR is prescribed by FINMA and uses a three-month average that is measured using daily calculations during the quarter. The FINMA calculation of HQLA takes into account a cancellation mechanism (post-cancellation view) and is therefore not directly comparable to the assets presented in the financial statements that could potentially be monetized under a severe stress scenario. The cancellation mechanism effectively excludes the impact of certain secured financing transactions from available HQLA and simultaneously adjusts the level of net cash outflows calculated. Application of the cancellation mechanism adjusts both the numerator and denominator of the LCR calculation, meaning that the impact is mostly neutral on the LCR itself.

Our HQLA measurement methodology excludes potentially eligible HQLA available for use by entities of the Group in certain jurisdictions that may not be readily accessible for use by the Group as a whole. These HQLA eligible amounts may be restricted for reasons such as local regulatory requirements, including large exposure requirements, or other binding constraints that could limit the transferability to other Group entities in other jurisdictions.

On this basis, the level of our LCR was 184% as of the end of 2018, a small decrease from 185% as of the end of 2017, representing an average HQLA of CHF 161 billion and average net cash outflows of CHF 88 billion. The ratio reflects a conservative liquidity position, including ensuring that the Group's branches and subsidiaries meet applicable local liquidity requirements.

The LCR ratio was stable compared to 2017, as a decrease in the level of HQLA was offset by a decrease in net cash outflows. The lower level of HQLA reflected a decrease in cash held at central banks, partially offset by an increase in the amount of securities held during the period. The decrease in net cash outflows was primarily a result of decreased secured funding and lending activities and lower cash outflows from non-operational deposits within unsecured wholesale funding and from other contingent funding obligations. The decreases in net cash outflows were partially offset by a decrease in cash inflows from fully performing exposures and higher unsecured wholesale funding outflows in unsecured debt.

The spot balance of HQLA held on the last business day of 2018 was CHF 157.4 billion, which was CHF 0.7 billion higher than the spot balance of HQLA held on the last business day of 2017.

Liquidity coverage ratio – Group

		2018	2017
end of	Unweighted value[1]	Weighted value[2]	Weighted value[2]
High-quality liquid assets (CHF million)			
High-quality liquid assets [3]	**–**	**161,231**	**166,077**
Cash outflows			
Retail deposits and deposits from small business customers	159,648	20,765	20,108
Unsecured wholesale funding	219,615	89,065	87,899
Secured wholesale funding	–	54,879	65,525
Additional requirements	166,741	36,921	37,435
Other contractual funding obligations	65,526	65,526	70,679
Other contingent funding obligations	202,457	5,391	6,644
Total cash outflows	**–**	**272,547**	**288,290**
Cash inflows			
Secured lending	131,204	85,678	92,585
Inflows from fully performing exposures	67,514	31,785	33,624
Other cash inflows	67,273	67,273	72,228
Total cash inflows	**265,991**	**184,736**	**198,437**
Liquidity coverage ratio			
High-quality liquid assets (CHF million)	–	161,231	166,077
Net cash outflows (CHF million)	–	87,811	89,853
Liquidity coverage ratio (%)	**–**	**184**	**185**

Calculated using a three-month average, which is calculated on a daily basis.

1

Calculated as outstanding balances maturing or callable within 30 days.

2

Calculated after the application of haircuts for high-quality liquid assets or inflow and outflow rates.

3

Consists of cash and eligible securities as prescribed by FINMA and reflects a post-cancellation view.

Funding management

Treasury is responsible for the development, execution and regular updating of our funding plan. The plan reflects projected business growth, development of the balance sheet, future funding needs and maturity profiles as well as the effects of changing market and regulatory conditions.

Interest expense on long-term debt, is monitored and managed relative to certain indices, such as the London Interbank Offered Rate (LIBOR) and Overnight Index Swap rate (OIS), that are relevant to the financial services industry. This approach to term funding best reflects the sensitivity of both our liabilities and our assets to changes in interest rates. We are closely following the transition of LIBOR and other reference rates globally and the impact of this transition on our approach to funding management.

We continually manage the impact of funding spreads through careful management of our liability mix and opportunistic issuance of debt. The effect of funding spreads on interest expense depends on many factors, including market conditions, product type and the absolute level of the indices on which our funding is based.

We diversify our long-term funding sources by issuing structured notes, which are debt securities on which the return is linked to commodities, stocks, indices or currencies or other assets. We generally hedge structured notes with positions in the underlying assets or derivatives.

We also use other collateralized financings, including repurchase agreements and securities lending agreements. The level of our repurchase agreements fluctuates, reflecting market opportunities, client needs for highly liquid collateral, such as US treasuries and agency securities, and the impact of balance sheet and risk-weighted asset limits. In addition, matched book trades, under which securities are purchased under agreements to resell and are simultaneously sold under agreements to repurchase with comparable maturities, earn spreads, are relatively risk free and are generally related to client activity.

Our primary source of liquidity is funding through consolidated entities.

Funding sources

We fund our balance sheet primarily through core customer deposits, long-term debt, including structured notes, and shareholders' equity. We monitor the funding sources, including their concentrations against certain limits, according to their counterparty, currency, tenor, geography and maturity, and whether they are secured or unsecured. A substantial portion of our balance sheet is match funded and requires no unsecured funding. Match funded balance sheet items consist of assets and liabilities with close to equal liquidity durations and values so that the liquidity and funding generated or required by the positions are substantially equivalent.

Cash and due from banks and reverse repurchase agreements are highly liquid. A significant part of our assets, principally unencumbered trading assets that support the securities business, is comprised of securities inventories and collateralized receivables that fluctuate and are generally liquid. These liquid assets are available to settle short-term liabilities.

Loans, which comprise the largest component of our illiquid assets, are funded by our core customer deposits, with an excess coverage of 18% as of the end of 2018, stable compared to 2017, including a small increase in both loans and deposits. We fund other illiquid assets, including real estate, private equity and other long-term investments as well as the haircut for the illiquid portion of securities, with long-term debt and equity, in which we try to maintain a substantial funding buffer.

Our core customer deposits totaled CHF 341 billion as of the end of 2018, an increase compared to CHF 327 billion as of the end of 2017, reflecting an increase in the customer deposit base in the private banking and corporate & institutional banking businesses in 2018. Core customer deposits are from clients with whom we have a broad and longstanding relationship. Core customer deposits exclude deposits from banks and certificates of deposit. We place a priority on maintaining and growing customer deposits, as they have proven to be a stable and resilient source of funding even in difficult market conditions. Our core customer deposit funding is supplemented by the issuance of long-term debt.

> Refer to the chart “Balance sheet funding structure” and “Balance sheet” in Balance sheet and off-balance sheet for further information.

Funds transfer pricing

We maintain an internal funds transfer pricing system based on market rates. Our funds transfer pricing system is designed to allocate to our businesses all funding costs in a way that incentivizes their efficient use of funding. Our funds transfer pricing system is an essential tool that allocates to the businesses the short-term and long-term costs of funding their balance sheet usages and off-balance sheet contingencies. The funds transfer pricing framework ensures full funding costs allocation under normal business conditions, but it is of even greater importance in a stressed capital markets environment where raising funds is more challenging and expensive. Under this framework, our businesses are also credited to the extent they provide long-term stable funding.

Contractual maturity of assets and liabilities

The following table provides contractual maturities of the assets and liabilities specified as of the end of 2018. The contractual maturities are an important source of information for liquidity risk management. However, liquidity risk is also managed based on an expected maturity that considers counterparty behavior and in addition takes into account certain off-balance sheet items such as derivatives. Liquidity risk management performs extensive analysis of counterparty behavioral assumptions under various stress scenarios.

> Refer to “Contractual obligations and other commercial commitments” in Balance sheet and off-balance sheet and “Note 32 – Guarantees and commitments” in VI – Consolidated financial statements – Credit Suisse Group for further information on contractual maturities of guarantees and commitments.

Contractual maturity of assets and liabilities

end of 2018	On demand	Less than 1 month	Between 1 to 3 months	Between 3 to 12 months	Between 1 to 5 years	Greater than 5 years	Total
Assets (CHF million)							
Cash and due from banks	91,378	933	3,698	32	328	3,678	100,047
Interest-bearing deposits with banks	0	359	356	377	42	8	1,142
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	38,725	48,407	14,771	10,996	4,196	0	117,095
Securities received as collateral, at fair value	41,465	79	152	0	0	0	41,696
Trading assets, at fair value	132,203	0	0	0	0	0	132,203
Investment securities	6	0	57	794	2	2,052	2,911
Other investments	0	18	0	0	0	4,872	4,890
Net loans	10,276	54,432	32,510	47,849	98,057	44,457	287,581
Premises and equipment	0	0	0	0	0	4,838	4,838
Goodwill	0	0	0	0	0	4,766	4,766
Other intangible assets	0	0	0	0	0	219	219

Brokerage receivables	38,907	0	0	0	0	0	38,907
Other assets	15,648	2,635	3,612	4,976	2,938	2,812	32,621
Total assets	**368,608**	**106,863**	**55,156**	**65,024**	**105,563**	**67,702**	**768,916**
Liabilities							
Due to banks	6,530	2,106	5,283	961	226	114	15,220
Customer deposits	230,527	43,789	55,808	32,160	834	807	363,925
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	9,700	10,892	3,965	4	62	0	24,623
Obligation to return securities received as collateral, at fair value	41,465	79	152	0	0	0	41,696
Trading liabilities, at fair value	42,169	0	0	0	0	0	42,169
Short-term borrowings	0	3,113	10,144	8,669	0	0	21,926
Long-term debt	0	676	3,593	22,202	70,246	57,591	154,308
Brokerage payables	30,923	0	0	0	0	0	30,923
Other liabilities	20,515	7,060	65	479	1,108	880	30,107
Total liabilities	**381,829**	**67,715**	**79,010**	**64,475**	**72,476**	**59,392**	**724,897**

Interest rate management

Interest rate risk inherent in banking book activities, such as lending and deposit-taking, is managed through the use of replication portfolios. Treasury develops and maintains the models needed to determine the interest rate risks of products that do not have a defined maturity, such as demand and savings accounts. For this purpose, a replicating methodology is applied in close coordination with Risk Management to maximize the stability and sustainability of spread revenues at the divisions. Furthermore, Treasury manages the interest exposure of the Group's equity to targets agreed with senior management.

Debt issuances and redemptions

Our long-term debt includes senior, senior bail-in and subordinated debt issued in US-registered offerings and medium-term note programs, euro medium-term note programs, stand-alone offerings, structured note programs, covered bond programs, Australian dollar domestic medium-term note programs and a Samurai shelf registration statement in Japan. As a global bank, we have access to multiple markets worldwide and our major funding centers are New York, London, Zurich and Tokyo.

We use a wide range of products and currencies to ensure that our funding is efficient and well diversified across markets and investor types. Substantially all of our unsecured senior debt is issued without financial covenants, such as adverse changes in our credit ratings, cash flows, results of operations or financial ratios, which could trigger an increase in our cost of financing or accelerate the maturity of the debt. Our covered bond funding is in the form of mortgage-backed loans funded by domestic covered bonds issued through Pfandbriefbank Schweizerischer Hypothekarinstitute, one of two institutions established by a 1930 act of the Swiss Parliament to centralize the issuance of covered bonds, or historically from our own international covered bond program.

The following table provides information on long-term debt issuances, maturities and redemptions in 2018, excluding structured notes.

Debt issuances and redemptions

in 2018	Senior	Senior bail-in	Sub-ordinated	Long-term debt
Long-term debt (CHF billion, notional value)				
Issuances	**0.8**	**5.2**	**4.0**	**10.0**
of which unsecured	0.0	5.2	4.0	9.2
of which secured [1]	0.8	0.0	0.0	0.8
Maturities / Redemptions	**12.4**	**0.0**	**11.1**	**23.5**
of which unsecured	10.2	0.0	11.1	21.3
of which secured [1]	2.2	0.0	0.0	2.2

Excludes structured notes.

1

Includes covered bonds.

As of the end of 2018, we had outstanding long-term debt of CHF 154.3 billion, which included senior and subordinated instruments. We had CHF 48.1 billion and CHF 17.2 billion of structured notes and covered bonds outstanding, respectively, as of the end of 2018 compared to CHF 51.5 billion and CHF 18.9 billion, respectively, as of the end of 2017.

Short-term borrowings decreased 15% to CHF 21.9 billion as of the end of 2018 compared to CHF 25.9 billion in 2017, mainly related to issuances and redemptions of commercial papers (CP).

> Refer to "Issuances and redemptions" in Capital management for further information on capital issuances, including low-trigger and high-trigger capital instruments.

Credit ratings

Our access to the debt capital markets and our borrowing costs depend significantly on our credit ratings. Rating agencies take many factors into consideration in determining a company's rating, including, among others, earnings performance, business mix, market position, ownership, financial strategy, level of capital, risk management policies and practices, management team and the broader outlook for the financial services industry more generally. The rating agencies may raise, lower or withdraw their ratings, or publicly announce an intention to raise or lower their ratings, at any time.

Although retail and private bank deposits are generally less sensitive to changes in a bank's credit ratings, the cost and availability of other sources of unsecured external funding is generally a function of credit ratings. Credit ratings are especially important to us when competing in certain markets and when seeking to engage in longer-term transactions, including over-the-counter (OTC) derivative instruments.

A downgrade in credit ratings could reduce our access to capital markets, increase our borrowing costs, require us to post additional collateral or allow counterparties to terminate transactions under certain of our trading and collateralized financing and derivative contracts. This, in turn, could reduce our liquidity and negatively impact our operating results and financial position. Our internal liquidity barometer takes into consideration contingent events associated with a two-notch downgrade in our credit ratings. The maximum impact of a simultaneous one, two or three-notch downgrade by all three major rating agencies in the Bank's long-term debt ratings would result in additional collateral requirements or assumed termination payments under certain derivative instruments of CHF 0.2 billion, CHF 1.0 billion and CHF 1.3 billion, respectively, as of December 31, 2018, and would not be material to our liquidity and funding planning. If the downgrade does not involve all three rating agencies, the impact may be smaller.

Potential cash outflows on these derivative contracts associated with a downgrade of our long-term debt credit ratings, such as the requirement to post additional collateral to the counterparty, the loss of re-hypothecation rights on any collateral received and impacts arising from additional termination events, are monitored and taken into account in the calculation of our liquidity requirements. There are additional derivative related risks that do not relate to the downgrade of our long-term debt credit ratings and which may impact our liquidity position, including risks relating to holdings of derivatives collateral or potential movements in the valuation of derivatives positions. The potential outflows resulting across all derivative product types are monitored as part of the LCR scenario parameters and the internal liquidity reporting.
> Refer to “Investor information” in the Appendix for further information on Group and Bank credit ratings.
Cash flows from operating, investing and financing activities
As a global financial institution, our cash flows are complex and interrelated and bear little relation to our net earnings and net assets. Consequently, we believe that traditional cash flow analysis is less meaningful in evaluating our liquidity position than the liquidity and funding policies described above. Cash flow analysis may, however, be helpful in highlighting certain macro trends in our business.
For the year ended December 31, 2018, net cash provided by **operating activities** of continuing operations was CHF 12.8 billion, primarily reflecting an increase in net trading assets and liabilities and a decrease in other assets, partially offset by a decrease in other liabilities. Our operating assets and liabilities vary significantly in the normal course of business due to the amount and timing of cash flows. Management believes cash flows from operations, available cash balances and short-term and long-term borrowings will be sufficient to fund our operating liquidity needs.
Our **investing activities** primarily include originating loans to be held to maturity, other receivables and the investment securities portfolio. For the year ended December 31, 2018, net cash used in investing activities from continuing operations was CHF 7.4 billion, primarily due to an increase in loans, partially offset by a decrease in proceeds from sales of loans.
Our **financing activities** primarily include the issuance of debt and receipt of customer deposits. We pay annual dividends on our common shares. In 2018, net cash used in financing activities of continuing operations was CHF 15.1 billion, mainly reflecting the repayment of long-term debt, the repurchase of treasury shares, the decrease in short-term borrowings and the decrease in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions, partially offset by the issuance of long-term debt and the sale of treasury shares.

Capital management

As of the end of 2018, our BIS CET1 ratio was 12.6% and our BIS tier 1 leverage ratio was 5.2%.

Capital strategy

Credit Suisse considers a strong and efficient capital position to be a priority. Through our capital strategy, our goal is to strengthen our capital position and optimize the use of risk-weighted assets (RWA), particularly in light of emerging regulatory capital requirements.

The overall capital needs of Credit Suisse reflect management's regulatory and credit rating objectives as well as our underlying risks. Our framework considers the capital needed to absorb losses, both realized and unrealized, while remaining a strongly capitalized institution. Multi-year projections and capital plans are prepared for the Group and its major subsidiaries and reviewed throughout the year with their regulators. These plans are subject to various stress tests, reflecting both macroeconomic and specific risk scenarios. Capital contingency plans are developed in connection with these stress tests to ensure that possible mitigating actions are consistent with both the amount of capital at risk and the market conditions for accessing additional capital.

Regulatory framework

Credit Suisse is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks (Swiss Requirements), which include capital, liquidity, leverage and large exposure requirements and rules for emergency plans designed to maintain systemically relevant functions in the event of threatened insolvency.

The Basel framework describes a range of options for determining capital requirements in order to provide banks and supervisors the ability to select approaches that are most appropriate for their operations and their financial market infrastructure. In general, Credit Suisse has adopted the most advanced approaches, which align with the way that risk is internally managed and provide the greatest risk sensitivity.

References to phase-in and look-through included herein refer to Basel III capital requirements and Swiss Requirements. Phase-in reflects that, for the years 2014 – 2018, there was a five-year (20% per annum) phase-in of goodwill, other intangible assets and other capital deductions (e.g., certain deferred tax assets) and a phase-out of an adjustment for the accounting treatment of pension plans. For the years 2013 – 2022, there is a phase-out of certain capital instruments. Look-through assumes the full phase-in of goodwill and other intangible assets and other regulatory adjustments and the phase-out of certain capital instruments. Our capital metrics fluctuate during any reporting period in the ordinary course of business.

BIS Requirements

The BCBS, the standard setting committee within the Bank for International Settlements (BIS), issued the Basel III framework, with higher minimum capital requirements and conservation and countercyclical buffers, revised risk-based capital measures, a leverage ratio and liquidity standards. The framework was designed to strengthen the resilience of the banking sector and requires banks to hold more capital, mainly in the form of common equity. The new capital standards were phased in from 2013 through 2018 and became fully effective on January 1, 2019 for those countries that have adopted Basel III.

> Refer to the table "BIS phase-in requirements for Credit Suisse" for capital requirements and applicable effective dates during the phase-in period.

Under Basel III, the minimum common equity tier 1 (CET1) requirement is 4.5% of RWA. In addition, a 2.5% CET1 capital conservation buffer is required to absorb losses in periods of financial and economic stress.

A progressive buffer between 1% and 2.5% (with a possible additional 1% surcharge) of CET1, depending on a bank's systemic importance, is an additional capital requirement for global systemically important banks (G-SIBs). The Financial Stability Board (FSB) has identified Credit Suisse as a G-SIB and has advised that a progressive buffer of 1% will apply to Credit Suisse beginning in January 2019.

CET1 capital is subject to certain regulatory deductions and other adjustments to common equity, including the deduction of deferred tax assets for tax-loss carry-forwards, goodwill and other intangible assets.

In addition to the CET1 requirements, there is also a requirement for 1.5% of additional tier 1 capital and 2% of tier 2 capital. These requirements may also be met with CET1 capital. To qualify as additional tier 1 under Basel III, capital instruments must provide for principal loss absorption through a conversion into common equity or a write-down of principal feature. The trigger for such conversion or write-down must include a CET1 ratio of at least 5.125% as well as a trigger at the point of non-viability.

Basel III further provides for a countercyclical buffer that could require banks to hold up to 2.5% of CET1. This requirement is imposed by national regulators where credit growth is deemed to be excessive and leading to the build-up of system-wide risk.

Capital instruments that do not meet the strict criteria for inclusion in CET1 are excluded. Capital instruments that would no longer qualify as tier 1 or tier 2 capital will be phased out. In addition, instruments with an incentive to redeem prior to their stated maturity, if any, are phased out at their effective maturity date, which is generally the date of the first step-up coupon.

As of January 1, 2018, banks are required to maintain a tier 1 leverage ratio of 3%.

BIS phase-in requirements for Credit Suisse

For	2018	2019
Capital ratios		
CET1	4.5%	4.5%
Capital conservation buffer	1.875%[1]	2.5%
Progressive buffer for G-SIB	1.125%[1]	1.0%
Total CET1	**7.5%**	**8.0%**
Additional tier 1	1.5%	1.5%
Tier 1	**9.0%**	**9.5%**
Tier 2	2.0%	2.0%
Total capital	**11.0%**	**11.5%**
Phase-in deductions from CET1	100.0%	100.0%
Capital instruments subject to phase-out	Phased out over a 10-year horizon beginning 2013 through 2022	

1 Indicates phase-in period.

Swiss Requirements

The legislation implementing the Basel III framework in Switzerland in respect of capital requirements for systemically relevant banks, including Credit Suisse, goes beyond the Basel III minimum standards for systemically relevant banks.

The Swiss regulation framework includes certain requirements for Swiss banks classified as systemically important banks operating internationally, such as Credit Suisse. It contains two different minimum requirements for loss-absorbing capacity: G-SIBs must hold sufficient capital that absorbs losses to ensure continuity of service (going concern requirement), and they must issue sufficient debt instruments to fund an orderly resolution without recourse to public resources (gone concern requirement). Going concern capital and gone concern capital together form our total loss-absorbing capacity (TLAC). The going concern and gone concern requirements are generally aligned with the FSB's total loss-absorbing capacity standard. The Swiss requirements are subject to phase-in and grandfathering provisions for certain outstanding instruments, and have to be fully applied by January 1, 2020. Banks that do not maintain the minimum requirements may be limited in their ability to pay dividends and make discretionary bonus payments and other earnings distributions.

Going concern requirement

The going concern requirement applicable in 2020 for a G-SIB consists of (i) a base requirement of 12.86% of RWA and 4.5% of leverage exposure; and (ii) a surcharge, which reflects the G-SIB's systemic importance. For Credit Suisse, this currently translates into a going concern requirement of 14.3% of RWA, of which the minimum CET1 component is 10%, with the remainder to be met with a maximum of 4.3% additional tier 1 capital, which includes high-trigger capital instruments that would be converted into common equity or written down if the CET1 ratio falls below 7%. Under the going concern requirement, the Swiss leverage ratio must be 5%, of which the minimum CET1 component is 3.5%, with the remainder to be met with a maximum of 1.5% additional tier 1 capital, which includes high-trigger capital instruments.

Gone concern requirement

The gone concern requirement of a G-SIB is equal to its total going concern requirement, which in 2020, consists of a base requirement of 12.86% of RWA and 4.5% of leverage exposure, plus any surcharges applicable to the relevant G-SIB. The gone concern requirement does not include any countercyclical buffers. Credit Suisse is currently subject to a gone concern requirement of 14.3% of RWA and a 5% Swiss leverage ratio and is subject to potential capital rebates for resolvability and for certain tier 2 low-trigger instruments recognized as gone concern capital.

The gone concern requirement should primarily be fulfilled with bail-in instruments that are designed to absorb losses after the write-down or conversion into equity of regulatory capital of a G-SIB in a restructuring scenario, but before the write-down or conversion into equity of other senior obligations of the G-SIB. Bail-in instruments do not feature capital triggers that may lead to a write-down and/or a conversion into equity outside of restructuring, but only begin to bear losses once the G-SIB is formally in restructuring proceedings and FINMA orders capital measures (i.e., a write-down and/or a conversion into equity) in the restructuring plan.

Bail-in instruments must fulfill certain criteria in order to qualify under the gone concern requirement, including FINMA approval. In addition to bail-in instruments, the gone concern requirement may further be fulfilled with other capital instruments, including CET1, additional tier 1 capital instruments or tier 2 capital instruments.

Grandfathering provisions

The Capital Adequacy Ordinance provides for a number of grandfathering provisions with regard to the qualification of previously issued additional tier 1 capital instruments and tier 2 capital instruments:

Additional tier 1 capital instruments with a low trigger qualify as going concern capital until their first call date. Additional tier 1 capital instruments that no longer qualify as going concern capital pursuant to this provision qualify as gone concern capital;

Tier 2 capital instruments with a high trigger qualify as going concern capital until the earlier of (i) their maturity date or first call date; and (ii) December 31, 2019. Tier 2 capital instruments that no longer qualify as going concern capital pursuant to this provision qualify as gone concern capital until one year before their final maturity; and

Tier 2 capital instruments with a low trigger also qualify as going concern capital until the earlier of (i) their maturity date or first call date; and (ii) December 31, 2019. Tier 2 capital instruments that no longer qualify as going concern capital pursuant to this provision qualify as gone concern capital until one year before their final maturity.

Both the going concern and the gone concern requirements are subject to a phase-in with gradually increasing requirements and have to be fully applied by January 1, 2020.

FINMA decrees

The SNB designated the Group as a financial group of systemic importance under applicable Swiss law. FINMA requires the Group to fully comply with the special requirements for systemically important banks operating internationally, which include capital adequacy requirements and also specify liquidity and risk diversification requirements.

In December 2013, FINMA issued a decree (2013 FINMA Decree), effective since February 2, 2014, specifying capital adequacy requirements for the Bank on a stand-alone basis (Bank parent company), and for the Bank and the Group, each on a consolidated basis, as systemically relevant institutions.

In October 2017, FINMA issued an additional decree with respect to the regulatory capital requirements of the Bank parent company (2017 FINMA Decree), specifying the treatment of investments in subsidiaries for capital adequacy purposes. This decree partially replaced certain aspects of the 2013 FINMA Decree, but all other aspects of that decree remain in force. The 2017 FINMA Decree was effective retroactively as of July 1, 2017. The changes aim to create a capital adequacy framework for the Bank parent company that is more comparable to relevant international frameworks and does not rely on exemptions from, or corrections of, the basic framework applicable to all Swiss banks. The changes only apply to the going concern capital requirements for the Bank parent company, which, as of July 1, 2017, amounted to 14.3% of RWA, of which the minimum CET1 component was 10%, with the remainder to be met with a maximum of 4.3% additional tier 1 capital, which includes high-trigger capital instruments. Additional effects from countercyclical buffers impact the CET1 minimum requirement. Under the going concern requirement, the Swiss leverage ratio must be 5%, of which the minimum CET1 component is 3.5%, with the remainder to be met with a maximum of 1.5% additional tier 1 capital, which includes high-trigger capital instruments. Unlike the Group requirements, the capital and leverage requirements for the Bank parent company are not subject to a transition period.

The 2017 FINMA Decree requires the Bank parent company to risk-weight both direct and indirect investments in subsidiaries, with the initial risk-weight set at 200%. Beginning in 2019, these risk-weights will gradually increase over 10 years to 250% for participations in subsidiaries in Switzerland and to 400% for participations in subsidiaries abroad.

The 2017 FINMA Decree also applies an adjustment (referred to as a regulatory filter) to any impact on CET1 capital arising from the upcoming accounting change under applicable Swiss banking rules for the Bank parent company's investments in subsidiaries from the current portfolio valuation method to the individual valuation method by 2020. The regulatory filter allows for the measurement of the regulatory capital position as if the Bank parent company had maintained the portfolio valuation method, which results in higher total participation values subject to risk weighting.

> Refer to credit-suisse.com/regulatorydisclosures for the Bank parent company's regulatory disclosures.

Other requirements

Requirements in Switzerland include an extended countercyclical buffer, which is based on the BIS countercyclical buffer that could require banks to hold up to 2.5% of RWA in the form of CET1 capital. The extended countercyclical buffer relates to a requirement that can be imposed by national regulators when credit growth is deemed to be excessive and leading to the build-up of system-wide risk.

The Swiss Federal Council has not activated the BIS countercyclical buffer for Switzerland but instead requires banks to hold CET1 capital in the amount of 2% of their RWA pertaining to mortgage loans that finance residential property in Switzerland (Swiss countercyclical buffer).

FINMA requirements include capital charges for mortgages that finance owner-occupied residential property in Switzerland (mortgage multiplier) that were phased in through January 1, 2019. The mortgage multiplier applies for purposes of both BIS and FINMA requirements.

Other regulatory disclosures

In connection with the implementation of Basel III, certain regulatory disclosures for the Group and certain of its subsidiaries are required. The Group's Pillar 3 disclosure, regulatory disclosures, additional information on capital instruments, including the main features and terms and conditions of regulatory capital instruments and total loss-absorbing capacity-eligible instruments that form part of the eligible capital base and total loss-absorbing capacity resources, G-SIB financial indicators, reconciliation requirements, leverage ratios and certain liquidity disclosures as well as regulatory disclosures for subsidiaries can be found on our website.

> Refer to "credit-suisse.com/regulatorydisclosures" for additional information.

Regulatory developments

In May 2018, the BCBS published the revised standard on simple, transparent and comparable (STC) securitizations. It includes the STC criteria developed for short-term securitizations and their preferential capital treatment. The new rules were effective immediately.

In July 2018, the BCBS issued a revised assessment methodology for G-SIBs. The revised methodology is expected to be implemented by national authorities by 2021 and is expected to determine a G-SIB's applicable higher loss absorbency requirements from January 2023.

In July 2018, FINMA published revised circulars on the further implementation of Basel III in Switzerland, which, in general, became effective on January 1, 2019. This revision package is one of the final steps in the Swiss implementation of the Basel III standards and includes the following circulars:

- "Eligible capital – banks", which added final transitional guidelines for the calculation of regulatory capital related to the new current expected credit loss model under US GAAP, which will become effective for us as of January 1, 2020;
- "Interest rate risks – banks", in which FINMA will not apply the optional standardized framework according to Basel III standards; instead it will broaden the scope of existing interest rate reporting arrangements; and
- Other minor revisions to circulars, including new disclosure tables on key metrics and interest rate risks, total loss-absorbing capital, remuneration and value adjustments.

In October 2018, FINMA announced its reassessment of rebates for resolvability relating to the gone concern requirement. The eligibility for the rebates for resolvability is assessed on an annual basis. Effective July 1, 2018, the rebate for resolvability relating to the capital ratio was 1.424%, resulting in a gone concern requirement of 7.476%, and 0.48% relating to the leverage ratio, resulting in a gone concern leverage requirement of 2.52%.

In November 2018, the Swiss Federal Council issued a revision of the Capital Adequacy Ordinance. It includes changes to the gone-concern requirements and the treatment for the holding of bail-in instruments which are issued by third party banks. The revised standards became effective in January 2019.

In December 2018, BCBS published the updated framework on Pillar 3 disclosure requirements. These requirements, together with the updates published in January 2015 and March 2017, complete the Pillar 3 framework. The revised framework covers three elements. The first element, to be implemented by January 1, 2022, relates to revisions and additions arising from the finalization of the Basel III regulatory reforms in 2017. As a second element, the updated framework sets out new disclosure requirements on asset encumbrance. As a third element, the revised framework introduces new disclosure requirements relating to national supervisors imposing constraints on capital distributions. The second and third elements must be implemented by end-2020.

In January 2019, the BCBS released revisions to the minimum capital requirements for market risk, which included changes to the internal models approach and the standardized approach. The revisions also included amendments to

the definition of the boundary between the trading book and the banking book. The revised standard will become effective in January 2022.

Capital instruments
Issuances and redemptions

end of 2018	Currency	Amount (million)	Interest rate (%)	Description	Due date
Issuances – callable bail-in instruments					
First quarter of 2018	USD	2,000	3.869	Senior notes	2029
	AUD	176	–	Zero coupon accreting senior notes	2038
	AUD	125	3.5	Senior notes	2024
	AUD	175	floating rate	Senior notes	2024
	USD	305	–	Zero coupon accreting senior notes	2048
Second quarter of 2018	USD	1,250	4.207	Senior notes	2024
	USD	750	floating rate	Senior notes	2024
	USD	145	–	Zero coupon accreting senior notes	2048
Third quarter of 2018	EUR	100	2.455	Senior notes	2034
	USD	190	–	Zero coupon accreting senior notes	2048
Fourth quarter of 2018	USD	100	–	Zero coupon accreting senior notes	2048
	USD	100	–	Zero coupon accreting senior notes	2048
2019 to date	USD	120	–	Zero coupon accreting senior notes	2049
	USD	120	–	Zero coupon accreting senior notes	2049
	USD	100	–	Zero coupon accreting senior notes	2049

	USD	1,050	floating rate	Senior notes	2024
Issuances – high-trigger capital instruments					
Third quarter of 2018	USD	2,000	7.5	Perpetual tier 1 contingent write-down capital notes	–
	CHF	300	3.5	Perpetual tier 1 contingent write-down capital notes	–
	USD	1,500	7.25	Perpetual tier 1 contingent write-down capital notes	–
Redemptions					
Third quarter of 2018	USD	1,000	3.3	Perpetual tier 1 capital notes	–
	CHF	290	6.0	Low-trigger perpetual tier 1 capital notes	–
Fourth quarter of 2018	USD	2,000	3.3	Perpetual tier 1 capital notes	–
	USD	1,720	9.5	High-trigger perpetual tier 1 capital notes	–
	USD	1,725	9.5	High-trigger perpetual tier 1 capital notes	–
	CHF	2,500	9.0	High-trigger perpetual tier 1 capital notes	–

Contingent convertible capital instruments

We have issued high-trigger and low-trigger capital instruments to meet our capital requirements. Our high-trigger instruments either mandatorily convert into our ordinary shares or their principal amount is written down to zero upon the occurrence of certain specified triggering events. These events include our CET1 ratio falling below 7% (or any lower applicable minimum threshold), or a determination by FINMA that conversion is necessary, or that we require public sector capital support, to prevent us from becoming insolvent, bankrupt or unable to pay a material amount of

our debts, or other similar circumstances. Conversion can only be prevented if FINMA, at our request, is satisfied that certain conditions exist and conversion is not required. High-trigger instruments are designed to absorb losses before our other capital instruments, including the low-trigger capital instruments. The features of low-trigger capital instruments are described below. Contingent Capital Awards would not convert into common equity, but would be written down to zero upon a trigger event.

Higher Trigger Capital Amount

The capital ratio write-down triggers for certain of our outstanding capital instruments take into account the fact that other outstanding capital instruments that contain relatively higher capital ratios as part of their trigger feature are expected to convert into equity or be written down prior to the write-down of such capital instruments. The amount of additional capital that is expected to be contributed by such conversion into equity or write-down is referred to as the Higher Trigger Capital Amount.

The following tier 1 capital notes (collectively, Tier 1 Capital Notes), which have a trigger amount of 5.125% and qualify as low trigger capital instruments, were outstanding as of December 31, 2018:

- USD 2.5 billion 6.25% tier 1 capital notes; and
- USD 2.25 billion 7.5% tier 1 capital notes.

The following tier 2 capital notes (collectively, Tier 2 Capital Notes), which have a trigger amount of 5% and qualify as low trigger capital instruments, were outstanding as of December 31, 2018:

- USD 2.5 billion 6.5% tier 2 capital notes; and
- EUR 1.25 billion 5.75% tier 2 capital notes.

Each of the series of Tier 1 Capital Notes and Tier 2 Capital Notes qualify as low-trigger capital instruments and have a write-down feature, which means that the full principal amount of the notes will be

permanently written down to zero upon the occurrence of specified triggering events. These events occur when the amount of our CET1 ratio, together with an additional ratio described below that takes into account other outstanding capital instruments, falls below 5.125% for the Tier 1 Capital Notes and 5% for the Tier 2 Capital Notes. The write-down can only be prevented if FINMA, at our request, is satisfied that certain conditions exist and determines a write-down is not required. The capital notes will also be written down upon a non-viability event, which occurs when FINMA determines that a write-down is necessary, or that we require extraordinary public sector capital support, to prevent us from becoming insolvent, bankrupt or unable to pay a material amount of our debts, or other similar circumstances.

With respect to the capital instruments that specify a trigger event if the CET1 ratio were to fall below 5.125%, the Higher Trigger Capital Amount was CHF 5.6 billion and the Higher Trigger Capital Ratio (i.e., the ratio of the Higher Trigger Capital Amount to the aggregate of all RWA of the Group) was 2.0%, both as of the end of 2018.

With respect to the capital instruments that specify a trigger event if the CET1 ratio were to fall below 5%, the Higher Trigger Capital Amount was CHF 10.2 billion and the Higher Trigger Capital Ratio was 3.6%, both as of the end of 2018.

> Refer to the table “BIS capital metrics – Group” for further information on the BIS metrics used to calculate such measures.

BIS capital metrics

Our CET1 ratio was 12.6% as of the end of 2018 compared to 13.5% as of the end of 2017, with lower CET1 capital and higher RWA. Our tier 1 ratio was 16.2% as of the end of 2018 compared to 18.9% the end of 2017. Our total capital ratio was 17.7% as of the end of 2018 compared to 20.8% as of the end of 2017.

BIS capital metrics – Group

			Phase-in			Look-through
			%			%
end of	2018	2017	change	2018	2017	change
Capital and risk-weighted assets (CHF million)						
CET1 capital	35,824	36,711	(2)	35,824	34,824	3
Tier 1 capital	46,040	51,482	(11)	46,040	47,262	(3)
Total eligible capital	50,239	56,696	(11)	49,548	51,389	(4)
Risk-weighted assets	284,582	272,815	4	284,582	271,680	5
Capital ratios (%)						
CET1 ratio	12.6	13.5	–	12.6	12.8	–
Tier 1 ratio	16.2	18.9	–	16.2	17.4	–
Total capital ratio	17.7	20.8	–	17.4	18.9	–

Eligible capital – Group

			Phase-in			Look-through
			%			%
end of	2018	2017	change	2018	2017	change
Eligible capital (CHF million)						
Total shareholders' equity	**43,922**	**41,902**	5	**43,922**	**41,902**	5
Regulatory adjustments [1]	(643)	(576)	12	(643)	(576)	12
Adjustments subject to phase-in						
Accounting treatment of defined benefit pension plans	–	508	(100)	–	–	–
Common share capital issued by subsidiaries and held by third parties	–	44	(100)	–	–	–
Goodwill [2]	(4,762)	(3,792)	26	(4,762)	(4,740)	0
Other intangible assets [2]	(47)	(48)	(2)	(47)	(60)	(22)
Deferred tax assets that rely on future profitability	(1,647)	(1,770)	(7)	(1,647)	(2,213)	(26)
Shortfall of provisions to expected losses	(461)	(402)	15	(461)	(503)	(8)
Gains/(losses) due to changes in own credit on fair-valued liabilities	804	2,152	(63)	804	2,690	(70)
Defined benefit pension assets [2]	(1,374)	(1,337)	3	(1,374)	(1,672)	(18)
Investments in own shares	(32)	(13)	146	(32)	(16)	100
Other adjustments [3]	64	43	49	64	56	14
Deferred tax assets from temporary differences (threshold-based)	0	0	–	0	(44)	100
Adjustments subject to phase-in	**(7,455)**[4]	**(4,615)**	62	**(7,455)**	**(6,502)**	15
CET1 capital	**35,824**	**36,711**	(2)	**35,824**	**34,824**	3
High-trigger capital instruments (7% trigger)	5,615	7,575	(26)	5,615	7,575	(26)
Low-trigger capital instruments (5.125% trigger)	4,601	4,863	(5)	4,601	4,863	(5)
Additional tier 1 instruments	**10,216**	**12,438**	(18)	**10,216**	**12,438**	(18)
Additional tier 1 instruments subject to phase-out [5]	0	2,778	(100)	–	–	–
Deductions from additional tier 1 capital	–	(445)	100	–	–	–
Additional tier 1 capital	**10,216**	**14,771**	(31)	**10,216**	**12,438**	(18)
Tier 1 capital	**46,040**	**51,482**	(11)	**46,040**	**47,262**	(3)
Low-trigger capital instruments (5% trigger)	3,508	4,127	(15)	3,508	4,127	(15)
Tier 2 instruments	**3,508**	**4,127**	(15)	**3,508**	**4,127**	(15)
Tier 2 instruments subject to phase-out	691	1,138	(39)	–	–	–
Deductions from tier 2 capital	–	(51)	100	–	–	–

Tier 2 capital	**4,199**	**5,214**	(19)	**3,508**	**4,127**	(15)
Total eligible capital	**50,239**	**56,696**	(11)	**49,548**	**51,389**	(4)

1
Includes regulatory adjustments not subject to phase-in, including a cumulative dividend accrual.
2
Net of deferred tax liability.
3
Includes cash flow hedge reserve.
4
Reflects 100% phase-in deductions, including goodwill, other intangible assets and certain deferred tax assets.
5
Includes hybrid capital instruments that are subject to phase-out.

CET1 capital was CHF 35.8 billion as of the end of 2018 compared to CHF 36.7 billion as of the end of 2017. CET1 was impacted by an additional annual 20% phase-in of regulatory deductions from CET1 (from 80% to 100%), including goodwill, other intangible assets and certain deferred tax assets, and an additional annual 20% decrease in the adjustment for the accounting treatment of pension plans (from 20% to 0%), pursuant to phase-in requirements. CET1 capital was also affected by the cash component of a dividend accrual. These decreases were partially offset by net income attributable to shareholders and a regulatory adjustment of deferred tax assets.

Additional tier 1 capital was CHF 10.2 billion as of the end of 2018 compared to CHF 14.8 billion as of the end of 2017, mainly reflecting the redemption of several tier 1 capital notes. This reduction was partially offset by the issuance of several perpetual tier 1 capital notes and an additional annual 20% phase-in of regulatory deductions (from 20% to 0%), including goodwill, other intangible assets and other capital deductions.

Tier 2 capital was CHF 4.2 billion as of the end of 2018 compared to CHF 5.2 billion as of the end of 2017, mainly due to the impact of the prescribed amortization requirement as instruments move closer to their maturity date.

Total eligible capital as of the end of 2018 was CHF 50.2 billion compared to CHF 56.7 billion as of the end of 2017, primarily reflecting a decrease in additional tier 1 capital.

As of the end of 2018, the look-through CET1 ratio was 12.6% compared to 12.8% as of the end of 2017. As of the end of 2018, the look-through total capital ratio was 17.4% compared to 18.9% as of the end of 2017.

Capital movement – Group

	Phase-in		Look-through	
	2018	2017	2018	2017
CET1 capital (CHF million)				
Balance at beginning of period	**36,711**	**36,576**	**34,824**	**30,783**
Net income/(loss) attributable to shareholders	2,024	(983)	2,024	(983)
Foreign exchange impact	(308)[1]	(807)	(266)	(736)
Impact of deductions relating to phase-in requirements	(1,843)	(2,650)	0	0
Issuance of common shares	0	4,096[2]	0	4,096
Regulatory adjustment of deferred tax assets	586	1,637[3]	586	2,487
Regulatory adjustment of own credit on fair-valued financial liabilities	(199)	(397)	(199)	2
Other	(1,147)[4]	(761)	(1,145)	(825)
Balance at end of period	**35,824**	**36,711**	**35,824**	**34,824**
Additional tier 1 capital (CHF million)				
Balance at beginning of period	**14,771**	**12,289**	**12,438**	**11,096**
Foreign exchange impact	109	(475)	97	(372)
Impact of deductions relating to phase-in requirements	445	853	0	0
Issuances	3,713	1,680	3,713	1,680
Redemptions	(9,081)	(180)	(6,139)	0
Regulatory adjustment of own credit on fair-valued financial liabilities	0	386	0	0
Other	259	218	107	34
Balance at end of period	**10,216**	**14,771**	**10,216**	**12,438**
Tier 2 capital (CHF million)				
Balance at beginning of period	**5,214**	**6,863**	**4,127**	**4,879**
Foreign exchange impact	(53)	(41)	(39)	3
Impact of deductions relating to phase-in requirements	50	50	0	0
Redemptions	0	(714)	0	(698)
Other	(1,012)[5]	(944)	(580)	(57)
Balance at end of period	**4,199**	**5,214**	**3,508**	**4,127**
Eligible capital (CHF million)				
Balance at end of period	**50,239**	**56,696**	**49,548**	**51,389**

1
Includes US GAAP cumulative translation adjustments and the foreign exchange impact on regulatory CET1 adjustments.

2
Represents the issuance of common shares in connection due to the rights offering.

3
Primarily reflects the impact of the re-assessment of deferred tax assets resulting from the US tax reform.

4
Includes the impact of a dividend accrual, the net effect of share-based compensation and pensions and a change in other regulatory adjustments.

5
Primarily reflects the impact of the prescribed amortization requirement as instruments move closer to their maturity date.

Risk-weighted assets

Our balance sheet positions and off-balance sheet exposures translate into RWA, which are categorized as credit, market and operational RWA. When assessing RWA, it is not the nominal size, but rather the nature (including risk mitigation such as collateral or hedges) of the balance sheet positions or off-balance sheet exposures that determines the RWA.

Credit risk RWA reflect the capital requirements for the possibility of a loss being incurred as the result of a borrower or counterparty failing to meet its financial obligations or as a result of a deterioration in the credit quality of the borrower or counterparty. Under Basel III, certain regulatory capital adjustments are dependent on the level of CET1 capital (thresholds). The amount above the threshold is deducted from CET1 capital and the amount below the threshold is risk weighted. RWA subject to such threshold adjustments are included in credit risk RWA. For measuring the capital requirements related to credit risk, we received approval from FINMA to use the advanced internal ratings-based (A-IRB) approach. Under the A-IRB approach for measuring credit risk, risk weights are determined by using internal risk parameters for probability of default (PD), loss given default (LGD) and effective maturity. The exposure at default (EAD) is either derived from balance sheet values or by using models. For the capital requirements for counterparty credit risk, we implemented the advanced credit valuation adjustment (CVA), which covers the risk of mark-to-market losses on the expected counterparty risk arising from changes in a counterparty's credit spreads.

Market risk RWA reflect the capital requirements of potential changes in the fair values of financial instruments in response to market movements inherent in both balance sheet and off-balance sheet items. For calculating the capital requirements related to market risk, the internal models and standardized approaches are used. Within the Basel framework for FINMA regulatory capital purposes, we implemented risk measurement models, including an incremental risk charge (IRC), stressed value-at-risk (VaR) and risks not in VaR (RNIV).

The IRC is a regulatory capital charge for default and migration risk on positions in the trading books and is intended to complement additional standards being applied to the VaR modeling framework, including stressed VaR. Stressed VaR replicates a VaR calculation on the Group's current portfolio, taking into account a one-year observation period relating to significant financial stress and helps reduce the pro-cyclicality of the minimum capital requirements for market risk. RNIV and stressed RNIV are risks that are not currently implemented within the Group's VaR model, such as certain basis risks, higher order risks and cross risks. For capital purposes, FINMA, in line with BIS requirements, uses a multiplier to impose an increase in market risk capital for every regulatory VaR backtesting exception above four in the prior rolling 12-month period. In 2018, our market risk capital multiplier remained at FINMA and BIS minimum levels and we did not experience an increase in market risk capital.

> Refer to "Market risk review" in Risk management for further information.

Operational risk RWA reflect the capital requirements for the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. For calculating the capital requirements related to operational risk, we received approval from FINMA to use the advanced measurement approach (AMA). Under the AMA for measuring operational risk, we have identified key scenarios that describe our major operational risks using an event model.

Risk-weighted assets – Group

end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit	Corporate Center	Group
2018 (CHF million)								
Credit risk	63,280	26,604	27,102	35,380	20,498	5,834	16,201	**194,899**
Market risk	1,315	1,669	3,507	9,158	200	1,305	1,489	**18,643**
Operational risk	11,880	11,843	6,547	14,478	3,492	10,787	12,013	**71,040**
Risk-weighted assets – phase-in / look-through	**76,475**	**40,116**	**37,156**	**59,016**	**24,190**	**17,926**	**29,703**	**284,582**
2017 (CHF million)								
Credit risk	52,776	24,641	20,510	34,185	17,362	12,078	14,960	**176,512**
Market risk	737	1,101	5,128	11,334	121	1,875	994	**21,290**
Operational risk	12,059	12,514	5,836	13,339	2,575	19,660	9,030	**75,013**
Risk-weighted assets – phase-in	**65,572**	**38,256**	**31,474**	**58,858**	**20,058**	**33,613**	**24,984**	**272,815**
Look-through adjustment	–	–	–	–	–	–	(1,135)	**(1,135)**
Risk-weighted assets – look-through	**65,572**	**38,256**	**31,474**	**58,858**	**20,058**	**33,613**	**23,849**	**271,680**

Risk-weighted assets movements

RWA increased 4% to CHF 284.6 billion as of the end of 2018 from CHF 272.8 billion as of the end of 2017. The increase was primarily driven by increases in movements in risk levels and methodology and policy changes in credit risk and an increase relating to model and parameter updates in market risk and credit risk. These increases were partially offset by decreases in movements in risk levels in market risk and operational risk and methodology and policy changes in operational risk.

Excluding the foreign exchange impact, the increase in **credit risk** was primarily driven by increases related to movements in risk levels attributable to book size, methodology and policy changes and model and parameter updates. The increase in risk levels attributable to book size was mainly due to increases in lending risk exposures, primarily in Swiss Universal Bank, Asia Pacific and Global Markets. These increases were partially offset by the impact of hedging transactions executed in connection with managing the Group's RWA exposures in Global Markets, Swiss Universal Bank and Asia Pacific, decreases relating to derivative exposures in Global Markets and the Strategic Resolution Unit, decreases in lending risk exposures in the Strategic Resolution Unit and decreases in securitization exposures in International Wealth Management and the Strategic Resolution Unit. The increase resulting from methodology and policy changes was primarily due to an additional phase-in of the multiplier on income producing real estate (IPRE) and non-IPRE exposures, both within Swiss Universal Bank, increases reflecting the implementation of the new Basel III revised rules for banking book securitizations across the divisions and an additional phase-in of a multiplier on certain investment banking corporate exposures in Investment Banking & Capital Markets, Global Markets and Asia Pacific. The increase from model and parameter updates was primarily related to advanced CVA resulting from increased market volatility in the VaR model, primarily in the Strategic Resolution Unit and Swiss Universal Bank. The increase also reflected a phase-in of the RWA impact of an updated ship finance rating model in International Wealth Management.

Excluding the foreign exchange impact, the decrease in **market risk** was primarily driven by movements in risk levels, partially offset by increases resulting from model and parameter updates. The decrease in risk levels was primarily in Global Markets and Asia Pacific. The increase in model and parameter updates mainly reflected time series updates and model enhancements to VaR impacting Global Markets, International Wealth Management and Asia Pacific.

The decrease in **operational risk** was mainly driven by methodology and policy changes and movements in risk levels. The decrease in methodology and policy changes in the Corporate Center was in connection with the external transfer of our US private banking business. In addition, a new operational risk allocation key was agreed with FINMA, reducing RWA relating to operational risk in the Strategic Resolution Unit by CHF 8.9 billion and allocating this primarily to the Corporate Center, Global Markets, Investment Banking & Capital Markets and Asia Pacific. The decrease in risk levels was mainly due to increased insurance benefits attributable to the Corporate Center, Global Markets, Asia Pacific and Investment Banking & Capital Markets.

Risk-weighted asset movement by risk type – Group

2018	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit	Corporate Center	Total
Credit risk (CHF million)								
Balance at beginning of period	**52,776**	**24,641**	**20,510**	**34,185**	**17,362**	**12,078**	**14,960**	**176,512**
Foreign exchange impact	35	(134)	58	(168)	(31)	(2)	71	(171)
Movements in risk levels	5,522	645	4,094	1,451	2,849	(7,498)	1,304	8,367
of which credit risk – book size [1]	5,092	1,366	4,184	1,349	2,880	(7,524)	1,319	8,666
of which credit risk – book quality [2]	430	(721)	(90)	102	(31)	26	(15)	(299)
Model and parameter updates [3]	771	1,101	1,366	(703)	(979)	987	(146)	2,397
Methodology and policy changes [4]	4,176	351	1,074	615	1,297	269	12	7,794
Balance at end of period – phase-in	**63,280**	**26,604**	**27,102**	**35,380**	**20,498**	**5,834**	**16,201**	**194,899**
Market risk (CHF million)								
Balance at beginning of period	**737**	**1,101**	**5,128**	**11,334**	**121**	**1,875**	**994**	**21,290**
Foreign exchange impact	(23)	(30)	(61)	(128)	(3)	(24)	(34)	(303)
Movements in risk levels	583	(158)	(1,791)	(3,437)	84	(591)	417	(4,893)
Model and parameter updates [3]	18	759	246	1,413	(2)	50	116	2,600
Methodology and policy changes [4]	0	(3)	(15)	(24)	0	(5)	(4)	(51)
Balance at end of period – phase-in	**1,315**	**1,669**	**3,507**	**9,158**	**200**	**1,305**	**1,489**	**18,643**
Operational risk (CHF million)								
Balance at beginning of period	**12,059**	**12,514**	**5,836**	**13,339**	**2,575**	**19,660**	**9,030**	**75,013**
Movements in risk levels	6	6	(293)	(663)	(157)	0	(971)	(2,072)
Model and parameter updates [3]	0	0	0	0	0	0	577	577
Methodology and policy changes [4]	(185)	(677)	1,004	1,802	1,074	(8,873)	3,377	(2,478)
Balance at end of period – phase-in	**11,880**	**11,843**	**6,547**	**14,478**	**3,492**	**10,787**	**12,013**	**71,040**
Total (CHF million)								
Balance at beginning of period	**65,572**	**38,256**	**31,474**	**58,858**	**20,058**	**33,613**	**24,984**	**272,815**

Foreign exchange impact	12	(164)	(3)	(296)	(34)	(26)	37	(474)
Movements in risk levels	6,111	493	2,010	(2,649)	2,776	(8,089)	750	1,402
Model and parameter updates [3]	789	1,860	1,612	710	(981)	1,037	547	5,574
Methodology and policy changes [4]	3,991	(329)	2,063	2,393	2,371	(8,609)	3,385	5,265
Balance at end of period – phase-in / look-through	**76,475**	**40,116**	**37,156**	**59,016**	**24,190**	**17,926**	**29,703**	**284,582**

1
Represents changes in portfolio size.
2
Represents changes in average risk weighting across credit risk classes.
3
Represents movements arising from updates to models and recalibrations of parameters and internal changes impacting how exposures are treated.
4
Represents externally prescribed regulatory changes impacting how exposures are treated.
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Leverage metrics

Credit Suisse has adopted the BIS leverage ratio framework, as issued by the BCBS and implemented in Switzerland by FINMA. Under the BIS framework, the leverage ratio measures tier 1 capital against the end-of-period exposure. As used herein, leverage exposure consists of period-end balance sheet assets and prescribed regulatory adjustments. The look-through leverage exposure was CHF 881.4 billion as of the end of 2018, a decrease of 4% compared to CHF 916.5 billion as of the end of 2017. The decrease in leverage exposure was mainly due to a reduction in the Group's consolidated balance sheet, primarily reflecting lower operating activities, partially offset by the foreign exchange translation impact.

> Refer to "Balance sheet and off-balance sheet" for further information on the reduction in the Group's consolidated balance sheet.

Look-through leverage exposure – Group

end of	2018	2017
Look-through leverage exposure (CHF million)		
Swiss Universal Bank	255,480	257,054
International Wealth Management	98,556	99,267
Asia Pacific	106,375	105,585
Global Markets	245,664	283,809
Investment Banking & Capital Markets	40,485	43,842
Strategic Resolution Unit	29,579	59,934
Corporate Center	105,247	67,034
Leverage exposure	**881,386**	**916,525**

BIS leverage ratios – Group

The tier 1 leverage ratio was 5.2% as of the end of 2018, compared to 5.6% as of the end of 2017, reflecting lower tier 1 capital and lower leverage exposure. The CET1 leverage ratio was 4.1% as of the end of 2018 compared to 4.0% as of the end of 2017, reflecting lower leverage exposure and lower CET1 capital.

On a look-through basis, the tier 1 leverage ratio was 5.2% as of the end of 2018, stable compared to the end of 2017, reflecting lower leverage exposure and lower tier 1 capital. The look-through CET1 leverage ratio as of the end of 2018 was 4.1% compared to 3.8% as of the end of 2017, reflecting lower leverage exposure and higher CET1 capital.

Leverage exposure components – Group

			Phase-in			Look-through
			%			%
end of	2018	2017	change	2018	2017	change
Leverage exposure (CHF million)						
Balance sheet assets	**768,916**	**796,289**	(3)	**768,916**	**796,289**	(3)
Adjustments						
Difference in scope of consolidation and tier 1 capital deductions [1]	(12,655)	(11,873)	7	(12,655)	(14,401)	(12)
Derivative financial instruments	73,110	85,210	(14)	73,110	85,210	(14)
Securities financing transactions	(32,278)	(27,138)	19	(32,278)	(27,138)	19
Off-balance sheet exposures	84,293	76,565	10	84,293	76,565	10
Total adjustments	**112,470**	**122,764**	(8)	**112,470**	**120,236**	(6)
Leverage exposure	**881,386**	**919,053**	(4)	**881,386**	**916,525**	(4)

1 Includes adjustments for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation and tier 1 capital deductions related to balance sheet assets.

BIS leverage metrics – Group

	Phase-in			Look-through		
end of	2018	2017	% change	2018	2017	% change
Capital and leverage exposure (CHF million)						
CET1 capital	35,824	36,711	(2)	35,824	34,824	3
Tier 1 capital	46,040	51,482	(11)	46,040	47,262	(3)
Leverage exposure	881,386	919,053	(4)	881,386	916,525	(4)
Leverage ratios (%)						
CET1 leverage ratio	4.1	4.0	–	4.1	3.8	–
Tier 1 leverage ratio	5.2	5.6	–	5.2	5.2	–

Swiss metrics

Swiss capital metrics

As of the end of 2018, our Swiss CET1 ratio was 12.5%, our going concern capital ratio was 17.3%, our gone concern capital ratio was 12.5% and our TLAC ratio was 29.8%.

On a look-through basis, as of the end of 2018, our Swiss CET1 capital was CHF 35.7 billion and our Swiss CET1 ratio was 12.5%. Our going concern capital was CHF 45.9 billion and our going concern capital ratio was 16.1%. Our gone concern capital was CHF 37.9 billion and our gone concern capital ratio was 13.3% Our total loss-absorbing capacity was CHF 83.8 billion and our TLAC ratio was 29.4%.

> Refer to “Swiss Requirements” for further information on Swiss regulatory requirements.

Swiss capital metrics – Group

	Phase-in			Look-through		
end of	2018	2017	% change	2018	2017	% change
Swiss capital and risk-weighted assets (CHF million)						
Swiss CET1 capital	35,719	36,567	(2)	35,719	34,665	3
Going concern capital	49,443	53,131	(7)	45,935	47,102	(2)
Gone concern capital	35,678	35,712	0	37,909	35,226	8
Total loss-absorbing capacity	85,121	88,843	(4)	83,844	82,328	2
Swiss risk-weighted assets	285,193	273,436	4	285,193	272,265	5
Swiss capital ratios (%)						
Swiss CET1 ratio	12.5	13.4	–	12.5	12.7	–
Going concern capital ratio	17.3	19.4	–	16.1	17.3	–
Gone concern capital ratio	12.5	13.1	–	13.3	12.9	–
TLAC ratio	29.8	32.5	–	29.4	30.2	–

Swiss capital and risk-weighted assets – Group

	Phase-in			Look-through		
end of	2018	2017	% change	2018	2017	% change
Swiss capital (CHF million)						
CET1 capital – BIS	35,824	36,711	(2)	35,824	34,824	3
Swiss regulatory adjustments [1]	(105)	(144)	(27)	(105)	(159)	(34)
Swiss CET1 capital	**35,719**	**36,567**	(2)	**35,719**	**34,665**	3
Additional tier 1 high-trigger capital instruments	5,615	7,574	(26)	5,615	7,574	(26)
Grandfathered capital instruments	8,109	8,990	(10)	4,601	4,863	(5)
of which additional tier 1 low-trigger capital instruments	4,601	4,863	(5)	4,601	4,863	(5)
of which tier 2 low-trigger capital instruments	3,508	4,127	(15)	–	–	–
Swiss additional tier 1 capital	**13,724**	**16,564**	(17)	**10,216**	**12,437**	(18)
Going concern capital	**49,443**	**53,131**	(7)	**45,935**	**47,102**	(2)
Bail-in debt instruments	33,892	31,099	9	33,892	31,099	9
Additional tier 1 instruments subject to phase-out	–	2,778	(100)	–	–	–
Tier 2 instruments subject to phase-out	691	1,138	(39)	–	–	–
Tier 2 amortization component	1,095	1,193	(8)	509	–	–
Tier 2 low-trigger capital	–	–	–	3,508	4,127	(15)

instruments						
Deductions	–	(496)	100	–	–	–
Gone concern capital	**35,678**	**35,712**	0	**37,909**	**35,226**	8
Total loss-absorbing capacity	**85,121**	**88,843**	(4)	**83,844**	**82,328**	2
Risk-weighted assets (CHF million)						
Risk-weighted assets – BIS	284,582	272,815	4	284,582	271,680	5
Swiss regulatory adjustments [2]	611	621	(2)	611	585	4
Swiss risk-weighted assets	**285,193**	**273,436**	4	**285,193**	**272,265**	5

1
Includes adjustments for certain unrealized gains outside the trading book.
2
Primarily includes differences in the credit risk multiplier.
135

Swiss leverage metrics – Group

	Phase-in			Look-through		
			%			%
end of	2018	2017	change	2018	2017	change
Swiss capital and leverage exposure (CHF million)						
Swiss CET1 capital	35,719	36,567	(2)	35,719	34,665	3
Going concern capital	49,443	53,131	(7)	45,935	47,102	(2)
Gone concern capital	35,678	35,712	0	37,909	35,226	8
Total loss-absorbing capacity	85,121	88,843	(4)	83,844	82,328	2
Leverage exposure	881,386	919,053	(4)	881,386	916,525	(4)
Swiss leverage ratios (%)						
Swiss CET1 leverage ratio	4.1	4.0	–	4.1	3.8	–
Going concern leverage ratio	5.6	5.8	–	5.2	5.1	–
Gone concern leverage ratio	4.0	3.9	–	4.3	3.8	–
TLAC leverage ratio	9.7	9.7	–	9.5	9.0	–

Rounding differences may occur.

Swiss leverage metrics

The leverage exposure used in the Swiss leverage ratios is measured on the same period-end basis as the leverage exposure for the BIS leverage ratio. As of the end of 2018, our Swiss CET1 leverage ratio was 4.1%, our going concern leverage ratio was 5.6%, our gone concern leverage ratio was 4.0% and our TLAC leverage ratio was 9.7%. On a look-through basis, as of the end of 2018, our Swiss CET1 leverage ratio was 4.1%, our going concern leverage ratio was 5.2%, our gone concern leverage ratio was 4.3% and our TLAC leverage ratio was 9.5%.

Bank regulatory disclosures

The following capital, RWA and leverage disclosures apply to the Bank. The business of the Bank is substantially the same as that of the Group, including business drivers and trends relating to capital, RWA and leverage metrics.

> Refer to “BIS capital metrics”, “Risk-weighted assets”, “Leverage metrics”, “Swiss metrics” for further information.

BIS capital metrics – Bank

end of	2018	2017	Phase-in % change
Capital and risk-weighted assets (CHF million)			
CET1 capital	38,915	38,433	1
Tier 1 capital	48,231	52,378	(8)
Total eligible capital	52,431	57,592	(9)
Risk-weighted assets	286,081	272,720	5
Capital ratios (%)			
CET1 ratio	13.6	14.1	–
Tier 1 ratio	16.9	19.2	–
Total capital ratio	18.3	21.1	–

The Bank’s CET1 ratio was 13.6% as of the end of 2018 compared to 14.1% as of the end of 2017, mainly reflecting higher RWA. The Bank’s tier 1 ratio was 16.9% as of the end of 2018 compared to 19.2% as of the end of 2017. The Bank’s total capital ratio was 18.3% as of the end of 2018 compared to 21.1% as of the end of 2017.

CET1 capital was CHF 38.9 billion as of the end of 2018 compared to CHF 38.4 billion as of the end of 2017. CET1 was impacted by net income attributable to shareholders. This increase was partially offset by an additional annual 20% phase-in of regulatory deductions from CET1 (from 80% to 100%), including goodwill, other intangible assets and certain deferred tax assets, and an additional annual 20% decrease in the adjustment for the accounting treatment of pension plans (from 20% to 0%), pursuant to phase-in requirements.

Additional tier 1 capital was CHF 9.3 billion as of the end of 2018 compared to CHF 13.9 billion as of the end of 2017, mainly reflecting the redemption of several tier 1 capital notes, partially offset by the issuance of several perpetual tier 1 capital notes, an additional annual 20% phase-in of regulatory deductions (from 20% to 0%), including goodwill, other intangible assets and other capital deductions and a positive foreign exchange impact.

Eligible capital and risk-weighted assets – Bank

end of	2018	2017	Phase-in % change
Eligible capital (CHF million)			
Total shareholders' equity	**45,296**	**42,670**	6
Regulatory adjustments [1]	(49)	(46)	7
Adjustments subject to phase-in	(6,332)[2]	(4,191)	51
CET1 capital	**38,915**	**38,433**	1
Additional tier 1 instruments	9,316[3]	11,579	(20)
Additional tier 1 instruments subject to phase-out [4]	–	2,778	(100)
Deductions from additional tier 1 capital	–	(412)	100
Additional tier 1 capital	**9,316**	**13,945**	(33)
Tier 1 capital	**48,231**	**52,378**	(8)
Tier 2 instruments	3,508[5]	4,127	(15)
Tier 2 instruments subject to phase-out	692	1,138	(39)
Deductions from tier 2 capital	–	(51)	100
Tier 2 capital	**4,200**	**5,214**	(19)
Total eligible capital	**52,431**	**57,592**	(9)
Risk-weighted assets by risk type (CHF million)			
Credit risk	196,398	176,417	11

Market risk	18,643	21,290	(12)
Operational risk	71,040	75,013	(5)
Risk-weighted assets	**286,081**	**272,720**	5

1
Includes regulatory adjustments not subject to phase-in, including a cumulative dividend accrual.
2
Reflects 100% phase-in deductions, including goodwill, other intangible assets and certain deferred tax assets.
3
Consists of high-trigger and low-trigger capital instruments. Of this amount, CHF 5.6 billion consists of capital instruments with a capital ratio write-down trigger of 7% and CHF 3.7 billion consists of capital instruments with a capital ratio write-down trigger of 5.125%.
4
Includes hybrid capital instruments that are subject to phase-out.
5
Consists of low-trigger capital instruments with a capital ratio write-down trigger of 5%.

Tier 2 capital was CHF 4.2 billion as of the end of 2018 compared to CHF 5.2 billion as of the end of 2017, mainly due to the impact of the prescribed amortization requirement as instruments move closer to their maturity date.

The Bank's total eligible capital was CHF 52.4 billion as of the end of 2018 compared to CHF 57.6 billion as of the end of 2017.

RWA increased CHF 13.4 billion to CHF 286.1 billion as of the end of 2018 compared to CHF 272.7 billion as of the end of 2017.

Swiss capital and risk-weighted assets – Bank

end of	2018	2017	Phase-in % change
Swiss capital (CHF million)			
CET1 capital – BIS	38,915	38,433	1
Swiss regulatory adjustments [1]	(105)	(145)	(28)
Swiss CET1 capital	**38,810**	**38,288**	1
Additional tier 1 high-trigger capital instruments	5,624	7,631	(26)
Grandfathered capital instruments	7,200	8,076	(11)
of which additional tier 1 low-trigger capital instruments	3,692	3,949	(7)
of which tier 2 low-trigger capital instruments	3,508	4,127	(15)
Swiss additional tier 1 capital	**12,824**	**15,707**	(18)
Going concern capital	**51,634**	**53,995**	(4)
Bail-in debt instruments	33,897	31,125	9
Additional tier 1 instruments subject to phase-out	–	2,778	(100)
Tier 2 instruments subject to phase-out	691	1,138	(39)
Tier 2 amortization component	1,095	1,193	(8)
Deductions	–	(463)	100
Gone concern capital	**35,683**	**35,771**	0
Total loss-absorbing capacity	**87,317**	**89,766**	(3)
Risk-weighted assets (CHF million)			
Risk-weighted assets – BIS	286,081	272,720	5
Swiss regulatory adjustments [2]	601	612	(2)
Swiss risk-weighted assets	**286,682**	**273,332**	5

1 Includes adjustments for certain unrealized gains outside the trading book.

2 Primarily includes differences in the credit risk multiplier.

Swiss capital metrics – Bank

end of	2018	2017	Phase-in % change
Swiss capital and risk-weighted assets (CHF million)			
Swiss CET1 capital	38,810	38,288	1
Going concern capital	51,634	53,995	(4)
Gone concern capital	35,683	35,771	0
Total loss-absorbing capacity	87,317	89,766	(3)
Swiss risk-weighted assets	286,682	273,332	5
Swiss capital ratios (%)			
Swiss CET1 ratio	13.5	14.0	–
Going concern capital ratio	18.0	19.8	–
Gone concern capital ratio	12.4	13.1	–
TLAC ratio	30.5	32.8	–

Rounding differences may occur.

Leverage exposure components – Bank

end of	2018	2017	Phase-in % change
Leverage exposure (CHF million)			

Balance sheet assets	**772,069**	**798,372**	(3)
Adjustments			
Difference in scope of consolidation and tier 1 capital deductions [1]	(11,493)	(11,569)	(1)
Derivative financial instruments	73,258	85,559	(14)
Securities financing transactions	(32,278)	(27,138)	19
Off-balance sheet exposures	84,298	76,569	10
Total adjustments	**113,785**	**123,421**	(8)
Leverage exposure	**885,854**	**921,793**	(4)

1 Includes adjustments for investments in banking, financial, insurance or commercial entities that are consolidated for accounting purposes but outside the scope of regulatory consolidation and tier 1 capital deductions related to balance sheet assets.

BIS leverage metrics – Bank

end of	2018	2017	Phase-in % change
Capital and leverage exposure (CHF million)			
CET1 capital	38,915	38,433	1
Tier 1 capital	48,231	52,378	(8)
Leverage exposure	885,854	921,793	(4)
Leverage ratios (%)			
CET1 leverage ratio	4.4	4.2	–
Tier 1 leverage ratio	5.4	5.7	–

Swiss leverage metrics – Bank

end of	2018	2017	Phase-in % change
Swiss capital and leverage exposure (CHF million)			
Swiss CET1 capital	38,810	38,288	1
Going concern capital	51,634	53,995	(4)
Gone concern capital	35,683	35,771	0
Total loss-absorbing capacity	87,317	89,766	(3)
Leverage exposure	885,854	921,793	(4)
Swiss leverage ratios (%)			
Swiss CET1 leverage ratio	4.4	4.2	–
Going concern leverage ratio	5.8	5.9	–
Gone concern leverage ratio	4.0	3.9	–
TLAC leverage ratio	9.9	9.7	–

Rounding differences may occur.

Shareholders’ equity

Group

The Group’s total shareholders’ equity was CHF 43.9 billion as of the end of 2018 compared to CHF 41.9 billion as of the end of 2017. Total shareholders’ equity was positively impacted by net income attributable to shareholders, gains on fair value elected liabilities relating to credit risk and an increase in the share-based compensation obligation. These movements were partially offset by transactions relating to the settlement of share-based compensation awards and dividends paid.

> Refer to the “Consolidated statements of changes in equity” in VI – Consolidated financial statements – Credit Suisse Group for further information on the Group’s total shareholders’ equity.

Bank

The Bank’s total shareholders’ equity was CHF 45.3 billion as of the end of 2018 compared to CHF 42.7 billion as of the end of 2017. Total shareholders’ equity was positively impacted by net income attributable to shareholders, gains on fair value elected liabilities relating to credit risk and an increase in the share-based compensation obligation. These movements were partially offset by transactions relating to the settlement of share-based compensation awards and foreign exchange-related movements on cumulative translation adjustments.

> Refer to the “Consolidated statements of changes in equity” in VIII – Consolidated financial statements – Credit Suisse (Bank) for further information on the Bank’s total shareholders’ equity.

Shareholders' equity and share metrics

			Group			Bank
			%			%
end of	2018	2017	change	2018	2017	change
Shareholders' equity (CHF million)						
Common shares	102	102	0	4,400	4,400	0
Additional paid-in capital	34,889	35,668	(2)	45,557	45,718	0
Retained earnings	26,973	24,973	8	10,179	8,484	20
Treasury shares, at cost	(61)	(103)	(41)	–	–	–
Accumulated other comprehensive income/(loss)	(17,981)	(18,738)	(4)	(14,840)	(15,932)	(7)
Total shareholders' equity	**43,922**	**41,902**	5	**45,296**	**42,670**	6
Goodwill	(4,766)	(4,742)	1	(4,056)	(4,036)	0
Other intangible assets	(219)	(223)	(2)	(219)	(223)	(2)
Tangible shareholders' equity [1]	**38,937**	**36,937**	5	**41,021**	**38,411**	7
Shares outstanding (million)						
Common shares issued	2,556.0	2,556.0	0	4,399.7	4,399.7	0
Treasury shares	(5.4)	(5.7)	(5)	–	–	–
Shares outstanding	**2,550.6**	**2,550.3**	0	**4,399.7**	**4,399.7**	0
Par value (CHF)						
Par value	**0.04**	**0.04**	0	**1.00**	**1.00**	0
Book value per share (CHF)						
Total book value per share	**17.22**	**16.43**	5	**10.30**	**9.70**	6
Goodwill per share	(1.87)	(1.86)	1	(0.92)	(0.92)	0
Other intangible assets per share	(0.08)	(0.09)	(11)	(0.06)	(0.05)	20
Tangible book value per share [1]	**15.27**	**14.48**	5	**9.32**	**8.73**	7

1 Management believes that tangible shareholders' equity and tangible book value per share, both non-GAAP financial measures, are meaningful as they are measures used and relied upon by

industry analysts and investors to assess valuations and capital adequacy.

Foreign exchange exposure

Foreign exchange risk associated with investments in branches, subsidiaries and affiliates is managed within defined parameters that create a balance between the interests of stability of capital adequacy ratios and the preservation of Swiss franc shareholders' equity. The decisions regarding these parameters are made by CARMC and are regularly reviewed. Foreign exchange risk associated with the nonfunctional currency net assets of branches and subsidiaries is managed through a combination of forward-looking and concurrent backward-looking hedging activity, which is aimed at reducing the foreign exchange rate induced volatility of reported earnings.

Share repurchases

The Swiss Code of Obligations limits a corporation's ability to hold or repurchase its own shares. We may only repurchase shares if we have sufficient free reserves to pay the purchase price, and if the aggregate nominal value of the repurchased shares does not exceed 10% of our nominal share capital. Furthermore, we must create a special reserve in our parent company's financial statements in the amount of the purchase price of the acquired shares. In our consolidated financial statements, own shares are recorded at cost and reported as treasury shares, resulting in a reduction in total shareholders' equity. Shares repurchased by us do not carry any voting rights at shareholders' meetings.

For 2018, there was no publicly announced share repurchase program in place. We purchased 817 million treasury shares and sold or re-issued 771 million treasury shares in 2018 through open market transactions, predominantly for market-making purposes and facilitating customer orders as well as to meet the Group's delivery obligations with respect to share-based compensation. As of December 31, 2018, the Group held 5 million treasury shares.

For 2019, the Board of Directors of the Group approved a share buyback program of Group ordinary shares of up to CHF 1.5 billion. We expect to buy back at least CHF 1.0 billion in 2019, subject to market and economic conditions.

For 2020, we expect a similar share buyback program as in 2019, subject to approval by the Board of Directors. The level of the share buyback for 2020 will be set in light of our capital plans and subject to prevailing market conditions, but is expected to be in line with our intention to distribute at least 50% of net income.

We commenced the 2019 share buyback program on January 14, 2019. We are acquiring our own shares on a second trading line on SIX Swiss Exchange, subject to deduction of applicable Swiss federal withholding tax. The repurchased shares are expected to be cancelled by means of a capital reduction to be proposed at a future Annual General Meeting (AGM) of shareholders.

> Refer to "Impact of share-based compensation on shareholders' equity" in V – Compensation – Group compensation for further information.

Purchases and sales of treasury shares

in	Number of shares (million)	Average price per share (CHF)
2018		
January	59.8	18.10
February	64.2	17.30
March	86.1	16.98
April	41.1	16.11
May	73.2	16.31
June	91.0	15.27
July	46.4	15.10
August	59.4	15.10
September	92.5	14.93
October	77.1	13.60
November	83.2	12.51
December	42.8	11.01
Total purchase of treasury shares	**816.8**	**–**
Total sale of treasury shares	**770.6**	**–**

Dividends and dividend policy

Under the Swiss Code of Obligations, dividends may be paid out only if and to the extent the corporation has distributable profits from previous business years, or if the free reserves of the corporation are sufficient to allow distribution of a dividend. In addition, at least 5% of the annual net profits must be retained and booked as general legal reserves for so long as these reserves amount to less than 20% of the paid-in share capital. Our reserves currently exceed this 20% threshold. Furthermore, dividends may be paid out only after shareholder approval at the AGM. The Board of Directors may propose that a dividend be paid out, but cannot itself set the dividend. In Switzerland, the

auditors are required to confirm whether the appropriation of retained earnings is in accordance with Swiss law and the company's articles of incorporation. In practice, the shareholders usually approve the dividend proposal of the Board of Directors. Dividends are usually due and payable after the shareholders' resolution relating to the allocation of profits has been passed. Under the Swiss Code of Obligations, the statute of limitations in respect of claiming the payment of dividends that have been declared is five years.

The dividend payment made in 2018 for the financial year 2017 consisted of a distribution of CHF 0.25 per share payable out of capital contribution reserves in cash. The distribution was free of Swiss withholding tax and was not subject to income tax for Swiss resident individuals holding the shares as a private investment.

Our dividend payment policy seeks to provide investors with an efficient form of capital distribution relative to earnings. We have revised our dividend policy beginning in 2017 by discontinuing the proposal of a scrip alternative at the option of shareholders and by instead proposing to pay an all-cash dividend per share at a level similar to the cash component (as opposed to the stock component) per share of the total dividend that our shareholders elected in recent years, subject to performance and to the decision of the Board of Directors and approval of our shareholders in due course. We expect to generate a sustainable ordinary dividend for shareholders in 2019 and 2020, and to increase the ordinary dividend by at least 5% per annum.

Our Board of Directors will propose to the shareholders at the AGM on April 26, 2019 a distribution of CHF 0.2625 per share out of capital contribution reserves for the financial year 2018. The distribution will be free of Swiss withholding tax and will not be subject to income tax for Swiss resident individuals holding the shares as a private investment. The distribution will be payable in cash. The ex-dividend date has been set to May 3, 2019.

Reflecting our holding company structure, the Group is not an operating company and holds investments in subsidiaries. It is therefore reliant on the dividends of its subsidiaries to pay shareholder dividends and service its long-term debt. The subsidiaries of the Group are generally subject to legal restrictions on the amount of dividends they can pay. The amount of dividends paid by operating subsidiaries is determined after consideration of the expectations for future results and growth of the operating businesses.

> Refer to “Proposed distribution out of capital contribution reserves” in VII – Parent company financial statements – Credit Suisse Group – Proposed appropriation of retained earnings and capital distribution for further information on dividends.

Dividend per ordinary share

	USD[1]	CHF
Dividend per ordinary share for the financial year		
2017	0.25	0.25
2016	0.72	0.70
2015	0.72	0.70
2014	0.75	0.70
2013	0.79	0.70

1 Represents the distribution on each American Depositary Share. For further information, refer to credit-suisse.com/dividend.

Risk management

During 2018, we enhanced our risk data aggregation and reporting capabilities in line with BCBS 239 principles and passed the CCAR stress tests for our US intermediate holding company.

Key risk developments

The rise in protectionism and the implications of Fed monetary policy tightening, particularly for emerging countries, were the key risk developments which impacted the markets and the economy in 2018. Other significant risk developments were political and economic policy developments in the eurozone, the implementation of new sanctions against Russia, the process surrounding the expected withdrawal of the UK from the European Union and the global economic slowdown. There were also concerns over volatility and liquidity in the markets.

Trade tensions

The risk of global trade tensions became a major concern of global investors beginning in early 2018. The escalation of tensions between the US and China continued during the course of the year with both countries implementing tariffs. Trade tension concerns also widened to include a number of other economies, including the eurozone, with impacts on sectors exposed to international trade such as ship finance. The impact of a shift towards a more protectionist foreign trade policy by the US continues to be assessed in various stress tests run at the Group, divisional or legal entity level on a regular basis.

Emerging markets vulnerabilities

The tightening of US monetary policy, the appreciation of the US dollar and the announcement and implementation of new tariffs triggered capital outflows from emerging markets and the broad-based sell-off of emerging markets currencies. Those global factors, combined with some specific local vulnerabilities, led to economic and political crises in a number of emerging market countries. In addition, China’s economic slowdown appeared to have worsened in the final quarter of 2018. We closely monitor developments in China and in other emerging markets as well as the related risks in our portfolio and have implemented certain risk-reduction measures.

Policy interest rates and credit cycle

The Fed continued tightening its monetary policy throughout 2018. The ECB ended its asset purchase program and the Bank of England raised interest rates. In credit markets, there was some concern over leveraged loans, a segment where issuance has grown rapidly. We monitor potential risks associated with the monetary policy tightening paths of the Fed and other major central banks through our suite of stress scenarios. We also closely monitor the risks associated with any deterioration in the credit quality of the leverage loan portfolio.

European political landscape

After initial uncertainties, Germany formed a government coalition early in the year. Negotiations relating to the withdrawal of the UK from the EU remained a source of uncertainty in Europe in 2018. In addition, discussions between the new coalition in Italy and the European Commission over the 2019 budget brought some stress to Italian markets in the second half of 2018. We are continuing to monitor developments and assess the potential negative implications using a suite of stress scenarios.

Withdrawal of the UK from the EU

Uncertainty over the outcome of the negotiations surrounding the anticipated withdrawal of the UK from the EU persisted throughout 2018 and early 2019. That uncertainty had a significant negative impact on the UK economy in late 2018 and in early 2019 and was also a factor contributing to the economic slowdown in the eurozone. The withdrawal agreement between the EU and the UK has not yet been approved and it appears likely that there will be a delay of the UK’s withdrawal from the EU for a period of time beyond March 29, 2019, although it is still possible that the UK could leave the EU without such an agreement in place. We are continuing to closely monitor this situation and its potential impact on the Group.

Market liquidity and volatility

There has been significant structural change in the markets since the 2008/2009 financial crisis. The amount of inventory held by banks and broker-dealers has declined. The role in the markets of computer-driven investment strategies and of mutual funds and exchange-traded funds has significantly increased. Volatility in the markets is heavily influenced by the asset purchase programs of the major central banks and has become a significant investor concern, particularly since early February 2018 when equity markets fell, credit spreads widened and equity market volatility significantly increased. Such structural changes have increased the threat that liquidity shortages could quickly develop in periods of stress and trigger large moves in the markets. The potential for liquidity shortages in

stress periods and for spikes in volatility are embedded in the market risk shocks which form part of the suite of multi-quarter stress scenarios we have developed. That suite of stress scenarios is assessed on a monthly basis.

Sanctions involving Russia

The US Department of the Treasury's Office of Foreign Assets Control (OFAC) imposed sanctions in 2018 against Russian individuals and companies. We identified impacted client relationships and transactions to ensure compliance; additionally, our sanctions compliance group closely monitors the developments in collaboration with the businesses and the risk management

function. Unless there are specific restrictions in place, we continue serving Russian clients by applying enhanced due diligence procedures.

Cyber risk

The financial industry is increasingly reliant on technology and faces dynamic cyber threats from a variety of actors who are driven by monetary, political and other motivations. We continue to invest significantly in an information and cybersecurity program in order to strengthen our ability to anticipate, defend against, detect and recover from cyber attacks. We regularly assess the effectiveness of our key controls and conduct ongoing employee training and awareness activities, including for key management personnel, in order to embed resilience and a strong cyber risk culture.

Risk management oversight

Prudent risk taking in line with our strategic priorities is fundamental to our business. The primary objectives of risk management are to protect our financial strength and reputation, while ensuring that capital is well deployed to support business growth and activities. Our risk management framework is based on transparency, management accountability and independent oversight. Risk management is an integral part of our business planning process with strong senior management and Board involvement.

We continuously work to strengthen risk management across the Group in our efforts to meet the challenges resulting from a volatile market environment and increasing complexity driven by the changing regulatory landscape. Utilizing comprehensive risk management processes and sophisticated control systems, we continuously work to minimize the negative impact that may arise from risk concentrations.

Organizational development in 2019

On February 26, 2019, an organizational change relating to the compliance functions was announced, effective immediately. The regulatory affairs function was separated from the compliance organization and integrated into the office of the CEO with the Global Head of Regulatory Affairs now reporting directly to the CEO. The remaining functions within the compliance organization are managed by the Chief Compliance Officer (CCO), and that office continues to be represented on the Group’s Executive Board.

Risk governance

Effective risk governance sets a solid foundation for comprehensive risk management discipline. Our risk governance framework is based on a “three lines of defense” governance model, where each line has a specific role with defined responsibilities and works in close collaboration to identify, assess and mitigate risks.

The first line of defense is the front office, which is responsible for pursuing suitable business opportunities within the strategic risk objectives and compliance requirements of the Group. Its primary responsibility is to ensure compliance with relevant legal and regulatory requirements and maintain effective internal controls.
The second line of defense includes functions such as risk management, compliance, legal and product control. It articulates standards and expectations for the effective management of risk and controls, including advising on applicable legal and regulatory requirements and publishing related policies, and monitors and assesses compliance with regulatory and internal standards. The second line of defense is separate from the front office and includes independent control functions responsible for reviewing, measuring and challenging front office activities and producing independent assessments and risk management reporting for senior management and regulatory authorities.
The third line of defense is the internal audit function, which monitors the effectiveness of controls across various functions and operations, including risk management and governance practices.
Our operations are regulated by authorities in each of the jurisdictions in which we conduct business. Central banks and other bank regulators, financial services agencies, securities agencies and exchanges and self-regulatory organizations are among the regulatory authorities that oversee our businesses. FINMA is our primary regulator.
> Refer to “Regulation and supervision” in I – Information on the company for further information.
Our governance includes a committee structure and a comprehensive set of corporate policies which are developed, reviewed and approved by the Board, the Executive Board, their respective committees, the Group CRO, the Group CCRO, or the CCO since the organizational change on February 26, 2019, and the board of directors of significant subsidiaries, in accordance with their respective responsibilities and levels of authority.
> Refer to “Board of Directors” and “Executive Board” in IV – Corporate Governance for further information.
Board of Directors
The Board is responsible for our strategic direction, supervision and control, and for defining our overall tolerance for risk. For this purpose, the Board approves the risk management framework and sets overall risk appetite in consultation with its Risk Committee (Risk Committee).
The **Risk Committee** is responsible for assisting the Board in fulfilling its oversight responsibilities by periodically reviewing the Group’s risk management function, its resources and key risks.
The **Audit Committee** is responsible for assisting the Board in fulfilling its oversight responsibilities by monitoring management’s approach with respect to financial reporting, internal controls, accounting and legal and regulatory compliance. Additionally, the Audit Committee is responsible for monitoring the independence and performance of internal and external auditors.
In 2018, the Board decided to establish the **Conduct and Financial Crime Control Committee**, which became effective in 2019. The Conduct and Financial Crime Control Committee assists the Board in fulfilling its oversight duties with respect to the Group’s exposure to financial crime risk. It is tasked with monitoring and assessing the effectiveness of financial crime compliance programs and initiatives.
Executive Board
The Executive Board is responsible for developing and implementing our strategic business plans, subject to approval by the Board. It further reviews and coordinates significant initiatives for the risk management function and establishes Group-wide risk policies. The Group CRO and CCRO, or the CCO since the organizational change on February 26, 2019, are members of the Executive Board and represent the risk management and compliance functions, respectively, reporting to the Group CEO and, at least annually, to the Board.
Executive Board committees
The Capital Allocation & Risk Management Committee (CARMC) is responsible for overseeing and directing our risk profile, recommending risk limits at the Group level to the Risk Committee and the Board, establishing and allocating risk appetite among the various businesses, reviewing new significant business strategies or changes in business strategies including business migrations, making risk-related decisions on escalations, and for applying measures, methodologies and tools to monitor and manage the risk portfolio. CARMC meets monthly and conducts reviews according to the following three rotating cycles. The asset & liability management cycle reviews the funding and balance sheet trends and activities, plans and monitors regulatory and business liquidity requirements and internal and regulatory capital adequacy, provides governance and oversight over all material business migrations and ensures that legal entity strategic initiatives are within the Group’s risk appetite and appropriately supported and controlled. The market & credit risks cycle defines and implements risk management strategies for the Group businesses, sets and

approves risk appetite within Board-approved limits and other appropriate measures to monitor and manage the risk profile of the Group and allocates liquidity resources and sets liquidity risk limits. The internal control system cycle monitors and analyzes significant operational, legal and compliance risks, reviews and approves the business continuity program's alignment with the corporate strategy on an annual basis, sets limits, caps and triggers on specific businesses to control significant operational risk exposure, and reviews and assesses the appropriateness and efficiency of the internal control systems.

The Valuation Risk Management Committee (VARMC) is responsible for establishing policies regarding the valuation of certain material assets and the policies and calculation methodologies applied in the valuation process. Further, VARMC is responsible

for monitoring and assessing valuation risks, reviewing inventory valuation conclusions and directing the resolution of significant inventory valuation issues.
The Risk Processes & Standards Committee (RPSC) reviews major risk management processes, issues general instructions, standards and processes concerning risk management, approves material changes in market, credit and operational risk management standards, policies and related methodologies, and approves the standards of our internal models used for calculating regulatory capital.
The Reputational Risk & Sustainability Committee (RRSC) sets policies and reviews processes and significant cases relating to reputational risks and sustainability issues. It also ensures adherence to our reputational and sustainability policies and oversees their implementation.
Divisional and legal entity risk management committees
Divisional and legal entity risk management committees review risk, legal, compliance and internal control matters specific to the divisions and individual legal entities, respectively.
Risk organization
The risk management function is responsible for providing risk management oversight and establishing an organizational basis to manage risk matters. The risk management function challenges and proactively engages with the business divisions in shaping the divisions' and the Group's risk profiles.
Our risk organization supports the Group's strategy and divisional structure. The divisional chief risk officers, who also act as legal entity chief risk officers for the most significant legal entities in their respective regions, assume an important role in this organization. From a people and business management perspective, the organizational setup of the risk function builds on a matrix structure, unifying global functions and divisional/legal entity perspectives.
Our governance framework includes dedicated risk management committees for each division. The divisional and legal entity chief risk officer organizations have established granular risk appetite frameworks and reporting capabilities to cover the specific needs of their business divisions. The global risk functions drive our risk appetite, ensure globally harmonized models and methodologies, execute global regulatory deliverables, provide global limit frameworks and ensure risk conflict remediation.
The key elements of the risk organization include a matrix structure and central functions.
Matrix structure
Our matrix structure reflects the Group's business strategy and emphasizes the Group's legal entity considerations. The global functions comprise credit, market, enterprise and operational (including liquidity) as well as fiduciary risk management, and are accountable for functional risk oversight and the risk limit framework at the global and local legal entity level. They are also responsible for functional models, methodologies and policies and function-related regulatory change.

The enterprise and operational risk management mandate is focused on the overarching risk framework, including risk appetite and stress testing, Group risk reporting, liquidity risk management, model risk management, operational risk management, business continuity management, risk-related regulatory management and coordination of our reputational risk-related activities.
The divisional chief risk officers for Swiss Universal Bank, International Wealth Management, Asia Pacific, Global Markets, Investment Banking & Capital Markets and (through December 2018) the Strategic Resolution Unit are responsible for ensuring alignment of the risk management function within our divisions.
The legal entity chief risk officers provide risk oversight for certain significant legal entities in the locations of our main operations. They define the local risk management and risk appetite frameworks and are responsible for meeting the legal-entity-specific regulatory requirements. The legal entity chief risk officer roles for our most significant legal entities are assumed by the divisional chief risk officers in their respective regions, except for Credit Suisse AG where the chief risk officer role is assumed by the Group CRO.
The heads of the global functions and the divisional/legal entity chief risk officers jointly manage the embedded functional teams.
Central functions
Risk and Finance Data Analytics, Reporting provides consistent reporting production, analytics and data management shared with finance functions. CRO Change is responsible for the portfolio of strategic change programs across the risk management function. The Group CRO's chief operating officer facilitates business management within the risk management function. Credit Risk Review is a review function independent from credit risk management with a direct reporting line to the Board's Risk Committee, administratively reporting to the Group CRO. Credit Risk Review assesses Credit Suisse's credit exposures and credit risk management processes and practices. Until August 2018, the head of Credit Risk Review was responsible for our comprehensive capital analysis and review (CCAR) challenge function which supports the application of the CCAR framework for our US intermediate holding company (IHC) and provides independent assessments of the processes for the development of the US IHC's capital plan. In August 2018, the CCAR challenge function responsibilities were transferred to the senior management of our US IHC. CCAR is a US regulatory framework introduced by the Fed to assess, regulate and supervise large financial institutions.
On June 28, 2018, the Fed released results of its annual CCAR stress tests, for the first time publicly releasing results for our US IHC. Our US IHC was projected to maintain capital ratios above minimum regulatory requirements in the adverse and severely adverse CCAR stress scenarios, and the Fed did not object to its proposed capital plan. As part of the stress testing requirements of the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), our US IHC was also required to conduct a mid-cycle stress test using a set of internally developed macroeconomic scenarios and submit the results to the Fed in October 2018. As previously disclosed, our US IHC was projected to maintain capital ratios above minimum regulatory requirements under the internally developed severely adverse scenario.
Compliance
The compliance function is a proactive, independent function working with the businesses to continuously challenge practices to manage compliance risk. As a second line of defense function, responsibilities include independently assessing compliance risk, monitoring and testing and reporting on adherence to the compliance risk appetite and other material matters to the Board and senior management. It also oversees regulatory interactions of the Group and assesses potential impact and monitors implementation of regulatory developments.
Our compliance organization supports the Group's strategy and divisional structure, with the involvement of the divisional chief compliance officers, who also provide compliance oversight for the most significant legal entities in their respective regions. The divisional chief compliance officers are responsible for providing independent oversight and control over the compliance and regulatory risks relating to their respective divisions and legal entities.
Central compliance functions
Central compliance functions, such as core compliance services, financial crime compliance and investigations, support all divisions by overseeing and managing global programs in partnership with the divisional chief compliance officers. The core compliance services function oversees framework design and establishes and monitors enterprise level standards and controls for compliance practices, surveillance and global programs (e.g., cross-border compliance, client tax compliance and conduct risk). The financial crime compliance function establishes and monitors compliance policies, guidelines, procedures and controls related to anti-money laundering, anti-corruption

and sanctions. The investigations function is responsible for the identification and remediation of significant breaches in the Group's compliance processes and controls.

The regulatory affairs function, reporting directly to the CEO since the organizational change on February 26, 2019, supports the Group through management of regulatory relationships and interactions, including coordination of regulatory commitments on behalf of relevant divisions.

Risk culture

We base our business operations on conscious and disciplined risk-taking. We believe that independent risk management, compliance and audit processes with proper management accountability are critical to the interests and concerns of our stakeholders. Our risk culture is supported by the following principles:

We establish a clear risk appetite that sets out the types and levels of risk we are prepared to take;

Our risk management and compliance policies set out authorities and responsibilities for taking and managing risks;

We actively monitor risks and take mitigating actions where they fall outside accepted levels;

Breaches of risk limits are identified, analyzed and escalated, and large, repeated or unauthorized exceptions may lead to terminations, adverse adjustments to compensation or other disciplinary action; and

We seek to establish resilient risk constraints that promote multiple perspectives on risk and reduce the reliance on single risk measures.

We actively promote a strong risk culture where employees are encouraged to take accountability for identifying and escalating risks and for challenging inappropriate actions. The businesses are held accountable for managing all of the risks they generate, including those relating to employee behavior and conduct, in line with our risk appetite. Expectations on risk culture are regularly communicated by senior management, reinforced through policies and training, and considered in the performance assessment and compensation processes and, with respect to employee conduct, assessed by formal disciplinary review committees.

We seek to promote responsible behavior through the Group's Code of Conduct, which provides a clear statement on the conduct standards and ethical values that we expect of our employees and members of the Board, so that we maintain and strengthen our reputation for integrity, fair dealing and measured risk-taking. In addition, our six conduct and ethics standards, which include client focus, meritocracy, stakeholder management, accountability, partner and transparency, are a key part of our effort to embed our core ethical values into our business strategy and the fabric of our organization.

They are designed to encourage employees to act with responsibility, respect, honesty and compliance to secure the trust of our stakeholders. Initiatives in this area have provided employees with practical guidance on careful and considered behavior and the importance of acting ethically and learning from mistakes. Our employee performance assessment and compensation processes are linked to the conduct and ethics standards and the Group's Code of Conduct.

> Refer to "Conduct risk" in Risk coverage and management for further information.

BCBS 239

The BCBS published the "Principles for effective risk data aggregation and risk reporting" (BCBS 239) in 2013 in order to strengthen the risk data aggregation and risk reporting practices at banks and enhance their risk management and decision-making processes. Our program for implementing these principles regarding risk data aggregation and reporting at Credit Suisse was completed and operational as of December 31, 2018 and we are in the process of evidencing compliance with the BCBS 239 principles which we expect to complete in the first half of 2019.

Risk appetite framework

Overview

We maintain a comprehensive Group-wide risk appetite framework, which is governed by a global policy and provides a robust foundation for risk appetite setting and management across the Group. A key element of the framework is a detailed statement of the Board-approved risk appetite which is aligned to our financial and capital plans. The framework also encompasses the processes and systems for assessing the appropriate level of risk appetite required to constrain our overall risk profile.

Risk capacity is the maximum level of risk that we can assume given our current level of resources before breaching any constraints determined by capital and liquidity needs, the operational environment and our responsibilities to depositors, shareholders, investors and other stakeholders. Risk appetite expresses the aggregate level and types of risk we are willing to assume within our risk capacity to achieve our strategic objectives and business plan. Risk profile is a point-in-time assessment of our net risk exposures aggregated within and across each relevant risk category and is expressed in a variety of different quantitative risk metrics and qualitative risk observations. The size of our risk profile is restricted to the planned level of our risk appetite through the use of risk constraints, such as limits, guidelines, tolerances and targets.

Key aspects and process

The Group risk appetite framework is governed by an overarching global policy that encompasses the suite of specific policies, processes and systems with which the risk constraints are calibrated and the risk profile is managed. The framework is guided by the following strategic risk objectives:

- maintaining Group-wide capital adequacy above minimum regulatory requirements under both normal and stressed conditions;
- promoting stability of earnings to support performance in line with financial objectives;
- ensuring sound management of liquidity and funding risk in normal and stressed conditions;
- proactively controlling concentration risks;
- managing operational and compliance risk within our enterprise risk and control framework (ERCF) to ensure sustainable performance;
- minimizing reputational risk; and
- managing and mitigating conduct risk.

Group-wide risk appetite is determined in partnership with the financial and capital planning process on an annual basis, based on bottom-up forecasts that reflect planned risk usage by the businesses and top-down, Board-driven strategic risk objectives and risk appetite. Scenario stress testing of financial and capital plans is an essential element in the risk appetite calibration process as a key means through which our strategic risk objectives, financial resources and business plans are aligned. The capital plans are also analyzed using our economic capital coverage ratio, which provides a further means of assessing bottom-up risk plans with respect to available capital resources. The risk appetite is approved through a number of internal governance forums, including joint approval by the Group CRO and the CFO, the Risk Appetite Review Committee (a sub-committee of CARMC), CARMC and, subsequently, by the Board.

The risk appetite statement is the formal plan, approved by the Board, for our Group-wide risk appetite. Key divisional allocations are cascaded from the Group and approved in divisional risk management committees. Legal entity risk appetites are set by the local legal entity board of directors within the limits established by the Group. The top-down and bottom-up risk appetite calibration process includes the following key steps:

Top-down:

Group-level strategic risk objectives are agreed by the Board in line with our financial and capital objectives.

Top-down risk capacities and risk appetites are determined with reference to available resources and key thresholds, such as minimum regulatory requirements.

A risk appetite statement is determined and approved annually by the Board, and is based on the strategic risk objectives, the comprehensive scenario stress testing of our forecasted financial results and capital requirements, and our economic capital framework. A semi-annual review of the risk appetite and capacity levels is performed. The risk appetite statement comprises quantitative and qualitative risk measures necessary for adequate control of the risk appetite across the organization. The review of the top-down and bottom-up risk appetite levels and their allocation between divisions and legal entities is performed by the Risk Appetite Review Committee.

Separate legal entity risk appetite frameworks aligned to local regulatory requirements are in place for material subsidiaries. An integrated year-end planning process ensures that individual legal entity risk appetites are consistent with Group levels.

Divisional risk committees are responsible for allocating risk appetite within the respective divisions based on individual business line reviews and requirements.

Bottom-up:

Planned risk levels and related risk appetite requirements are provided by front office business experts in conjunction with financial and capital plans in order to ensure consistency with the business strategy. Risk plans are reviewed by the relevant risk management committees.

Bottom-up risk forecasts are aggregated across businesses to assess divisional and Group-wide risk plans and to support management decisions on variations to existing risk appetite levels or the possible need for new risk appetite measures.

The effectiveness of risk appetite in support of business strategy execution and delivery against financial objectives is assessed via a risk appetite effectiveness framework. This framework assists senior management and the Board in ensuring that appropriate levels of risk appetite are set and that the subsequent risk constraints are appropriately calibrated.

Risk, financial and capital plans are jointly reviewed and approved by the Executive Board and the Board.

The chart “Risk appetite framework – key aspects” provides an overview of key Group-wide quantitative and qualitative aspects covered in our risk appetite statement for the Group and their connection to the division-specific risk appetite statements.

Thematic and exclusion risk appetite

As previously disclosed, in the second quarter of 2017 we amended and enhanced our risk appetite framework to provide additional governance and controls within our relevant transaction approval processes to distinguish between those types of business exposures held in the Strategic Resolution Unit that will be allowed for execution in our strategic divisions and those documented in our thematic and exclusion risk appetite framework that will be prohibited or for which we have limited risk appetite.

In the first quarter of 2018, CARMC approved the removal of 12 counterparties from the Group's thematic and exclusion risk appetite framework and the Risk Committee was subsequently notified of the risk appetite updates. The counterparties and associated trades were transferred from the Strategic Resolution Unit back to the Global Markets and Investment Banking & Capital Markets divisions in the first quarter of 2018. In the second quarter of 2018, after a business reassessment in connection with our planning relating to the withdrawal of the UK from the EU, the Audit Committee approved the transfer of assets and liabilities relating to Credit Suisse (Deutschland) Aktiengesellschaft from the Strategic Resolution Unit to the Investment Banking & Capital Markets division.

Risk constraints

A core aspect of our risk appetite framework is a sound system of integrated risk constraints to maintain our risk profile within our overall risk appetite. Our risk appetite framework utilizes a suite of different types of risk constraints to reflect the aggregate risk appetite of the Group and to further cascade risk appetite across our organization, including among business divisions and legal entities. The risk constraints restrict our maximum balance sheet and off-balance sheet exposure given the market environment, business strategy and financial resources available to absorb losses. Different levels of seniority are mapped to, and specific enforcement and breach response protocols are required for, each type of risk constraint. We define the following risk constraint categories:

Qualitative constraints represent constraints that are used to manage identified but unquantifiable or subjective risks, with adherence assessed by the appropriate level of constraint authority.

Quantitative constraints represent constraints that are used to manage identified quantifiable risks and exist in the form of limits, guidelines, tolerances, targets and flags.

Constraint authority for the risk constraints is determined by the relevant approving body and constraints are currently in effect for all key risk governance bodies and committees including the Board, its Risk Committee, the Executive Board and CARMC. The appropriateness of the constraint types for the various risk classes within our risk appetite, including market, credit, operational and liquidity risk, is determined considering the respective characteristics of the various risk constraint types. We define the following types of risk constraints:

Qualitative constraint statements are required for all qualitative constraints. Qualitative constraint statements need to be specific and to clearly define the respective risk to ensure that the risk profile for unquantifiable or subjective risks is readily assessable.

Limits, guidelines and tolerances are specific threshold levels for a given risk metric. Limits are binding thresholds that require discussion to avoid a breach and trigger immediate remediating action if a breach occurs. Guidelines are thresholds which, if breached, require an action plan to reduce risk below the guideline or to propose, justify and agree to adjust the guideline. Tolerances are designed as management thresholds to initiate discussion, and breach of a tolerance level triggers review by the relevant constraint authority.

Targets represent the level of risk that the Group intends to accept in pursuit of business objectives at a specific point in time in the future.

Flags are early warning indicators, which serve primarily as a business risk management and supervisory control tool for our front offices, Treasury and the risk management function. Flags can be set for any quantifiable risk and may be complementary to other types of constraints.

With respect to limits, guidelines and tolerances, established criteria are applied in the selection of the appropriate risk constraint, including the assessment of (i) the materiality of the respective risk metric with regard to its contribution to the overall Group risk appetite; (ii) the importance of the risk constraint to the organization from a qualitative perspective; (iii) the characteristic of the respective risk, e.g., risk concentrations or high priority risk for

the Group; and (iv) the availability of mitigating actions to manage the risk profile of the Group in relation to the respective risk.
We have established a constraint structure which manages the Group's risk profile using multiple metrics, including economic risk capital, VaR, scenario analysis and various exposure limits at the Group level. The overall risk limits for the Group are set by the Board in consultation with its Risk Committee and are binding. In the rare circumstance where a breach of these limits would occur, it would result in a notification to the Chair of the Board's Risk Committee and the Group CEO, and written notification to the full Board at its next meeting. Following notification, the Group CRO may approve positions that exceed the Board limits up to a predefined level and any such approval is reported to the full Board. Positions that exceed the Board limits by more than the predefined level may only be approved by the Group CRO and the full Board acting jointly. In 2018 and 2017, no Board limits were exceeded.
Dedicated constraints are also in place to cover the specific risk profiles of individual businesses and legal entities. In the context of the overall risk appetite of the Group, as defined by the limits set by the Board and its Risk Committee, CARMC is responsible for allocating divisional risk limits and more specific limits deemed necessary to control the concentration of risk within individual lines of business. The divisional risk management committees and the divisional and legal entity chief risk officers are responsible for allocating risk appetite further within the organization. For this purpose, they use a detailed framework of individual risk limits designed to control risk-taking at a granular level by individual businesses and in the aggregate. The risk constraints are intended to:
- limit overall risk-taking to the Group's risk appetite;
- trigger senior management discussions with the businesses involved, risk management and governance committees in case of substantial change in the overall risk profile;
- ensure consistent risk measurement across businesses;
- provide a common framework for the allocation of resources to businesses; and
- provide a basis for protecting the Group's capital base and meeting strategic risk objectives.

The limit owners are responsible for reviewing warning triggers for risk limits. They may set warning triggers for potential limit excesses at any level lower than the approved limits as deemed appropriate after taking into account the nature of the underlying business. Strict escalation procedures apply to any limit breaches and, depending on the severity of the excess, the Group CRO or divisional chief executive officer's approval may be required. Serious excesses are highlighted in periodic Risk Committee meeting management summaries. An assessment by the disciplinary review committee and any disciplinary actions that may be taken are considered in the regular performance assessment and compensation processes.
Risk coverage and management
We use a wide range of risk management practices to address the variety of risks that arise from our business activities. Policies, processes, standards, risk assessment and measurement methodologies, risk appetite constraints, and risk monitoring and reporting are key components of our risk management practices. Our risk management practices complement each other in our analysis of potential loss, support the identification of interdependencies and interactions of risks across the organization and provide a comprehensive view of our exposures. We regularly review and update our risk management practices to ensure consistency with our business activities and relevance to our business and financial strategies. Risk management practices have evolved over time without a standardized approach within the industry, therefore comparisons across firms may not be meaningful. Our key risk types, definitions and key risk evaluation methods are summarized in the table "Key risk types overview".
It is important to both evaluate each risk type separately and assess their combined impact on the Group, which helps ensure that our overall risk profile remains within the Group-wide risk appetite.
The primary evaluation methods used to assess Group-wide quantifiable risks include economic risk capital and stress testing. Economic risk capital captures both position risk, such as market risk and credit risk, and non-position risk, such as operational risk, pension risk and certain business risks (e.g., expense risk, owned real estate risk and interest rate risk on treasury positions), and is a key component in our risk appetite framework with limits established to control aggregate risk. Stress testing also captures position and non-position risks and provides an evaluation method capable of capturing both historic and forward-looking scenarios to ensure that aggregate risks are managed within the Group-wide risk appetite also under stressed conditions.
The description of our economic risk capital methodology and our stress testing framework below is followed by a more detailed description of our key risk types.

> Refer to “Liquidity and funding management” for further information on liquidity and funding risks-related evaluation methods used in our liquidity risk management framework and for funding management.

Economic risk capital

Overview

Economic risk capital is used as a consistent and comprehensive tool for capital management, limit monitoring and performance management. Economic risk capital is our core Group-wide risk management tool for measuring and reporting the combined impact from quantifiable risks such as market, credit, operational, pension and expense risks, each of which has an impact on our capital position.

Under the Basel framework, we are required to maintain a robust and comprehensive framework for assessing capital adequacy, defining internal capital targets and ensuring that these capital targets are consistent with our overall risk profile and the current operating environment. Our economic risk capital model represents our internal view of the amount of capital required to support our business activities.

> Refer to “Capital strategy” and “Regulatory framework” in Capital management for further information on our capital management framework.

With effect from January 1, 2018, we implemented a revised economic risk capital framework. We redeveloped the position risk methodology by introducing new and enhancing previously used credit and market risk models. Our redesigned credit risk model is based on a multi-factor Monte-Carlo-simulation, compared to the single-factor model used previously. Our new market risk model incorporates new price and spread shocks for securitized products and illiquid private equity investments and uses historical simulation for equity and fixed income trading, compared to the combination of credit spread shocks and historical simulation used in previous models. In October 2018, we further developed the market risk framework, reflecting an improved recognition of hedging benefits between securitized products and underlying hedges, a recalibration of the 99.97% “gone concern” scalars for securitized products and certain traded risk, and an enhanced annualization approach. Market risks not covered by these models are captured using a risk-not-in-economic-risk-capital model, which is now also part of the market risk framework reflected in position risk. In addition, during the first quarter of 2018, we

enhanced the granularity of credit conversion factors and data feeds for securitizations in our position risk model. Our position risk categories reflect the redeveloped position risk methodology and are described in the table “Position risk categories”. In the operational risk model, we removed the US private banking losses from the data set, applied a discount to the RMBS losses to better reflect the internal view of the forward-looking risk profile and, as a result of these modifications, updated the divisional allocations. Further, in the other risks category, we improved our pension risk methodology to ensure that our pension plan assets and liabilities risk is modeled in line with the redeveloped position risk framework. Finally, we introduced an enhanced and newly calibrated correlation matrix to aggregate across all position, operational and other risk models, in order to make the correlations among risk categories more responsive to changes in the portfolio and in market conditions.
During 2018, we further embedded the new economic risk capital framework into our risk appetite and risk management framework. The new framework should enable us to better assess, monitor and manage capital adequacy and solvency risk in both “going concern” and “gone concern” scenarios. In a “going concern” scenario, we hold sufficient capital to absorb losses to ensure continuity of service. In a “gone concern” scenario, we hold sufficient capital to fund an orderly resolution without recourse to public resources.
> Refer to “Methodology and model developments” in Risk review and results – Economic risk capital review for further information.
Methodology and scope
Economic risk capital measures risks in terms of economic realities rather than regulatory or accounting rules and estimates the amount of capital needed to remain solvent and in business under extreme market, business and operating conditions over the period of one year, given our target financial strength (our long-term credit rating). Economic risk capital is set to a level needed to absorb unexpected losses at a confidence level of 99.97%. Our economic risk capital model is a set of methodologies used for measuring quantifiable risks associated with our business activities on a consistent basis. It is calculated separately for position risk (reflecting our exposure to market and credit risks), operational risk and other risks. Within each of these risk categories, risks are further divided into subcategories, for which economic risk capital is calculated using the appropriate specific methodology. Some of these methodologies are common to a number of risk subcategories, while others are tailored to the particular features of single, specific risk types included in position risk, operational risk and other risks. Economic risk capital is calculated by aggregating position, operational and other risks.
Position risk and diversification benefit
Position risk is the level of unexpected loss from our portfolio of balance sheet and off-balance sheet positions over a one-year holding period and includes market and credit risks. Position risk is calculated at a 99% confidence level for risk management purposes reflecting a “going concern” scenario. Position risk is also calculated at a 99.97% confidence level for capital management purposes reflecting a “gone concern” resolution scenario. Our position risks categories are described in the table “Position risk categories”.
To determine our overall position risk, we consider the diversification benefit across risk types. Diversification benefit represents the reduction in risk that occurs when combining different, not perfectly correlated risk types in the same portfolio and is measured as the difference between the sum of position risk for the individual risk types and the position risk calculated for the combined portfolio. Hence, position risk for the combined portfolio is non-additive across risk types and is lower than the sum of position risk of its individual risk types due to risk reduction (or benefit) caused by portfolio diversification. When analyzing position risk for risk management purposes, we look at individual risk types before and after the diversification benefit.
As part of our overall risk management, we hold a portfolio of hedges. Hedges are impacted by market movements, similar to other trading securities, and may result in gains or losses which offset losses or gains on the portfolios they were designated to hedge. Due to the varying nature and structure of hedges, these gains or losses may not wholly offset the losses or gains on the portfolios.
Operational risk
Operational risk is the risk of financial loss arising from inadequate or failed internal processes, people and systems or from external events. We use an internal model to calculate the economic capital requirement for operational risk at a 99.97% confidence level and a one-year holding period. A loss distribution approach based on historical data on internal and relevant external losses of peers is used to generate a loss distribution for a range of potential operational risk loss scenarios, such as unauthorized trading incidents, business interruption, fraud or other material business

disruptions. The parameters estimated through the quantitative model are reviewed by business experts and senior management in order to take account of the business environment and internal control factors and to reflect a forward-looking view in the estimate. The capital calculation also includes a component to reflect litigation events and insurance mitigation.

Position risk categories

	Risks captured
Credit risk	– Risk of counterparty defaults relating to investment banking credit exposures – Risk of counterparty defaults and potential changes in creditworthiness relating to private banking corporate and retail credit exposures
Non-traded credit spread risk	– Potential changes in creditworthiness relating to investment banking credit exposures
Securitized products	– Residential real estate activities, including residential mortgage-backed securities, residential mortgage loans and real estate acquired at auction – Commercial real estate activities, including commercial mortgage-backed securities, commercial loans and real estate acquired at auction – Other securitized products, including asset-backed securities and other trade receivables – Benefits from certain market risk hedges
Traded risk	– Interest rate levels and volatilities – Foreign exchange rates and volatilities – Equity prices and volatilities – Commodity prices and volatilities – Traded credit spreads – Equity risk arbitrage activities, in particular, the risk that an announced merger may not be completed – Illiquid hedge fund exposures – Life finance and litigation business activities – Risks currently not implemented in our economic risk capital models for traded risks, primarily for fixed income and equity trading, such as certain basis risks, higher order risks and cross risks between asset classes
Emerging markets country event risk	– Loss due to significant country events – Corporate counterparty defaults triggered by sovereign defaults – Risk of related disturbance in neighboring countries or countries in the same region
Equity investments	– Private equity and other illiquid equity investment exposures

Other risks

The other risks category includes the following:

Our expense risk measures the potential difference between expenses and revenues in a severe market event, excluding the elements captured by position risk and operational risk, using conservative assumptions regarding the earnings capacity and the ability to reduce the cost base in a crisis situation.

Pension risk is the risk that we, as a plan sponsor, are required to fund a deficit in employee pension schemes in an extreme event. It covers fluctuations in our pension plan assets and liabilities which can lead to potential funding shortfalls. Funding shortfalls can arise from a decline in asset values and/or an increase in the present value of liabilities. The shortfall would need to be funded using available resources. In order to recognize the potential for a funding shortfall, we apply an economic risk capital charge.

Owned real estate risk is defined as the capital at risk which arises from fluctuations in the value of buildings owned by the Group.

Foreign exchange risk is the risk arising from a currency mismatch between available economic capital and economic risk capital required.

Corporate interest rate risk is the interest rate risk on our treasury positions arising from discounting our client interest rate margins.

The impact from deferred share-based compensation awards captures the economic benefit that may result from covering our structural short obligations to deliver own shares through market purchases during times of falling market prices.

Available economic capital

Available economic capital is an internal view of the capital available to absorb losses based on the reported BIS look-through CET1 capital under Basel III, with economic adjustments applied to provide consistency with our economic risk capital. It enables a comparison between capital needs (economic risk capital) and capital resources (available economic capital).

Economic risk capital coverage ratio

Economic risk capital coverage ratio is defined as the ratio of capital available to absorb losses in a “gone concern” scenario (available economic capital) to capital needs (economic risk capital). The economic risk capital coverage ratio is primarily meant to provide an assessment of our solvency and reflects our best internal assessment of risk and loss absorbing capacity in an extreme scenario. Furthermore, the economic risk capital coverage ratio is embedded in our risk appetite framework through our capital adequacy objective. We also plan to incorporate the “going concern” economic risk capital coverage ratio into our risk appetite and risk management frameworks, to supplement the “gone concern” coverage ratio introduced in 2015.

The economic risk capital coverage ratio operates with a number of distinct bands that serve as key controls for monitoring and managing our operational solvency. An economic risk capital coverage ratio lower than 125% requires senior management review, followed by an action plan at a coverage ratio lower than 110%. Immediate actions such as risk reductions or capital measures would be triggered at a coverage ratio lower than 100%. The Board has set the minimum level for this coverage ratio at 80%.

Governance

Our economic risk capital framework is governed and maintained by a dedicated steering committee, which regularly reviews, assesses and updates the economic risk capital methodology in light of market and regulatory developments, risk management practice and organizational changes. In addition, the steering committee approves new methodologies and prioritizes the implementation for its three components (position risk, operational risk and other risks).

Stress testing framework

Overview

Stress testing or scenario analysis provides an additional approach to risk management and formulates hypothetical questions, including what would happen to our portfolio if, for example, historic or adverse forward-looking events were to occur. A well-developed stress testing framework provides a powerful tool for senior management to identify these risks and also take corrective actions to protect the earnings and capital from undesired impacts.

Stress testing is a fundamental element of our Group-wide risk appetite framework included in overall risk management to ensure that our financial position and risk profile provide sufficient resilience to withstand the impact of severe economic conditions. Stress testing results are monitored against limits, and are used in risk appetite discussions and strategic business planning and to support our internal capital adequacy assessment. Within the risk appetite framework, CARMC sets Group-wide and divisional stressed position loss limits to correspond to minimum post-stress capital ratios. Currently, limits are set on the basis of look-through BIS CET1 capital ratios. Stress tests also form an integral part of the Group's capital planning and the recovery and resolution plan (RRP) process. Within the RRP, stress tests provide the indicative scenario severity required to reach recovery and resolution capital levels.

Stress testing provides key inputs for managing the following objectives of the risk appetite framework:

Ensuring Group-wide capital adequacy on both a regulatory basis and under stressed conditions: We run a suite of scenarios on forecasted financial metrics such as revenues, expenses, pre-tax income and risk-weighted assets. The post-stress capital ratios are assessed against the risk appetite of the Group.

Maintaining stable earnings: We mainly use stress testing to quantitatively assess earnings stability risk. Earnings-loss-triggers are established and monitored to contain excessive risk-taking which could compromise our earnings stability.

We also conduct externally defined stress tests that meet the specific requirements of regulators. For example, as part of various regular stress tests and analysis, FINMA requires a semi-annual loss potential analysis that includes an extreme scenario that sees European countries experience a severe recession resulting from the worsening of the European debt crisis as well as a scenario focusing on a financial crisis in China and the US.

Methodology and scope of Group-wide stress testing

Stress tests are carried out to determine stressed position losses, earnings volatility and stressed capital ratios using historical, forward-looking and reverse stress testing scenarios. The scope of stress testing includes market, credit default, operational, business and pension risk. Stress tests also include the scenario impact on risk-weighted assets through changes to market, credit and operational components.

We use historical stress testing scenarios to consider the impact of market shocks from relevant periods of extreme market disturbance. Standardized severity levels allow comparability of severity across differing risk types. The calibration of bad day, bad week, severe event and extreme event scenarios involves the identification of the worst moves that have occurred in recent history. Severe flight to quality (SFTQ) is a key scenario used for Group-wide stress testing and risk appetite setting. It is a combination of market shocks and defaults that reflects conditions similar to what followed the 2008/2009 financial crisis. The SFTQ scenario assumes a severe crash across financial markets, along with stressed default rates.

We use forward-looking stress testing scenarios to complement historical scenarios. The forward-looking scenarios are centered on potential macroeconomic, geopolitical or policy threats. The Scenario Management Oversight Committee, comprised of internal economists, front office and representatives of the risk management and finance function, discusses the backdrop to several forward-looking scenarios. The Scenario Management Oversight Committee reviews a wide range of scenarios and selects those that are most relevant to the analysis of key macroeconomic shocks. Some examples of forward-looking scenarios include US and European country recessions, a so-called emerging markets economic "hard landing" and the impact of monetary policy changes by central banks. Various scenarios are also used to mitigate concentration risks across the entire firm, such as the credit concentration

scenario. During 2018, the Group continued to focus on the following forward-looking scenarios:

Financial sector problems in the eurozone: the markets challenge the solvency of a systemically-important bank, which puts the overall European financial sector and selected eurozone countries under acute pressure. The European economy is forced into recession. Contagion from a European recession to the US and emerging market economies is assumed to be substantial.

An emerging markets “hard landing” scenario: there is a severe economic slowdown in China driven by a wave of defaults in the private non-financial and financial sectors. The problems in China negatively impact all large emerging markets through lower commodity prices, increased capital flight and reduced intra-regional foreign trade. There is also significant contagion to the economy in the US and in Europe.

Stress scenarios for the UK and for the US: the scenarios take into account the large increase in economic policy outlook

uncertainties and the higher risk that inflation significantly accelerates, bringing about a disorderly rise in government bond yields. The UK stress scenario focuses on the risks which may materialize from the negotiations on leaving the EU. The US stress scenario focuses on the business risks which may materialize from more expansionary fiscal policies and from any shift toward more protectionist foreign trade practices.
The scenarios are reviewed and updated regularly as markets and business strategies evolve. In 2018, a one-in-three years likelihood scenario called “flight to quality lite” (FTQ Lite) was developed to reflect a scenario with a lower severity of impact than SFTQ but with a higher likelihood of occurrence. FTQ Lite is used to test the earnings robustness of the Group. In addition to these periodic scenario analyses, we also perform ad hoc scenario analyses, for example in respect of the devaluation of the Turkish lira in the first half of 2018, in connection with current events as a proactive risk management tool.
We use reverse stress testing scenarios to complement traditional stress testing and enhance our understanding of business model vulnerabilities. Reverse stress testing scenarios define a range of severe adverse outcomes and identify what could lead to these outcomes. The more severe scenarios include large counterparty failures, sudden shifts in market conditions, operational risk events, credit rating downgrades and the shutdown of wholesale funding markets.
Governance
Our stress testing framework is comprehensive and governed by a dedicated steering committee, the Scenario Steering Committee. The Scenario Steering Committee reviews the scenario methodology and approves changes to scenario frameworks. It is comprised of experts in stress methodologies representing various risk functions (market risk, liquidity risk, credit risk and operational risk) and also represents the Group divisions and major legal entities.
The Scenario Management Oversight Committee has received responsibility from CARMC for the Group-wide scenario calibration and analysis process, including the design of scenarios and the assessment and approval of scenario results. Stress tests are conducted on a regular basis and the results, trend information and supporting analysis are reported to the Board, senior management and regulators.
Market risk
Definition
Market risk is the risk of financial loss arising from movements in market risk factors. The movements in market risk factors that generate financial losses are considered to be adverse changes in interest rates, credit spreads, foreign exchange rates, equity and commodity prices and other factors, such as market volatility and the correlation of market prices across asset classes. A typical transaction or position in financial instruments may be exposed to a number of different market risk factors. Our trading portfolios (trading book) and non-trading portfolios (banking book) have different sources of market risk.
Sources of market risk
Market risks arise from both our trading and non-trading business activities. The classification of assets and liabilities into trading book and banking book portfolios determines the approach for analyzing our market risk exposure. This classification reflects the business and risk management perspective with respect to trading intent, and may be different from the classification of these assets and liabilities for financial reporting purposes.
Trading book
Market risks from our trading book relate to our trading activities, primarily in Global Markets (which includes International Trading Solutions), Asia Pacific and the Strategic Resolution Unit. Our trading book, as measured for risk management purposes, typically includes fair-valued positions only, primarily of the following balance sheet items: trading assets and trading liabilities, investment securities, other investments, other assets (mainly derivatives used for hedging, loans and real estate held-for-sale), short-term borrowings, long-term debt and other liabilities (mainly derivatives used for hedging).
We are active globally in the principal trading markets, using a wide range of trading and hedging products, including derivatives and structured products. Structured products are customized transactions often using combinations of derivatives and are executed to meet specific client or internal needs. As a result of our broad participation in products and markets, our trading strategies are correspondingly diverse and exposures are generally spread across a range of risks and locations.
The market risks associated with the entire portfolio, including the embedded derivative elements of our structured products, are actively monitored and managed on a portfolio basis as part of our overall trading book and are reflected in our VaR measures.

Banking book

Market risks from our banking book primarily relate to asset and liability mismatch exposures, equity participations and investments in bonds and money market instruments. Our businesses and the treasury function have non-trading portfolios that carry market risks, mainly related to changes in interest rates but also to changes in foreign exchange rates, equity prices and, to a lesser extent, commodity prices. Our banking book, as measured for risk management purposes, includes a majority of the following balance sheet items: loans, central bank funds sold, securities purchased under resale agreements and securities borrowing transactions, cash and due from banks, brokerage receivables, due to banks, customer deposits, central bank funds purchased, securities sold under repurchase agreements and securities lending transactions, brokerage payables, selected positions of short-term borrowings and long-term debt, hedging instruments and other assets and liabilities not included in the trading portfolio.

We assume interest rate risks in our banking book through lending and deposit-taking, money market and funding activities, and the deployment of our consolidated equity as well as other activities, including market making and trading activities involving banking book positions at the divisional level. Savings accounts and many other retail banking products have no contractual maturity date or direct market-linked interest rate and are risk-managed on a pooled basis using replication portfolios on behalf of our private banking, corporate and institutional businesses. The replication portfolios approximate the interest rate characteristics of the underlying products. This particular source of market risk is monitored on a daily basis.
The majority of non-trading foreign exchange risk is associated with our net investment in foreign branches, subsidiaries and affiliates denominated in currencies other than Swiss francs. This exposure is actively managed to hedge our capital and leverage ratios and is governed within our risk appetite framework.
Evaluation and management of market risk
We use market risk measurement and management methods capable of calculating comparable exposures across our many activities and employ focused tools that can model unique characteristics of certain instruments or portfolios. The tools are used for internal market risk management, internal market risk reporting and external disclosure purposes. Our principal market risk measurement for the trading book is VaR. In addition, our market risk exposures are reflected in scenario analysis, as included in our stress testing framework, position risk, as included in our economic risk capital, and sensitivity analysis. Each market risk measurement aims to estimate the potential loss that we can incur due to an adverse market movement with varying degrees of severity. VaR, scenario analysis, position risk and sensitivity analysis complement each other in our market risk assessment and are used to measure market risk at the Group level. Our risk management practices are regularly reviewed to ensure they remain appropriate.
The Group's overall limit framework encompasses specific limits on a large number of different products and risk type concentrations at the Group, divisional and legal entity levels. For example, there are controls over consolidated trading exposures, the mismatch of interest-earning assets and interest-bearing liabilities, private equity and seed capital. Risk limits are cascaded to lower organizational levels within the businesses. Risk limits are binding and generally set close to the planned risk profile to ensure that any meaningful increase in risk exposures is promptly escalated. The Group's Organizational Guidelines and Regulations and the Group's policies determine limit-setting authority, temporary modification of such limits in certain situations and required approval authority at the Group, Bank, divisional, business and legal entity levels for any instances that could cause such limits to be exceeded. For example, with respect to market risk limits, the divisional chief risk officers and certain other members of senior management have the authority to temporarily increase the divisional risk committee limits by an approved percentage for a specified maximum period. Market risk limit excesses are subject to a formal escalation procedure and the incremental risk associated with the excess must be approved by the responsible risk manager within market risk management, with escalation to senior management if certain thresholds are exceeded. The majority of the market risk limits are monitored on a daily basis. Limits for which the inherent calculation time is longer or for which the risk profile changes less often are monitored less frequently depending on the nature of the limit (weekly, monthly or quarterly). For example, limits relating to illiquid investments are monitored on a monthly basis. The business is mandated to remediate market risk limit excesses within three business days upon notification. Remediation actions which take longer than three days are subject to an out-of-policy remediation process with senior management escalation. All limit excesses identified in 2018 were resolved in line with applicable policy requirements.
For the purpose of this disclosure, market risk in the trading book is mainly measured using VaR and market risk in our banking book is mainly measured using sensitivity analysis on related market factors.
Value-at-risk
VaR is a risk measure which quantifies the potential loss on a given portfolio of financial instruments over a certain holding period and that is expected to occur at a certain confidence level. VaR can be calculated for all financial instruments with adequate price histories. Positions are aggregated by risk category rather than by product. For example, interest rate risk VaR captures potential losses driven by fluctuations of interest rates affecting a wide variety of interest rate products (such as interest rate and foreign exchange swaps or swaptions) as well as other products (such as foreign exchange, equity and commodity options) for which interest rate risk is not the primary market risk driver. The use of VaR allows the comparison of risk across different businesses. It also provides a means of aggregating and netting a variety of positions within a portfolio to reflect actual correlations between different assets, applying the concept of portfolio diversification benefit described above for position risk. Our VaR model is

designed to take into account a comprehensive set of risk factors across all asset classes.

VaR is an important tool in risk management and is used for measuring quantifiable risks from our activities exposed to market risk on a daily basis. In addition, VaR is one of the main risk measures for limit monitoring, financial reporting, calculation of regulatory capital and regulatory backtesting.

Our VaR model is predominantly based on historical simulation which derives plausible future trading losses from the analysis of historical movements in market risk factors. The model is responsive to changes in market conditions through the use of exponential weighting, which applies a greater weight to more recent events, and the use of expected shortfall equivalent measures to ensure all extreme adverse events are considered in the model. We use the same VaR model for risk management (including limit monitoring and financial reporting), regulatory capital calculation and regulatory backtesting purposes, although confidence level,

holding period and the scope of financial instruments considered can be different.
For our risk management VaR, we use a two-year historical dataset, a one-day holding period and a 98% confidence level. This means that we would expect daily mark-to-market trading losses to exceed the reported VaR not more than twice in 100 trading days over a multi-year observation period. This measure captures risks in trading books only and includes securitization positions. It is closely aligned to the way we consider the risks associated with our trading activities and to the way we measure regulatory VaR for capital purposes. For internal risk management and limit monitoring purposes we add certain banking book positions to the scope of the risk management VaR calculation.
For regulatory capital purposes, we operate under the Basel III market risk framework which includes the following components for the calculation of regulatory capital: regulatory VaR, stressed VaR, IRC, RNIV and stressed RNIV.
The regulatory VaR for capital purposes uses a two-year historical dataset, a ten-day holding period and a 99% confidence level. This measure captures all risks in the trading book and foreign exchange and commodity risks in the banking book and excludes securitization positions, as these are treated under the securitization approach for regulatory purposes. Stressed VaR replicates the regulatory VaR calculation on the Group's current portfolio over a continuous one-year observation period that results in the highest VaR. The historical dataset starting in 2006 avoids the smoothing effect of the two-year dataset used for our risk management and regulatory VaR, allows for the capturing of a longer history of potential loss events and helps reduce the pro-cyclicality of the minimum capital requirements for market risk. IRC is a regulatory capital charge for default and migration risk on positions in the trading books. RNIV captures a variety of risks, such as certain basis risks, higher order risks and cross risks between asset classes, not currently captured by the VaR model for example due to lack of sufficient or accurate data.
Backtesting VaR uses a two-year historical dataset, a one-day holding period and a 99% confidence level. This measure captures risks in the trading book and includes securitization positions. Backtesting VaR is not a component used for the calculation of regulatory capital but may have an impact through the regulatory capital multiplier if the number of backtesting exceptions exceeds regulatory thresholds.
Assumptions used in our market risk measurement methods for regulatory capital purposes are compliant with the standards published by the BCBS and other international standards for market risk management. We have approval from FINMA, as well as from other regulators for our subsidiaries, to use our regulatory VaR model in the calculation of market risk capital requirements. Ongoing enhancements to our VaR methodology are subject to regulatory approval or notification depending on their materiality, and the model is subject to regular reviews by regulators and the Group's independent model risk management function.
Information required under Pillar 3 of the Basel framework related to risk is available on our website.
> Refer to "credit-suisse.com/regulatorydisclosures" for further information.
> Refer to "Risk-weighted assets" in Capital management for further information on the use of our regulatory VaR model in the calculation of trading book market risk capital requirements.
VaR assumptions and limitations
The VaR model uses assumptions and estimates that we believe are reasonable, but VaR only quantifies the potential loss on a portfolio based on historical market conditions. The main assumptions and limitations of VaR as a risk measure are:

- VaR relies on historical data to estimate future changes in market conditions. Historical scenarios may not capture all potential future outcomes, particularly where there are significant changes in market conditions, such as increases in volatilities and changes in the correlation of market prices across asset classes;
- VaR provides an estimate of losses at a specified confidence level; the use of an expected shortfall equivalent measure allows all extreme adverse events to be considered in the model;
- VaR is based on either a one-day (for internal risk management, backtesting and disclosure purposes) or a ten-day (for regulatory capital purposes) holding period. This assumes that risks can be either sold or hedged over the holding period, which may not be possible for all types of exposure, particularly during periods of market illiquidity or turbulence; it also assumes that risks will remain in existence over the entire holding period; and
- VaR is calculated using positions held at the end of each business day and does not include intra-day changes in exposures.

To mitigate some of the VaR limitations and estimate losses associated with unusually severe market movements, we use other metrics designed for risk management purposes and described above, including stressed VaR, position risk and scenario analysis.

For some risk types there can be insufficient historical data for a calculation within the Group's VaR model. This often happens because underlying instruments may have traded only for a limited time. Where we do not have sufficient market data, either market data proxies or extreme parameter moves for these risk types are used. Market data proxies are selected to be as close to the underlying instrument as possible. Where neither a suitable market dataset nor a close proxy is available, extreme parameter moves are used.

We use a risk factor identification process to ensure that risks are identified and measured correctly. There are two parts to this process. First, the market data dependency approach systematically determines the risk requirements based on data inputs used by front-office pricing models and compares this with the risk types that are captured by the Group's VaR model and the RNIV framework. Second, the product-based approach is a qualitative analysis of product types undertaken in order to identify the risk types that those product types would be exposed to. A comparison is

again made with the risk types that are captured in the VaR and RNIV frameworks. This process identifies risks that are not yet captured in the VaR model or the RNIV framework. A plan for including these risks in one or the other framework can then be devised. RNIV is captured in our economic risk capital framework.

VaR backtesting

Backtesting is one of the techniques used to assess the accuracy and performance of the VaR model used by the Group for risk management and regulatory capital purposes and serves to highlight areas of potential enhancements. Backtesting is used by regulators to assess the adequacy of regulatory capital held by the Group, calculated using VaR.

Backtesting involves comparing the results produced by the VaR model with the hypothetical trading revenues on the trading book. Hypothetical trading revenues are defined in compliance with regulatory requirements and aligned with the VaR model output by excluding (i) non-market elements (such as fees, commissions, cancellations and terminations, net cost of funding and credit-related valuation adjustments) and (ii) gains and losses from intra-day trading. A backtesting exception occurs when a hypothetical trading loss exceeds the daily VaR estimate.

For capital purposes and in line with BIS requirements, FINMA increases the capital multiplier for every regulatory VaR backtesting exception above four in the prior rolling 12-month period, resulting in an incremental market risk capital requirement for the Group. VaR models with less than five backtesting exceptions are considered by regulators to be classified in a defined “green zone”. The “green zone” corresponds to backtesting results that do not themselves suggest a problem with the quality or accuracy of a bank’s model.

VaR governance

Like other models, our VaR model is subject to internal governance including validation by a team of modeling experts independent from the model developers. Validation includes identifying and testing the model’s assumptions and limitations, investigating its performance through historical and potential future stress events, and testing that the live implementation of the model behaves as intended. We employ a range of different control processes to help ensure that the models used for market risk remain appropriate over time. As part of these control processes, a dedicated Market Risk Quantitative Steering Committee meets regularly to review model performance and approve any new or amended models.

Sensitivity analysis

Market risks associated with our banking book positions are measured, monitored and limited using several tools, including economic risk capital, scenario analysis, sensitivity analysis and VaR. For the purpose of this disclosure, the aggregated market risks associated with our banking book positions are measured using sensitivity analysis. Sensitivity analysis is a technique used to determine how different values of an independent variable will impact a particular dependent variable under a given set of assumptions. The sensitivity analysis for the banking book positions measures the potential change in economic value resulting from specified hypothetical shocks to market factors (e.g., interest rates). It is not a measure of the potential impact on reported earnings in the current period, since the banking book positions generally are not marked to market through the income statement.

Credit and debit valuation adjustments

Credit valuation adjustments are modifications to the measurement of derivative assets used to reflect the credit risk of counterparties. Debit valuation adjustments are modifications to the measurement of derivative liabilities used to reflect an entity’s own credit risk. VaR excludes the impact of changes in both counterparty and our own credit spreads on derivative products.

Credit risk

Definition

Credit risk is the risk of financial loss arising as a result of a borrower or counterparty failing to meet its financial obligations or as a result of deterioration in the credit quality of the borrower or counterparty. In the event of a default, a bank generally incurs a loss equal to the amount owed by the debtor, less any recoveries from foreclosure, liquidation of collateral, the restructuring of the debtor company or other recovery proceeds from the debtor. A change in the credit quality of a counterparty has an impact on the valuation of assets measured at fair value, with valuation changes recorded in the consolidated statements of operations.

Sources of credit risk

Credit risk arises from the execution of our business strategy in the divisions and reflects exposures directly held in the form of lending products (including loans and credit guarantees) or derivatives, shorter-term exposures such as

underwriting commitments, and settlement risk related to the exchange of cash or securities outside of typical delivery versus payment structures. For the divisions, the main sources of credit risk are presented in the table “Sources of credit risk by division”.

Evaluation and management of credit risk

We use a credit risk management framework which provides for the consistent evaluation, measurement, and management of credit risk across the Group. Assessment of credit risk exposures for internal risk estimates and risk-weighted assets are calculated based on PD, LGD and EAD models approved by our main regulators. The credit risk framework incorporates the following core elements:

- counterparty and transaction assessments: application of internal credit ratings (PD), assignment of LGD and EAD values in relation to counterparties and transactions;
- credit limits: establishment of credit limits, subject to approval by delegated authority holders, to serve as primary risk controls on exposures and to prevent undue risk concentrations;

Sources of credit risk by division

Division	Main sources of credit risk
Swiss Universal Bank	Lending against real estate and financial collateral as well as commercial lending and consumer finance
International Wealth Management	Lending against real assets (e.g., real estate, ships, aircraft) and financial collateral
Asia Pacific	Lending to corporate clients and lending to private clients against real estate and financial collateral
Global Markets	Corporate lending, derivatives and securities financing activities with institutional clients and counterparties, and asset finance
Investment Banking & Capital Markets	Loan underwriting commitments and corporate lending
Strategic Resolution Unit [1]	Legacy lending and derivatives exposures
Corporate Center	Money market exposures through balance sheet management

1 Beginning in 2019, the Strategic Resolution Unit has ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit and will be separately disclosed within the Corporate Center.

- risk mitigation: active management of risk mitigation provided in relation to credit exposures, including through the use of cash sales, participations, collateral or guarantees or hedging instruments; and
- credit monitoring, impairments and provisions: processes to support the ongoing monitoring and management of credit exposures, supporting the early identification of deterioration and any subsequent impact.

Counterparty and transaction assessments

We evaluate and assess counterparties and clients to whom we have credit exposures, primarily using internal rating models that have been approved by our main regulators. We use these models to determine internal credit ratings which are intended to reflect the PD of each counterparty. For a majority of counterparties and clients, internal ratings are based on internally developed statistical models which are backtested against internal experience, validated by a function independent of model development, and approved by our main regulators for application in the regulatory capital calculation under the A-IRB approach of the Basel framework. Findings from backtesting serve as a key input for any future rating model developments.

Internal statistical rating models are based on a combination of quantitative factors (e.g., financial fundamentals and market data) and qualitative factors (e.g., credit history and economic trends).

For the remaining counterparties where statistical rating models are not used, internal credit ratings are assigned on the basis of a structured expert approach using a variety of inputs such as peer analyses, industry comparisons, external ratings and research as well as the judgment of expert credit officers.

In addition to counterparty ratings, credit risk management also assesses the risk profile of individual transactions and assigns transaction ratings which reflect specific contractual terms such as seniority, security and collateral.

Internal credit ratings may differ from external credit ratings, where available, and are subject to periodic review. Our internal ratings are mapped to a PD band associated with each rating which is calibrated to historical default experience using internal data and external data sources. Our internal masterscale for credit ratings is shown in the table “Credit Suisse counterparty ratings”.

LGD estimates the size of loss that may arise on a credit exposure in the event of a default. We assign LGD on credit exposures based on the structure of the transaction and credit mitigation such as collateral or guarantees. The LGD values are calibrated to reflect a downturn macroeconomic environment and include recovery costs.

EAD represents the expected amount of credit exposure in the event of a default and reflects the current drawn exposure and an expectation regarding the future evolution of the credit exposure. For loan exposures, a credit conversion factor is applied to project the additional drawn amount between current utilization and the approved facility amount. The credit exposure related to traded products such as derivatives is based on a simulation using statistical models.

We use internal rating methodologies consistently for the purposes of approval, establishment and monitoring of credit limits and credit portfolio management, credit policy, management reporting, risk-adjusted performance

measurement, economic risk capital measurement and allocation and financial accounting.

Credit limits

Our credit exposures are managed at the counterparty and ultimate parent level in accordance with credit limits which apply in relation to current and potential future exposures. Credit limits to counterparties and groups of connected companies are subject to formal approval under delegated authority within the divisions where the credit exposures are generated, and where significant in terms of size or risk profile, are subject to further escalation to the Group chief credit officer or Group CRO.

Credit Suisse counterparty ratings

Ratings	PD bands (%)	Definition	S&P	Fitch	Moody's	Details
AAA	0.000–0.021	Substantially risk free	AAA	AAA	Aaa	Extremely low risk, very high long-term stability, still solvent under extreme conditions
AA+	0.021–0.027	Minimal risk	AA+	AA+	Aa1	Very low risk, long-term stability,
AA	0.027–0.034		AA	AA	Aa2	repayment
AA-	0.034–0.044		AA-	AA-	Aa3	sources sufficient under lasting adverse conditions, extremely high medium-term stability
A+	0.044–0.056	Modest risk	A+	A+	A1	Low risk, short- and medium-term stability,
A	0.056–0.068		A	A	A2	small adverse
A-	0.068–0.097		A-	A-	A3	developments can be absorbed long term, short- and medium-term solvency preserved in the event of serious difficulties
BBB+	0.097–0.167	Average risk	BBB+	BBB+	Baa1	Medium to low risk, high short-term
BBB	0.167–0.285		BBB	BBB	Baa2	stability, adequate
BBB-	0.285–0.487		BBB-	BBB-	Baa3	substance for medium-term survival, very stable short term
BB+	0.487–0.839	Acceptable risk	BB+	BB+	Ba1	Medium risk, only short-term stability, only
BB	0.839–1.442		BB	BB	Ba2	capable of
BB-	1.442–2.478		BB-	BB-	Ba3	absorbing minor adverse developments in the medium term, stable in the short term, no increased credit risks expected within the year
B+	2.478–4.259	High risk	B+	B+	B1	Increasing risk, limited capability to absorb
B	4.259–7.311		B	B	B2	further unexpected negative developments
B-	7.311–12.550		B-	B-	B3	
CCC+	12.550–21.543	Very high risk	CCC+	CCC+	Caa1	High risk, very limited capability to absorb
CCC	21.543–100.00		CCC	CCC	Caa2	further unexpected negative developments
CCC-	21.543–100.00		CCC-	CCC-	Caa3	
CC	21.543–100.00		CC	CC	Ca	
C	100	Imminent or actual loss	C	C	C	Substantial credit risk has materialized, i.e., counterparty is distressed and/or non-performing. Adequate specific provisions must be made as further adverse developments will result directly in credit losses.
D1	Risk of default has materialized		D	D		
D2						

Transactions rated C are potential problem loans; those rated D1 are non-performing assets and those rated D2 are non-interest earning.

In addition to counterparty and ultimate parent exposures, credit limits and tolerances are also applied at the portfolio level to monitor and manage risk concentrations such as to specific industries, countries or products. In addition, credit risk concentration is regularly supervised by credit and risk management committees.

Risk mitigation

We actively manage our credit exposure by taking financial and non-financial collateral supported by enforceable legal documentation, as well as by utilizing credit hedging techniques. Financial collateral in the form of cash,

marketable securities (e.g., equities, bonds or funds) and guarantees serves to mitigate the inherent risk of credit loss and to improve recoveries in the event of a default. Financial collateral is subject to controls on eligibility and is supported by frequent market valuation depending on the asset class to ensure exposures remain adequately collateralized. Depending on the quality of the collateral, appropriate haircuts are applied for risk management purposes.

Non-financial collateral such as residential and commercial real estate, tangible assets (e.g., ships or aircraft), inventories and commodities are valued at the time of credit approval and periodically thereafter depending on the type of credit exposure and collateral coverage ratio.

In addition to collateral, we also utilize credit hedging in the form of protection provided by single-name and index credit default swaps as well as structured hedging and insurance products. Credit hedging is used to mitigate risks arising from the loan portfolio, loan underwriting exposures and counterparty credit risk. Hedging is intended to reduce the risk of loss from a specific counterparty default or broader downturn in markets that impact the overall credit risk portfolio. Credit hedging contracts are typically bilateral or centrally cleared derivative transactions and are subject to collateralized trading arrangements. We evaluate hedging risk mitigation to ensure that basis or tenor risk is appropriately identified and managed.

In addition to collateral and hedging strategies, we also actively manage our loan portfolio and may sell or sub-participate positions in the loan portfolio as a further form of risk mitigation.

Credit monitoring, impairments and provisions

A rigorous credit quality monitoring process provides an early identification of possible changes in the creditworthiness of clients and includes regular asset and collateral quality reviews, business and financial statement analysis, and relevant economic and industry studies. Regularly updated watch lists and review meetings are used for the identification of counterparties that could be subject to adverse changes in creditworthiness.

In the event of a default, credit exposures are transferred to recovery management functions within credit risk management and are subject to formal reporting to the quarterly recovery review committee. Changes in the exposure profile and expectations for recovery form the basis to determine the allowance for credit losses which are discussed with the Group chief credit officer. Any decision to make full or partial write-offs require the approval of the Group chief credit officer.

The review of the credit quality of clients and counterparties does not depend on the accounting treatment of the asset or commitment. Our credit portfolio & provisions review committee regularly reviews the appropriateness of allowances for credit losses.

Changes in the credit quality of loans held at fair value are reflected in valuation changes recorded directly in revenues, and therefore are not part of the impaired loans balance which only includes loans valued on an amortized cost basis. Impaired transactions are further classified as potential problem exposure, non-performing exposure, non-interest-earning exposure or restructured exposure, and the exposures are generally managed within credit recovery units.
We maintain specific valuation allowances on loans valued at amortized cost, which we consider a reasonable estimate of losses identified in the existing credit portfolio. We provide for loan losses based on a regular and detailed analysis of all counterparties, taking collateral value into consideration, where applicable. If uncertainty exists as to the repayment of either principal or interest, a specific valuation allowance is either created or adjusted accordingly. The specific allowance for loan losses is revalued by Group credit risk management at least annually or more frequently depending on the risk profile of the borrower or credit-relevant events.
An inherent loss allowance is estimated for all loans not specifically identified as impaired and that, on a portfolio basis, are considered to contain inherent losses. The method for determining the inherent loss in the lending portfolios of Global Markets and Investment Banking & Capital Markets is based on a market-implied model using long-term industry-wide historical default and recovery data taking into account the credit rating and industry of each counterparty. A separate component of the calculation reflects the current market conditions in the allowance for loan losses. Depending on the nature of the exposures, this method may also be applied for the lending portfolios in Swiss Universal Bank, International Wealth Management, Asia Pacific and the Strategic Resolution Unit. For all other exposures, inherent losses in the lending portfolios of these divisions are determined based on current internal risk ratings, collateral and exposure structure, applying historical default and loss experience in the ratings and loss parameters. Qualitative adjustments to reflect current market conditions or any other factors not captured by the model are approved by management and reflected in the allowance for loan losses. A provision for inherent losses on off-balance sheet lending-related exposure, such as contingent liabilities and irrevocable commitments, is also determined, using a methodology similar to that used for the loan portfolio.
Credit risk governance
Credit risk is managed and controlled by Group credit risk management, an independent function within the risk management area and governed by a comprehensive framework of policies and procedures. Key processes are reviewed through supervisory checks on a regular basis by credit risk management, including the Group chief credit officer.
The Group chief credit officer has established an executive governance and change committee to support overall management and oversight of the credit risk management function. The committee is comprised of senior personnel of key functions within credit risk management and divisional chief credit officers. The governance framework is based on a committee structure covering key areas of the credit risk framework including the credit risk appetite committee, credit risk policy committee, credit risk controls committee and various project and change related governance committees. The governance framework ensures appropriate oversight of the global credit risk management function and the maintenance of required global standards for the management of the Group’s credit exposure.
Credit risk review
Governance and supervisory checks within credit risk management are supplemented by the credit risk review function. The credit risk review function is independent from credit risk management with a direct functional reporting line to the Risk Committee Chair, administratively reporting to the Group CRO. Credit risk review’s primary responsibility is to provide timely and independent assessments of the Group’s credit exposures and credit risk management processes and practices. Any findings and agreed actions are reported to senior management and, as necessary, to the Risk Committee.
Model risk
Like most other financial firms, we rely on advanced quantitative models across all business lines and legal entities to support a broad range of applications, including estimating various forms of financial risk, valuation of securities, stress testing, assessing capital adequacy, providing wealth management services to clients and to meet various reporting requirements.
Definition and sources of model risk
Model risk is the risk of adverse consequences from decisions made based on model results that may be incorrect, misinterpreted or used inappropriately. All quantitative models are imperfect approximations that are subject to

varying degrees of uncertainty in their output depending on, among other factors, the model's complexity and its intended application. As a result, modeling errors are unavoidable and can result in inappropriate business decisions, financial loss, regulatory and reputational risk and incorrect or inadequate capital reporting. Model errors, intrinsic uncertainty and inappropriate use are the primary contributors to aggregate, Group-wide model risk.

Evaluation and management of model risk

Through our global model risk management and governance framework we seek to identify, measure and mitigate all significant risks arising from the use of models embedded within our global model ecosystem. Model risks can then be mitigated through a well-designed and robust model risk management framework, encompassing both model governance policies and procedures in combination with model validation best practices.

Robust model risk management is crucial to ensuring that the Group's model risk is assessed and managed in order to remain within a defined model risk appetite by focusing on identification, measurement and resolution of model limitations. Under the Group's model governance policies, the model risk management function validates and approves all new models and material changes to existing models before their implementation, in compliance with standards established by regulators. Developers, owners and model supervisors are responsible for identifying, developing, implementing and testing their models. Model supervisors are responsible for ensuring that models are submitted to model risk management for validation and approval and entered into the Group's model inventory. The model risk management function is structured to be independent from model users, developers and supervisors.
A rigorous validation practice should ensure that models are conceptually sound, correctly implemented by the model owners and developers and functioning as intended. To accomplish this, model risk management deploys a team of objective, well-informed subject matter experts (the model validators) who have the necessary skills and knowledge to pose effective challenge to all classes of models as a guiding principle for mitigating model risk.
Under the Group model governance policies, all models are risk-tiered according to an internal scoring method that combines complexity and materiality to assign models into one of four risk tiers. These rating tiers are used to prioritize models and allocate resources for initial validations, annual reviews and ongoing monitoring.
Governance
Governance is an important part of model risk management. Various model review committees within model risk management prepare aggregate model risk reports that serve to identify concentrations of model risk and to make recommendations for remediation. These reports are submitted regularly to a dedicated model risk governance committee which escalates issues as necessary to the Group's Model Risk Steering Committee and the Board's Risk Committee.
Model risk management reviews models annually, reports model limitations to key stakeholders, tracks remediation plans for validation findings and reports on model risk tolerance and metrics to senior management. Model risk management oversees controls to support a complete and accurate Group-wide model inventory and performs annual attestations affirming the completeness and accuracy of its model inventory.
Operational and compliance risk
The Group is required to have an adequate and effective risk and control framework in place to manage operational and compliance risks. Building on established, independent operational and compliance risk frameworks, the ERCF further integrates these frameworks and harmonizes the related processes in the Group recognizing the commonality and prevalence of operational and compliance risk in the non-financial risk domain. The ERCF establishes a consistent, unified approach to non-financial risk and control identification and assessment and sets common minimum standards across the Group for each key component with regard to processes and the policy framework.
Operational risk
Operational risk is the risk of financial loss arising from inadequate or failed internal processes, people or systems, or from external events. Operational risk does not include strategic and reputational risks. However, some operational risks can lead to reputational issues and as such operational and reputational risks may be closely linked.
Operational risk is inherent in most aspects of our business, including the systems and processes that support our activities. It comprises a large number of disparate risks that can manifest in a variety of ways. Examples of operational risk include the risk of damage to physical assets, business disruption, failures relating to third-party processes, data integrity and trade processing, cyber attacks and fraudulent or unauthorized transactions. Operational risk can arise from human error, inappropriate conduct, failures in systems, processes and controls, deliberate attack or natural and man-made disasters.
In addition to managing and mitigating operational risks under the ERCF through business- and risk-related processes and organization as described below under "The enterprise risk and control framework", we also transfer the risk of potential loss from certain operational risks to third-party insurance companies in certain instances.
Compliance and regulatory risk
Compliance and regulatory risk is the risk from the failure to comply with laws, regulations, rules or market standards that may have a negative effect on our franchise and clients we serve. It includes the risk that changes in laws, regulations, rules or market standards may limit our activities and have a negative effect on our business or our ability to implement strategic initiatives, or can result in an increase in operating costs for the business or make our products and services more expensive for clients. Examples of sources of compliance risks include cross-border activities, the

risk of money laundering, improper handling of confidential information, conflicts of interest, improper gifts and entertainment and failure in duties to clients.

The enterprise risk and control framework

To effectively manage operational and compliance risks, the Group-wide ERCF was introduced in 2016 focusing on the early identification, recording, assessment, monitoring, prevention and mitigation of these risks, as well as timely and meaningful management reporting. Over the past three years, we have further improved the integration of previously separate operational risk processes, providing a more coherent and systematic approach to managing all aspects of the operational risk landscape. Under the ERCF, we integrated the operational risk framework and all of

its components with the compliance risk components to further harmonize our approach to non-financial risk. The assessment processes for operational and compliance risks are closely coordinated, resulting in an enhanced risk and control self-assessment (RCSA) that covers both risk types in a more consistent manner. Also, standardized Group-wide role descriptions define the responsibilities for identifying, assessing, reporting and managing risks across the organization. In 2018, continued progress was made in rolling out a systematic key control activities framework as part of the ERCF. This framework applies consistent standards and approaches to the identification, documentation and assessment of key controls across the Group.

The ERCF provides a structured approach to managing operational and compliance risks. It seeks to apply consistent standards and techniques for evaluating risks across the Group while providing individual businesses with sufficient flexibility to tailor specific components to their own needs, as long as they meet Group-wide minimum standards. The main components of the ERCF are described below:

Governance and policies are fundamental to the ERCF. Effective governance processes establish clear roles and responsibilities for managing operational and compliance risk and define appropriate escalation processes for outcomes that are outside expected levels. We utilize a comprehensive set of policies and procedures that set out how employees are expected to conduct their activities.

Each business area takes responsibility for its operational and compliance risks and the provision of adequate resources and procedures for the management of those risks. Businesses are supported by designated second line of defense operational risk and compliance teams that are responsible for independent risk oversight, methodologies, tools and reporting within their areas as well as working with management on any operational and compliance risk issues that arise. Businesses and relevant control functions meet regularly to discuss operational and compliance risk issues and identify required actions to mitigate risks.

The operational risk management and compliance functions are jointly responsible for setting minimum standards with policies and procedures for operational and compliance risks. This includes ensuring the cohesiveness of policies, tools and practices throughout the Group particularly with regard to the identification, evaluation, mitigation, monitoring and reporting of these risks.

Operational and compliance risk exposures, metrics, issues and remediation efforts are discussed at quarterly CARMC meetings of the internal control system cycle and at divisional operational risk and compliance management committee meetings, which have senior representatives from all relevant functions.

ERCF risk appetite determines our approach to risk-taking and articulates the motivations for taking, accepting or avoiding certain types of risks or exposures. Senior management expresses their operational and compliance risk appetite in terms of quantitative tolerance levels that apply to operational risk incidents (which may also arise due to compliance issues) and qualitative statements covering outcomes that should be avoided. Senior management also defines market area and client risk appetites. In 2018, we further enhanced our conduct risk appetite. The risk appetites are defined with the relevant risk management committees in agreement with the operational risk management and compliance functions.

ERCF risk taxonomy represents a unified and standardized catalogue of inherent non-financial risk definitions across operational and compliance risk. It provides a consistent approach to the identification and classification of these risks across the Group.

ERCF key controls are documented and assessed under a common controls assessment framework, ensuring that key controls are identified, documented, executed and assessed consistently and comprehensively, with a focus on the Group's most significant risks and associated key controls. We utilize a comprehensive set of internal controls that are designed to ensure that our activities follow agreed policies and that processes operate as intended. Key controls are subject to independent testing to evaluate their effectiveness. The results of these tests are considered by other ERCF components, such as in the RCSA process.

ERCF metrics are risk and control indicators that are used to monitor identified operational risks, compliance risks and controls over time. A key risk indicator is defined as a metric used to provide early warning of increasing risk exposure and can be backward and forward looking in nature. A key control indicator is defined as a metric that assesses and monitors the effectiveness of one or several controls. Minimum standards apply to the identification, selection, risk mapping approval, monitoring and escalation of metrics that are linked to ERCF risk appetite and top ERCF risks which are reported to the CARMC internal controls system cycle and divisional, functional or legal entity risk management committees. Key risk and control indicators may also be used as inputs into scenario analysis and capital allocation.

Incidents describes the process in which we systematically collect, analyze and report data on operational and compliance risk incidents to ensure that we understand the reasons why they occurred and how controls can be improved to reduce the risk of future incidents. We focus both on incidents that result in economic losses and on events that provide information on potential control gaps, even if no losses occurred. We also collect and utilize available data on incidents at relevant peer firms to identify potential risks that may be relevant in the future, even if they have not impacted the Group. Incident data is also a key input for our operational risk capital models and other analytics.

Enterprise risk and control assessment consolidates the assessment, review and challenge activities for operational, compliance and legal risks across all divisions and functions into a single framework and consists of the elements RCSA, compliance risk assessment and any associated legal risk assessment:

Risk and control self-assessments are comprehensive, bottom-up assessments of the key operational and compliance risks in each business and control function. The process of preparing RCSAs comprises a self-assessment of the relevant business line or functional risk profile based on the Group-wide ERCF risk taxonomy classifying risks under a standardized approach. It covers an assessment of the inherent risks of each business and control function, provides an evaluation of the effectiveness of the controls in place to mitigate these risks, determines the residual risk ratings and requires a decision to either accept or remediate any residual risks. In the case of remediation, mitigating actions are defined and approved by management. While these are self-assessments, they are subject to independent review and challenge by relevant risk management functions to ensure that they have been conducted appropriately. RCSAs utilize other components of the ERCF, such as ERCF metrics and incidents, and they generate outputs that are used to manage and monitor risks.

Compliance risk assessment is the Group's formal, proactive dynamic process which provides the framework for the independent second line compliance function to formally assess the overall compliance and regulatory risks associated with a particular business unit or business activity. The results are used to identify potential or actual areas of risk in the business which also assists compliance management in planning the compliance objectives to mitigate risks identified. This risk assessment consists of an analysis of the inherent risk and control effectiveness aligned to the compliance risk categories and is performed at the level of a risk unit. Quantitative metrics are leveraged wherever possible, supplementing the qualitative assessments. Upon completion of the assessment, overall risk unit ratings are established through a compliance divisional and Group-wide review and mitigating actions are identified as appropriate. The results of the compliance risk assessment are presented to the Board and the Group's Audit Committee.

Legal risk assessment is a sub-assessment of the Group's RCSA with the objective to conduct an enhanced assessment of legal risks across the Group. The legal risk assessment is based on the principles defined for the RCSA program. The General Counsel function reviews the results of the legal risk assessments performed by business units across the Group. The legal risk assessment complements the RCSA process in providing an independent review and challenge process by the second line of defense.

Top ERCF risks are identified at the Group, divisional and corporate function levels and represent the most significant risks requiring senior management attention. They are generated through a combination of top-down

assessment by senior management and a bottom-up process collating the main themes arising from the RCSA and compliance risk assessment processes. Where appropriate, remediation plans are put in place with ownership by senior management.

Issues and action management encompasses a structured approach to responding to operational and compliance risk incidents and breaches of ERCF quantitative and qualitative risk appetite or metrics, as well as continuous monitoring of remediation actions against identified control issues. It is applicable to business divisions and corporate functions globally. Further, the compliance and regulatory responses function consolidates and monitors Group-wide issues and actions including audit, regulatory, self-identified and second line identified issues and actions. The operational risk incident management component includes a defined process for identifying, categorizing, investigating, escalating and remediating incidents. These reviews seek to assess the causes of control weaknesses, establish appropriate remediation actions and ascertain whether events have implications for other businesses or could have a potential impact in the future. They can result in recommendations to impose restrictions on businesses while operational risk management processes and

controls are improved. The breach component provides a methodology for evaluating breaches of quantitative and qualitative ERCF risk appetite statements. Its goal is to provide senior management with the information needed to make decisions on how to best remediate issues that fall outside agreed risk appetite levels.
Where appropriate, major strategic change programs may also undergo independent **ERCF change assessments** by the operational risk function, leveraging the ERCF assessment framework to determine the potential impact of the change activity on the overall operational risk profile of the impacted area both during and after implementation.
ERCF scenario analysis is focused on operational and compliance risks and is used to identify and measure exposure to a range of adverse events, such as unauthorized trading, transaction processing errors and compliance issues. These scenarios help businesses assess the suitability of controls in light of potential losses, and they are also an input to the internal models used by the Group to calculate stressed loss projections as well as economic and regulatory capital.
More specifically, the **ERCF stress testing** is a sub-component of the Group-wide stress testing framework and it focuses on the evaluation of potential operational risk impacts of macro-economic scenarios on net income and regulatory capital across a number of operational risk categories. The macro-economic scenarios are provided as part of regulatory processes, such as CCAR and loss potential analysis, or internal processes, such as financial planning and risk appetite setting. **Capital modelling** is based on an advanced measurement approach (AMA) and utilizes both historical data as well as scenario analysis to estimate capital requirements for the Group, as further described below.
Finally, **ERCF reverse stress testing** is an additional complementary tool that introduces a more forward-looking element into the RCSA process. It assumes that a business has suffered an adverse outcome, such as a large operational risk loss, and requires consideration of the events that could have led to the result. As such, it allows for the consideration of risks beyond normal business expectations and it challenges common assumptions about the risk profile, the emergence of new risks or interactions between existing risks, as well as the performance of expected control and mitigation strategies.
Operational risk regulatory capital measurement
We have used an internal model to calculate the regulatory capital requirement for operational risk under the AMA approach since 2008. This model was replaced with an enhanced AMA internal model in 2014, which has been approved by FINMA.
The model is based on a loss distribution approach that uses historical data on internal and relevant external losses of peers to generate frequency and severity distributions for a range of potential operational risk loss scenarios, such as an unauthorized trading incident or a material business disruption. Business experts and senior management review, and may adjust, the parameters of these scenarios to take account of business environment and internal control factors, such as RCSA results and risk and control indicators, to provide a forward-looking assessment of each scenario.
Insurance mitigation is included in the regulatory capital requirement for operational risk where appropriate, by considering the level of insurance coverage for each scenario and incorporating haircuts as appropriate. The internal model then uses the adjusted parameters to generate an overall loss distribution for the Group over a one-year time horizon. The AMA capital requirement represents the 99.9th percentile of this overall loss distribution. We use a risk-sensitive approach to allocating the AMA capital requirement to businesses that is designed to be forward-looking and incentivize appropriate risk management behaviors.
In 2018, we updated the treatment of historic losses relating to divested businesses in the model, particularly those relating to the private banking business in the US that we exited. In addition, we increased the coverage provided by our operational risk insurance policy. These changes resulted in a decrease of our operational risk capital requirements.
Conduct risk
The Group considers conduct risk to be the risk that improper behavior or judgment by our employees may result in a negative financial, non-financial or reputational impact to our clients, employees or the Group, or negatively impact the integrity of the financial markets. Conduct risk may arise from a wide variety of activities and types of behaviors.
A Group-wide definition of conduct risk supports the efforts of our employees to have a common understanding of and consistently manage, minimize and mitigate our conduct risk. Further, it promotes standards of responsible conduct and ethics in our employees. Managing conduct risk includes consideration of the risks generated by each business and the strength of the associated mitigating controls. Conduct risk is also assessed by reviewing and learning from past incidents within the Group and at other firms in the financial services sector. Compliance oversees conduct risk for the Group.

The ongoing focus and investment in a strong risk culture is fundamental to the management of conduct risk. The Group's Code of Conduct provides a clear statement on our conduct expectations and ethical values, supported by our conduct and ethics standards.

> Refer to "Risk culture" in Risk management oversight and to "Corporate governance framework" in IV – Corporate Governance – Overview for further information on our Code of Conduct.

Technology risk

Technology risk deserves particular attention given the complex technological landscape that covers our business model. Ensuring that confidentiality, integrity and availability of information assets are protected is critical to our operations.

Technology risk is the risk that technology-related failures, such as service outages or information security incidents, may disrupt business. Technology risk is inherent not only in our IT assets, but also in the people and processes that interact with them including

through dependency on third-party suppliers and the worldwide telecommunications infrastructure. We seek to ensure that the data used to support key business processes and reporting is secure, complete, accurate, available, timely and meets appropriate quality and integrity standards. We require our critical IT systems to be identified, secure, resilient and available and support our ongoing operations, decision-making, communications and reporting. Our systems must also have the capability, capacity, scalability and adaptability to meet current and future business objectives, the needs of our customers and regulatory and legal expectations. Failure to meet these standards and requirements may result in adverse events that could subject us to reputational damage, fines, litigation, regulatory sanctions, financial losses or loss of market share.
Technology risks are managed through our technology risk management program, business continuity management plan and business contingency and resiliency plans. Technology risks are included as part of our overall enterprise risk and control assessment based upon a forward-looking approach focusing on the most significant risks in terms of potential impact and likelihood.
Cyber risk
Cyber risk, which is part of technology risk, is the risk that we will be compromised as a result of cyber attacks, security breaches, unauthorized access, loss or destruction of data, unavailability of service, computer viruses or other events that could have an adverse security impact. Any such event could subject us to litigation or cause us to suffer a financial loss, a disruption of our businesses, liability to our clients, regulatory intervention or reputational damage. We could also be required to expend significant additional resources to modify our protective measures or to investigate and remediate vulnerabilities or other exposures.
We recognize that cyber risk represents a rapidly evolving external risk landscape. The financial industry continues to face cyber threats from a variety of actors who are driven by monetary, political and other motivations. We actively monitor external incidents and threats and assess and respond accordingly to any potential vulnerabilities that this may reveal. We are also an active participant in industry forums and information exchange initiatives and engage in regulatory consultation on this subject.
We have an enterprise-wide cybersecurity strategy to provide strategic guidance as part of our efforts to achieve an optimized end-to-end security and risk competence that enables a secure and innovative business environment, aligned with the Group's risk appetite. Our technology security team leverages a wide array of leading technology solutions and industry best practices to support our ability to maintain a secure perimeter and detect and respond to threats in real time.
We regularly assess the effectiveness of our key controls and we conduct ongoing employee training and awareness activities, including for key management personnel, in order to embed a strong cyber risk culture. As part of the ERCF, the Executive Board as well as divisional and legal entity risk management committees are given updates on the broader technology risk exposure.
Senior management, including the Board and its Risk Committee, are actively engaged and regularly informed on the extent of the threats and mitigations in place to manage cyber incidents. Related business continuity and response plans are rehearsed regularly at all levels, up to and including the Executive Board. Notable incidents are escalated to the Risk Committee together with lessons learned and mitigation plans.
Legal risk
Legal risk is the risk of loss or imposition of damages, fines, penalties or other liability or any other material adverse impact arising from circumstances including the failure to comply with legal obligations, whether contractual, statutory or otherwise, changes in enforcement practices, the making of a legal challenge or claim against us, our inability to enforce legal rights or the failure to take measures to protect our rights.
Reputational risk
Reputational risk is the risk that negative perception by our stakeholders, including clients, counterparties, employees, shareholders, regulators and the general public, may adversely impact client acquisition and damage our business relationships with clients and counterparties, affecting staff morale and reducing access to funding sources.
Reputational risk may arise from a variety of sources, including, but not limited to, the nature or purpose of a proposed transaction or service, the identity or activity of a potential client, the regulatory or political climate in which the business will be transacted, and the potentially controversial environmental or social impacts of a transaction or significant public attention surrounding the transaction itself. The risk may also arise from reputational damage in the aftermath of an operational risk incident, such as cyber crime or the failure by employees to meet expected conduct

and ethical standards.

Reputational risk is included in the Group's risk appetite framework to ensure that risk-taking is aligned with the approved risk appetite. We highly value our reputation and are fully committed to protecting it through a prudent approach to risk-taking and a responsible approach to business. This is achieved through the use of dedicated processes, resources and policies focused on identifying, evaluating, managing and reporting potential reputational risks. This is also achieved by applying the highest standards of personal accountability and ethical conduct as set out in the Group's Code of Conduct and the Group's approach to conduct and ethics. Reputational risk potentially arising from proposed business transactions and client activity is assessed in the reputational risk review process. The Group's global policy on reputational risk requires employees to be conservative when assessing potential reputational impact and, where certain indicators give rise to potential reputational risk, the relevant business

proposal or service must be submitted through the reputational risk review process. This involves a submission by an originator (any employee), approval by a business area head or designee, and its subsequent referral to one of the assigned reputational risk approvers, each of whom is an experienced and high-ranking senior manager, independent of the business divisions, who has authority to approve, reject or impose conditions on our participation in the transaction or service.
The RRSC, on a global level, and the reputational risk committees, on a divisional or legal entity level, are the governing bodies responsible for the oversight and active discussion of reputational risk and sustainability issues. At the Board level, the Risk Committee and Audit Committee jointly assist the Board in fulfilling its reputational risk oversight responsibilities by reviewing and approving the Group's risk appetite framework as well as assessing the adequacy of the management of reputational risks.
In order to inform our stakeholders about how we manage some of the environmental and social risks inherent to the banking business, we publish our *Corporate Responsibility Report*, in which we also describe our efforts to conduct our operations in a manner that is environmentally and socially responsible and broadly contributes to society.
> Refer to "credit-suisse.com/responsibility" for our Corporate Responsibility Report.
Fiduciary risk
Fiduciary risk is the risk of financial loss arising when the Group or its employees, acting in a fiduciary capacity as trustee, investment manager or as mandated by law, do not act in the best interest of the client in connection with the advice and management of our client's assets including from a product-related market, credit, liquidity, counterparty and operational risk perspective.
Assessing investment performance and reviewing forward-looking investment risks in our discretionary client portfolios and investment funds is central to our oversight program. Areas of focus include:
- Measuring investment performance of discretionary client portfolios and investment funds and comparing the returns against benchmarks to understand sources and drivers of the returns.
- Assessing risk measures such as exposure, sensitivities, stress scenarios, expected volatility and liquidity across our portfolios to ensure that we are managing the assets in line with the clients' expectations and risk tolerance.
- Treating clients with a prudent standard of care, which includes information disclosure, subscriptions and redemptions processes, trade execution and requiring the highest ethical conduct.
- Ensuring discretionary portfolio managers' investment approach is in line with client expectations and in accordance with prospectus and guidelines.
- Monitoring client investment guidelines or investment fund limits. In certain cases, internal limits or guidelines are also established and monitored.

Sound governance is essential for all discretionary management activities including trade execution and the investment process. Our program targets daily, monthly or quarterly monitoring of all portfolio management activities with independent analysis provided to senior management. Formal review meetings are in place to ensure that investment performance and risks are in line with expectations and adequately supervised.
Strategic risk
Strategic risk is the risk of financial loss or reputational damage arising from inappropriate strategic decisions, ineffective implementation of business strategies or an inability to adapt business strategies in response to changes in the business environment. Strategic risk may arise from a variety of sources, including:
- an inadequate or inaccurate understanding of our existing capabilities and competitive positioning;
- an inadequate or inaccurate analysis of current and prospective operating conditions in our markets, including the macroeconomic environment, client and competitor behaviors and actions, regulatory developments and technological impacts;
- inappropriate strategic decisions, such as those pertaining to which activities we will undertake, which markets and client segments we will serve, which organizational structure we will adopt and how we will position ourselves relative to competitors;
- ineffective implementation and execution of chosen business strategies and related organizational changes;
- the inability to properly identify and analyze key changes in our operating environment, and to adapt strategies accordingly; and
- the inability to properly monitor progress against strategic objectives.

A wide variety of financial, risk, client and market analyses are used to monitor the effectiveness of our strategies and the performance of our businesses against their strategic objectives. These include an analysis of current and expected operating conditions, an analysis of current and target market positioning, and detailed scenario planning.

Strategic plans are developed by each division annually and aggregated into a Group plan, which is reviewed by the Group CRO, CFO and CEO before presentation to the full Executive Board. Following approval by the Executive Board, the Group plan is submitted for review and approval to the Board. In addition, there is an annual strategic review at which the Board evaluates the Group's performance against strategic objectives and sets the overall strategic direction for the Group. From time to time, the Board and the Executive Board conduct more fundamental in-depth reviews of the Group's strategy.

> Refer to "Strategy" in I – Information on the company for further information.

To complement the annual cycle, each division presents a more detailed individual analysis to review key dimensions of its strategy at various points during the year. Additionally, the CEO, the Executive Board and individual business heads regularly assess

the performance of each business against strategic objectives through a series of strategic business reviews conducted throughout the year. The reviews include assessments of business strategy, overall operating environment, including our competitive position, financial performance and key business risks.

Climate-related risks

Following the publication of recommendations from the FSB's Task Force on Climate-related Financial Disclosures (TCFD) in June 2017, climate risk is emerging as an important area of focus for the economy. The final TCFD report establishes a high-level framework for considering climate-related risks and opportunities in a firm's strategy and is applicable to listed corporations across all sectors globally.

In response to the TCFD recommendations, we have established a climate change program with the overall goal of addressing recommendations related to external disclosures of climate-linked risks and opportunities. The program team has worked to formalize climate-related governance and definitions in our key policies and to define the principles for climate risk strategy and management. The TCFD presented its recommendations in the four categories of governance, strategy, risk management and metrics and targets. We are in the process of assessing and implementing certain measures to address these recommendations, as summarized below.

Governance

We have updated the Risk Committee charter to include specific responsibility for climate risk management. The market & credit risk cycle of CARMC is now mandated to ensure that the capabilities for the management of relevant long-term risk trends, including climate change, are put in place. The RRSC has assumed responsibility for overall climate change strategy and policy. We have also updated key policies, including the reputational risk policy and the sustainability management policy, to incorporate important elements of climate risk management.

Strategy

We have identified several key risks and opportunities, originating from either the physical or the transition effects of climate change. Physical risks can arise from climate and weather-related events (e.g., heatwaves, droughts, floods, storms and sea-level rise) and can potentially result in material financial losses, impairing asset values and the creditworthiness of borrowers. Transition risks can arise from the process of adjustment towards a low-carbon economy through changes in climate policy, technological developments and disruptive business models, and shifting investor and consumer sentiment. Physical and transition climate risks can affect us as an organization either directly, through our physical assets, costs and operations, or indirectly, through our financial relationships with our clients.

We ultimately aim to leverage existing risk management processes and capabilities for the management of climate risk exposures, potentially including financial planning and strategy setting, by mapping the underlying climate risks to our existing risk types.

In line with the TCFD recommendations, we have developed a 2°C and a 4°C scenario as part of our plan to assess the resilience of our strategy towards climate change. We are pursuing a range of pilot studies to investigate the impact of these scenarios on our business.

We are engaged in a range of activities which may support the transition to a lower carbon and more climate-resilient economy. Our green finance solutions are designed to achieve a positive impact on the environment while also creating financial value for our clients, drawing upon the expertise of various specialist departments across our divisions.

In 2018, Credit Suisse supported clients in raising over USD 6 billion of green bonds globally. Since 2013 we have supported the issuance of USD 15 billion of green bonds for our clients. We are also active in the sustainability lending market and during 2018 we participated in a total of over USD 14 billion worth of sustainability-linked loans from a range of European borrowers. Credit Suisse actively supports clean and renewable energy businesses and, until the end of 2018, had been involved in over 110 transactions in this field with a value of more than USD 94 billion since 2010. We offer a number of funds focused on sustainability, green bond investments and sustainable real estate as well as products and services in conservation finance, for example our CS Real Estate Green Property Fund and CS Green Bond Fund. We also participate in sustainable finance through our Impact Advisory and Finance department.

Risk management

Historically we have considered climate change-related impacts mainly in connection with our management of reputational and operational risks. Risk management of climate change exposure from our financial relationships presents a challenge owing to the long-term nature of the climate impacts versus the relatively shorter-term nature of banking portfolios. The climate risk identification process relies on our existing risk identification and assessment

process, but also leverages a newly established climate risk and opportunities inventory. Climate risk is now embedded in our firm-wide risk taxonomy, and we expect to continue to develop the climate inventory as industry best practice and consensus on climate risks and opportunities evolve.

Metrics and targets

We measure our balance sheet assets and credit risk-weighted assets across the following fossil fuel industry sectors: oil and gas, power generation and coal mining. In addition, we are developing a set of internal metrics to assess our climate risk-related financial exposures, and we are managing and disclosing greenhouse gas emissions from our own operations on the basis of an ISO 14001-certified environmental management system.

> Refer to “credit-suisse.com/responsibility” for our Corporate Responsibility Report.

Risk review and results

Economic risk capital review

Methodology and model developments

We regularly review and update our economic risk capital methodology in order to ensure that the model remains relevant as markets and business strategies evolve. In the event of material methodology changes and dataset and model parameter updates, prior-period balances are restated in order to show meaningful trends.

> Refer to "Economic risk capital" in Risk coverage and management for further information on the 2018 economic risk capital methodology changes.

The net impact of the methodology changes and updates implemented in the first quarter of 2018, including the revised economic risk capital methodology implemented with effect from January 1, 2018, on economic risk capital for the Group as of December 31, 2017 was a decrease of CHF 1.5 billion, or 4.4%.

The net impact of the methodology changes and updates implemented in the fourth quarter of 2018 on economic risk capital for the Group as of December 31, 2017 was a decrease of CHF 2.5 billion, or 7.6%.

The combined net impact of all methodology changes and updates implemented in the first and fourth quarter of 2018 on economic risk capital for the Group as of the end of December 31, 2017 was a decrease of CHF 4.0 billion, or 12.0%, to CHF 29.1 billion. Prior periods have been restated.

Available economic capital trends

As of December 31, 2018, our available economic capital for the Group was CHF 49.2 billion, a decrease of CHF 1.1 billion from December 31, 2017. BIS look-through CET1 capital increased CHF 1.0 billion, mainly reflecting net income attributable to shareholders, partially offset by the cash component of a dividend accrual and a negative foreign exchange impact. Economic adjustments decreased CHF 2.1 billion, mainly driven by the redemption of CHF 5.9 billion of high-trigger tier 1 capital instruments, partially offset by new issuances.

Economic risk capital and coverage ratio

end of	2018	2017	% change
Available economic capital (CHF million, except where indicated)			
BIS look-through CET1 capital (Basel III)	35,824	34,824	3
Economic adjustments [1]	13,355	15,460	(14)
Available economic capital	**49,179**	**50,284**	(2)
Position risk			
Credit risk	2,155	2,735	(21)
Non-traded credit spread risk	3,463	2,631	32
Securitized products	1,706	945	81
Traded risk	1,574	1,121	40
Emerging markets country event risk	697	450	55
Equity investments	417	358	16
Diversification benefit [2]	(1,195)	(897)	33
Position risk (99% confidence level for risk management purposes)	**8,817**	**7,343**	20
Economic risk capital			
Position risk (99.97% confidence level for capital management purposes)	19,471	18,481	5
Operational risk	6,702	6,936	(3)
Other risks [3]	3,248	3,692	(12)
Economic risk capital	**29,421**	**29,109**	1
Economic risk capital coverage ratio (%) [4]	**167**	**173**	–

1 Includes primarily high- and low-trigger capital instruments, adjustments to unrealized gains on owned real estate, reduced recognition of deferred tax assets and adjustments to treatment of pension assets and obligations. Economic adjustments are made to BIS look-through

CET1 capital to enable comparison between economic risk capital and available economic capital under the Basel III framework.

2

Reflects the net difference between the sum of the position risk categories and the position risk on the total portfolio.

3

Includes owned real estate risk, expense risk, pension risk, foreign exchange risk between available economic capital and economic risk capital, interest rate risk on treasury positions, diversification benefits and the impact from deferred share-based compensation awards.

4

Ratio of available economic capital to economic risk capital.

Economic risk capital by division

	End of period			Average		
	2018	2017	% change	2018	2017	% change
CHF million						
Swiss Universal Bank	5,562	5,694	(2)	5,634	5,603	1
International Wealth Management	3,128	3,288	(5)	3,206	3,084	4
Asia Pacific	4,499	3,820	18	3,965	3,836	3
Global Markets	7,819	6,764	16	7,491	6,729	11
Investment Banking & Capital Markets	3,815	3,148	21	3,384	2,790	21
Strategic Resolution Unit	3,006	4,669	(36)	3,837	6,053	(37)
Corporate Center [1]	1,592	1,726	(8)	1,718	1,655	4
Economic risk capital	**29,421**	**29,109**	1	**29,235**	**29,750**	(2)

1 Includes primarily operational risk and expense risk.

Economic risk capital trends

Compared to December 31, 2017, our economic risk capital increased 1% to CHF 29.4 billion as of December 31, 2018, mainly due to a 5% increase in position risk, partially offset by a 12% decrease in other risks and a 3% decrease in operational risk. The increase in position risk was primarily driven by higher non-traded credit spread risk due to a reduced benefit from hedges in Investment Banking & Capital Markets and new loan commitments in the US in Global Markets, higher securitized products risk, primarily reflecting a reduced benefit from hedges in Global Markets, and higher traded risk, primarily reflecting increased higher order risks in equity derivatives in the US in Global Markets. These increases were partially offset by lower credit risk, mainly due to decreased trading book exposures in the US in Global Markets, reduced counterparty exposures in Europe in the Strategic Resolution Unit and a LGD parameter update, which primarily impacted Global Markets, Investment Banking & Capital Markets and the Strategic Resolution Unit. The decrease in other risks was mainly due to lower pension risk related to the Swiss pension plan in International Wealth Management and Swiss Universal Bank, driven by a reduction in equity investments as part of portfolio rebalancing as well as a recalibration of real estate parameters. The decrease in operational risk was mainly due to increased coverage provided by our operational risk insurance policy.

Market risk review

Trading book

Development of trading book risks

The tables entitled “One-day, 98% risk management VaR” and “Average one-day, 98% risk management VaR by division” show our trading-related market risk exposure, as measured by one-day, 98% risk management VaR in Swiss francs and US dollars. As we measure trading book VaR for internal risk management purposes using the US dollar as the base currency, the VaR figures were translated into Swiss francs using daily foreign exchange translation rates. VaR estimates are computed separately for each risk type and for the whole portfolio using the historical simulation methodology. The different risk types are grouped into five categories including interest rate, credit spread, foreign exchange, commodity and equity.

We regularly review our VaR model to ensure that it remains appropriate given evolving market conditions and the composition of our trading portfolio. In 2018, there were no material changes to our VaR methodology.

Average one-day, 98% risk management VaR by division

in	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Strategic Resolution Unit	Diversi-fication benefit[1]	Credit Suisse
CHF million							
2018	0	2	15	22	3	(13)	29
2017	0	4	13	21	6	(18)	26

2016	3	2	16	26	13	(27)	33
USD million							
2018	0	2	15	23	4	(15)	29
2017	0	4	13	21	6	(18)	26
2016	3	2	17	27	14	(29)	34

Excludes risks associated with counterparty and own credit exposures. Investment Banking & Capital Markets has only banking book positions.

1 Difference between the sum of the standalone VaR for each division and the VaR for the Group.

One-day, 98% risk management VaR

in / end of	Interest rate	Credit spread	Foreign exchange	Commodity	Equity	Diversi-fication benefit	Total
CHF million							
2018							
Average	17	20	4	1	11	(24)	29
Minimum	11	17	3	1	8	+	22
Maximum	26	23	14	2	24	+	36
End of period	16	19	3	1	14	(23)	30
2017							
Average	16	19	6	2	10	(27)	26
Minimum	11	16	4	1	8	+	21
Maximum	23	23	12	6	13	+	31
End of period	15	19	5	1	10	(22)	28
2016							
Average	14	28	8	2	16	(35)	33
Minimum	9	20	4	1	10	+	24
Maximum	20	44	18	3	38	+	65
End of period	15	21	7	1	13	(28)	29
USD million							
2018							
Average	18	20	5	1	12	(27)	29
Minimum	11	17	3	1	9	+	22
Maximum	26	24	14	3	24	+	36
End of period	16	19	3	1	14	(23)	30
2017							
Average	16	19	6	2	10	(27)	26
Minimum	11	17	4	1	8	+	22
Maximum	23	23	12	7	13	+	33
End of period	15	19	5	1	10	(21)	29
2016							
Average	14	28	9	2	17	(36)	34
Minimum	9	21	3	1	10	+	23
Maximum	20	44	18	3	38	+	65
End of period	15	21	6	1	13	(28)	28

Excludes risks associated with counterparty and own credit exposures.

1

As the maximum and minimum occur on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit.

We measure VaR in US dollars, as the majority of our trading activities are conducted in US dollars.

Period-end risk management VaR of USD 30 million as of December 31, 2018 remained largely stable compared to USD 29 million as of December 31, 2017. Average risk management VaR of USD 29 million in 2018 increased USD 3 million compared to 2017, mainly due to increased interest rate risk exposures and increased credit positions in Global Markets.

The chart entitled “Daily risk management VaR” shows the aggregated market risk in our trading book on a consolidated basis.

The histogram entitled “Actual daily trading revenues” compares the actual daily trading revenues for 2018 with those for 2017 and 2016. The dispersion of trading revenues indicates the day-to-day volatility in our trading activities. In 2018, we had nine trading loss days compared to two trading loss days in 2017, each with a trading loss not exceeding CHF 25 million.

For capital purposes and in line with BIS requirements, FINMA increases the capital multiplier for every regulatory VaR backtesting exception above four in the prior rolling 12-month period, resulting in an incremental market risk capital requirement for the Group. For 2018 we had one backtesting exception in our regulatory VaR model, compared to no backtesting exceptions in 2017 and two backtesting exceptions in 2016, remaining in the regulatory “green zone” for all three periods.

> Refer to “Risk-weighted assets” in Capital management for further information on the use of our regulatory VaR model in the calculation of trading book market risk capital requirements.

Banking book

Development of banking book interest rate risks

Interest rate risk on banking book positions is measured by estimating the impact resulting from a one basis point parallel increase in yield curves on the present value of interest rate-sensitive banking book positions. In the course of 2018, we updated our internal methodology for measuring interest rate risk on banking book positions in anticipation of new FINMA rules, which became effective on January 1, 2019. For regulatory purposes, we now exclude from the Group’s exposure calculation non-interest-bearing assets and liabilities comprising the sum of shareholders’ equity less deferred tax assets, goodwill and premises and equipment. We have also updated the client margin measurement on our Swiss private banking lending portfolio. The Group’s strategy for managing interest rate risk on banking book positions has not been affected. The prior-period balance has been restated to reflect these methodology updates. As of December 31, 2018, the interest rate sensitivity of a one basis point parallel increase in yield curves was negative CHF 1.5 million, compared to positive CHF 0.2 million as of December 31, 2017. The change was mainly driven by the issuance of new high-trigger tier 1 capital notes and the related interest rate hedges as well as the aging effect arising from the overall portfolio of outstanding capital instruments.

One basis point parallel increase in yield curves by currency – banking book positions

end of	CHF	USD	EUR	GBP	Other	Total
2018 (CHF million)						
Impact on present value	0.0	(1.6)	0.1	(0.1)	0.1	(1.5)
2017 (CHF million)						
Impact on present value	0.4	(0.4)	(0.1)	0.0	0.3	0.2

Interest rate risk on banking book positions is also assessed using other measures, including the potential value change resulting from a significant change in yield curves. The table “Interest rate scenario results – banking book positions” shows the impact of immediate 100 basis point and 200 basis point moves in the yield curves.

As of December 31, 2018, the most adverse impact of a 200 basis point upward or downward move in yield curves on the present value of banking book positions was a loss of CHF 183 million, compared to a gain of CHF 3 million as of December 31, 2017. The monthly analysis of the potential impact resulting from a significant change in yield curves indicated that as of the end of 2018 and 2017, the most adverse impact of a 200 basis point upward or downward move in yield curves on the present value of interest rate-sensitive banking book positions in relation to total eligible regulatory capital was significantly below the 20% threshold used by regulators to identify banks that potentially run excessive levels of interest rate risk in the banking book. In 2018, we also commenced our internal monitoring of the Group’s exposure calculation in anticipation of the new FINMA rules for measuring interest rate risk on banking book positions.

Interest rate scenario results – banking book positions

end of	CHF	USD	EUR	GBP	Other	Total
2018 (CHF million)						
Increase (+)/decrease (–) in interest rates						
+200 bp	17	(266)	61	(8)	13	(183)
+100 bp	6	(145)	20	(5)	7	(117)
–100 bp	0	169	0	7	(9)	167
–200 bp	6	362	20	15	(18)	385
2017 (CHF million)						
Increase (+)/decrease (–) in interest rates						
+200 bp	77	(38)	2	1	49	91
+100 bp	42	(30)	(2)	(1)	25	34
–100 bp	(48)	50	9	4	(26)	(11)
–200 bp	(101)	119	25	12	(52)	3

Development of banking book equity risks

Our equity portfolios of the banking book include positions in private equity, hedge funds, strategic investments and other instruments. These positions may not be strongly correlated with general equity markets. Equity risk on banking book positions is measured using sensitivity analysis that estimates the potential change in value resulting from a 10% decline in the equity markets of developed nations and a 20% decline in the equity markets of emerging market nations. The estimated impact of this scenario would have been a decrease of CHF 312 million in the value of the banking book portfolio as of December 31, 2018, compared to a decrease of CHF 391 million as of December 31, 2017.

Development of banking book commodity risks

Our commodity portfolios of the banking book include mainly precious metals, primarily gold. Commodity risk on banking book positions is measured using sensitivity analysis that estimates the potential change in value resulting from a 20% weakening in commodity prices. The estimated impact of this scenario on the value of the banking book portfolio would have been a decrease of CHF 0.1 million as of December 31, 2018 and 2017.

Credit and debit valuation adjustments

VaR excludes the impact of changes in both counterparty and our own credit spreads on derivative products. As of December 31, 2018, the estimated sensitivity implies that a one basis point increase in credit spreads, both counterparty and our own, would have resulted in a CHF 0.8 million gain on the overall derivatives position in the investment banking businesses. In addition, a one basis point increase in our own credit spread on our fair valued structured notes portfolio (including the impact of hedges) would have resulted in a CHF 25.3 million gain as of December 31, 2018.

Credit risk review

Credit risk overview

All transactions that are exposed to potential losses arising as a result of a borrower or counterparty failing to meet its financial obligations or as a result of deterioration in the credit quality of the borrower or counterparty are subject to credit risk exposure measurement and management.

> Refer to "Impaired loans" in VI – Consolidated financial statements – Credit Suisse Group – Note 19 – Loans, allowance for loan losses and credit quality for information on credit quality and aging analysis of loans.

For regulatory capital purposes, credit risk comprises several regulatory categories where credit risk measurement and related regulatory capital requirements are subject to different measurement approaches under the Basel framework. Details on regulatory credit risk categories, credit quality indicators and credit risk concentration are available in our disclosures required under Pillar 3 of the Basel framework related to risk, which will be available on our website.

> Refer to "credit-suisse.com/regulatorydisclosures" for further information.

Loans and irrevocable loan commitments

The following table provides an overview of loans and irrevocable loan commitments by division in accordance with accounting principles generally accepted in the US and are not comparable with the regulatory credit risk exposures presented in our disclosures required under Pillar 3 of the Basel framework.

Loans and irrevocable loan commitments

end of	2018	2017	% change
CHF million			
Gross loans	288,596	280,137	3
Irrevocable loan commitments	116,074	106,401	9
Total loans and irrevocable loan commitments	**404,670**	**386,538**	5
of which Swiss Universal Bank	178,595	174,386	2
of which International Wealth Management	56,013	54,378	3
of which Asia Pacific	48,087	47,145	2
of which Global Markets	73,940	61,649	20
of which Investment Banking & Capital Markets	46,001	43,692	5
of which Strategic Resolution Unit	1,591	4,623	(66)

Loans held-for-sale and traded loans

As of December 31, 2018 and 2017, loans held-for-sale included CHF 29 million and CHF 61 million, respectively, of seasoned US subprime residential mortgages from consolidated variable interest entities (VIE). Traded loans included US subprime residential mortgages of CHF 761 million and CHF 1,067 million as of December 31, 2018 and 2017, respectively.

Loans

The table "Loans" provides an overview of our loans by loan classes, impaired loans, the related allowance for loan losses and selected loan metrics by business division. The carrying values of loans and related allowance for loan losses are presented in accordance with generally accepted accounting standards in the US and are not comparable with the regulatory credit risk exposures presented in our disclosures required under Pillar 3 of the Basel framework.

Compared to December 31, 2017, gross loans increased CHF 8.5 billion to CHF 288.6 billion as of December 31, 2018, mainly due to higher commercial and industrial loans, higher loans to financial institutions, higher consumer mortgages and the translation impact from the US dollar. These increases were partially offset by lower consumer finance loans and the translation impact from the euro. The net increase of CHF 4.0 billion in commercial and industrial loans reflected increases in Swiss Universal Bank, Global Markets, International Wealth Management and Investment Banking & Capital Markets, partially offset by decreases in the Strategic Resolution Unit and Asia Pacific. The net increase of CHF 2.8 billion in loans to financial institutions was mainly driven by increases in Global Markets and Asia Pacific, partially offset by decreases in the Strategic Resolution Unit and Swiss Universal Bank. Consumer mortgages increased CHF 1.8 billion, mainly driven by an increase in Swiss Universal Bank. Consumer finance loans decreased CHF 0.3 billion, primarily due to a decrease in International Wealth Management.

On a divisional level, increases in gross loans of CHF 4.7 billion in Global Markets, CHF 3.4 billion in Swiss Universal Bank, CHF 1.2 billion in International Wealth Management, CHF 0.8 billion in Investment Banking & Capital Markets and CHF 0.7 billion in Asia Pacific were partially offset by a decrease of CHF 2.3 billion in the Strategic Resolution Unit.

> Refer to “Note 19 – Loans, allowance for loan losses and credit quality” in VI – Consolidated financial statements – Credit Suisse Group for further information.

Loans

end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit	Credit Suisse[1]
2018 (CHF million)							
Mortgages	102,358	3,979	1,435	0	0	73	107,845
Loans collateralized by securities	6,978	19,416	14,161	0	1,444	35	42,034
Consumer finance	3,298	508	3	13	0	83	3,905
Consumer	112,634	23,903	15,599	13	1,444	191	153,784
Real estate	22,902	2,109	1,273	184	242	17	26,727
Commercial and industrial loans	30,291	24,095	21,938	5,182	3,567	458	85,698
Financial institutions	2,294	1,592	4,175	9,080	632	521	18,494
Governments and public institutions	694	245	843	1,876	0	235	3,893
Corporate & institutional	56,181[2]	28,041[3]	28,229[4]	16,322	4,441	1,231	134,812
Gross loans	**168,815**	**51,944**	**43,828**	**16,335**	**5,885**	**1,422**	**288,596**
of which held at fair value	37	85	5,263	7,572	1,221	695	14,873
Net (unearned income) / deferred expenses	82	(118)	(33)	(32)	(11)	(1)	(113)
Allowance for loan losses[5]	(504)	(131)	(82)	(60)	(69)	(56)	(902)
Net loans	**168,393**	**51,695**	**43,713**	**16,243**	**5,805**	**1,365**	**287,581**
2017 (CHF million)							
Mortgages	100,498	4,106	1,309	0	0	126	106,039
Loans collateralized by securities	6,934	18,848	14,731	0	1,409	94	42,016
Consumer finance	3,174	941	25	17	0	85	4,242
Consumer	110,606	23,895	16,065	17	1,409	305	152,297
Real estate	23,158	1,968	720	302	403	48	26,599
Commercial and industrial loans	28,230	22,669	22,499	3,576	2,834	1,731	81,670
Financial institutions	2,749	1,917	2,912	6,432	422	1,059	15,697
Governments and public institutions	707	246	977	1,355	0	589	3,874
Corporate & institutional	54,844[2]	26,800[3]	27,108[4]	11,665	3,659	3,427	127,840
Gross loans	**165,450**	**50,695**	**43,173**	**11,682**	**5,068**	**3,732**	**280,137**
of which held at fair value	33	150	4,837	6,743	1,483	2,061	15,307
Net (unearned income) / deferred expenses	56	(113)	(19)	(17)	(12)	(1)	(106)
Allowance for loan losses[5]	(465)	(108)	(74)	(44)	(55)	(136)	(882)
Net loans	**165,041**	**50,474**	**43,080**	**11,621**	**5,001**	**3,595**	**279,149**

1
Includes the Corporate Center, in addition to the divisions disclosed.
2
The values of financial collateral and mortgages related to secured loans, considered up to the amount of the related loans, were CHF 10,834 million and CHF 33,533 million, respectively, as of December 31, 2018, and

CHF 11,201 million and CHF 32,704 million, respectively, as of December 31, 2017.
3
The values of financial collateral and mortgages related to secured loans, considered up to the amount of the related loans, were CHF 22,040 million and CHF 2,151 million, respectively, as of December 31, 2018, and CHF 20,485 million and CHF 1,809 million, respectively, as of December 31, 2017.
4
The values of financial collateral and mortgages related to secured loans, considered up to the amount of the related loans, were CHF 17,220 million and CHF 183 million, respectively, as of December 31, 2018, and CHF 19,566 million and CHF 138 million, respectively, as of December 31, 2017.
5
Allowance for loan losses is only based on loans that are not carried at fair value.
As of December 31, 2018, 97% of the aggregate Swiss residential mortgage loan portfolio of CHF 108.5 billion had a loan-to-value (LTV) ratio equal to or lower than 80%. As of December 31, 2017, 97% of the aggregate Swiss residential mortgage loan portfolio of CHF 105.1 billion had an LTV ratio equal to or lower than 80%. For substantially all Swiss residential mortgage loans originated in 2018 and 2017, the average LTV ratio was equal to or lower than 80% at origination. Our LTV ratios are based on the most recent appraised value of the collateral.

Impaired loans

end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit	Credit Suisse[1]
2018 (CHF million)							
Non-performing loans	365	534	183	29	37	55	1,203
Non-interest-earning loans	245	43	0	0	0	12	300
Non-performing and non-interest-earning loans	610	577	183	29	37	67	1,503
Restructured loans	76	130	0	5	8	80	299
Potential problem loans	247	128	2	9	0	4	390
Other impaired loans	323	258	2	14	8	84	689
Gross impaired loans [2]	**933**	**835**[3]	**185**	**43**	**45**	**151**	**2,192**
of which loans with a specific allowance	842	308	100	38	37	145	1,470
of which loans without a specific allowance	91	527	85	5	8	6	722
2017 (CHF million)							
Non-performing loans	413	327	92	32	36	148	1,048
Non-interest-earning loans	161	16	0	0	0	46	223
Non-performing and non-interest-earning loans	574	343	92	32	36	194	1,271
Restructured loans	66	95	0	0	0	129	290
Potential problem loans	129	103	29	9	0	279	549
Other impaired loans	195	198	29	9	0	408	839
Gross impaired loans [2]	**769**	**541**[3]	**121**	**41**	**36**	**602**	**2,110**
of which loans with a specific allowance	694	245	91	41	36	569	1,676
of which loans without a specific allowance	75	296	30	0	0	33	434

1
Includes the Corporate Center, in addition to the divisions disclosed.
2
Impaired loans are only based on loans that are not carried at fair value.
3
Includes gross impaired loans of CHF 62 million and CHF 111 million as of December 31, 2018 and 2017, respectively, which are mostly secured by guarantees provided by investment-grade export credit agencies.

Impaired loans and allowance for loan losses

Compared to December 31, 2017, gross impaired loans increased CHF 82 million to CHF 2.2 billion as of December 31, 2018, mainly driven by higher non-performing loans in International Wealth Management and Asia Pacific and higher non-interest-earning loans in Swiss Universal Bank, partially offset by lower potential problem loans in the Strategic Resolution Unit.

In International Wealth Management, gross impaired loans increased CHF 294 million, primarily driven by newly impaired positions in ship finance and European mortgages, partially offset by reductions in export finance. In Swiss Universal Bank, gross impaired loans increased CHF 164 million, mainly reflecting newly impaired positions in the commodity trade finance and the small and medium-sized enterprises business areas. In Asia Pacific, gross impaired loans increased CHF 64 million, mainly driven by newly impaired positions in ship finance and the default of an Indian infrastructure development company, partially offset by reductions in impaired loans for several private individuals. Gross impaired loans in Investment Banking & Capital Markets increased CHF 9 million, mainly driven

by the transfer of a restructured loan from the Strategic Resolution Unit. In the Strategic Resolution Unit, gross impaired loans decreased CHF 451 million, primarily driven by reductions in ship finance and Swiss real estate leasing.

> Refer to “Impaired loans” in VI – Consolidated financial statements – Credit Suisse Group – Note 19 – Loans, allowance for loan losses and credit quality for information on categories of impaired loans.

Allowance for loan losses

end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit	Credit Suisse[1]
2018 (CHF million)							
Balance at beginning of period [2]	**465**	**108**	**74**	**44**	**55**	**136**	**882**
of which individually evaluated for impairment	340	75	56	24	27	132	654
of which collectively evaluated for impairment	125	33	18	20	28	4	228
Transfers and reclassifications	0	0	0	1	2	(3)	0
Net movements recognized in statements of operations	121	35	34	9	3	(1)	201
Gross write-offs	(124)	(19)	(35)	(4)	0	(87)	(269)
Recoveries	34	2	1	9	8	4	58
Net write-offs	(90)	(17)	(34)	5	8	(83)	(211)
Provisions for interest	8	6	7	1	2	6	30
Foreign currency translation impact and other adjustments, net	0	(1)	1	0	(1)	1	0
Balance at end of period [2]	**504**	**131**	**82**	**60**	**69**	**56**	**902**
of which individually evaluated for impairment	358	91	47	27	30	55	608
of which collectively evaluated for impairment	146	40	35	33	39	1	294

1
Includes the Corporate Center, in addition to the divisions disclosed.
2
Allowance for loan losses is only based on loans that are not carried at fair value.

The following tables provide an overview of changes in impaired loans and related allowance for loan losses by loan portfolio segment.

Gross impaired loans by loan portfolio segment

	Consumer	Corporate & institutional	Total
2018 (CHF million)			
Balance at beginning of period	**632**	**1,478**	**2,110**
New impaired loans	470	997	1,467
Increase in existing impaired loans	30	44	74
Reclassifications to performing loans	(202)	(104)	(306)
Repayments [1]	(121)	(250)	(371)
Liquidation of collateral, insurance or guarantee payments	(47)	(208)	(255)
Sales [2]	0	(263)	(263)
Write-offs	(79)	(182)	(261)
Foreign currency translation impact and other adjustments, net	(6)	3	(3)

Balance at end of period	**677**	**1,515**	**2,192**

1
Full or partial principal repayments.
2
Includes transfers to loans held-for-sale for intended sales of held-to-maturity loans.
177

Allowance for loan losses by loan portfolio segment

	Consumer	Corporate & institutional	Total
2018 (CHF million)			
Balance at beginning of period	**220**	**662**	**882**
of which individually evaluated for impairment	179	475	654
of which collectively evaluated for impairment	41	187	228
Net movements recognized in statements of operations	19	182	201
Gross write-offs	(85)	(184)	(269)
Recoveries	21	37	58
Net write-offs	(64)	(147)	(211)
Provisions for interest	11	19	30
Foreign currency translation impact and other adjustments, net	1	(1)	0
Balance at end of period	**187**	**715**	**902**
of which individually evaluated for impairment	146	462	608
of which collectively evaluated for impairment	41	253	294

Loan metrics

end of	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit	Credit Suisse[1]
2018 (%)							
Non-performing and non-interest-earning loans / Gross loans	0.4	1.1	0.5	0.3	0.8	9.2	0.5
Gross impaired loans / Gross loans	0.6	1.6	0.5	0.5	1.0	20.8	0.8
Allowance for loan losses / Gross loans	0.3	0.3	0.2	0.7	1.5	7.7	0.3
Specific allowance for loan losses / Gross impaired loans	38.4	10.9	25.4	62.8	66.7	36.4	27.7
2017 (%)							
Non-performing and non-interest-earning loans / Gross loans	0.3	0.7	0.2	0.6	1.0	11.6	0.5
Gross impaired loans / Gross loans	0.5	1.1	0.3	0.8	1.0	36.0	0.8
Allowance for loan losses / Gross loans	0.3	0.2	0.2	0.9	1.5	8.1	0.3
Specific allowance for loan losses / Gross impaired loans	44.2	13.9	46.3	58.5	75.0	21.9	31.0

Gross loans and gross impaired loans exclude loans carried at fair value and the allowance for loan losses is only based on loans that are not carried at fair value.

1 Includes the Corporate Center, in addition to the divisions disclosed.

Derivative instruments

We enter into derivative contracts in the normal course of business for market making, positioning and arbitrage purposes, as well as for our own risk management needs, including mitigation of interest rate, foreign exchange and credit risk.

Derivatives are either privately negotiated OTC contracts or standard contracts transacted through regulated exchanges. The most frequently used derivative products include interest rate swaps, cross-currency swaps and credit default swaps (CDS), interest rate and foreign exchange options, foreign exchange forward contracts, and foreign exchange and interest rate futures.

The replacement values of derivative instruments correspond to their fair values at the dates of the consolidated balance sheets and arise from transactions for the account of individual customers and for our own account. Positive replacement values (PRV) constitute an asset, while negative replacement values (NRV) constitute a liability. Fair value does not indicate future gains or losses, but rather premiums paid or received for a derivative instrument at inception, if applicable, and unrealized gains and losses from marking to market all derivatives at a particular point in time. The fair values of derivatives are determined using various methodologies, primarily observable market prices where available and, in their absence, observable market parameters for instruments with similar characteristics and maturities, net present value analysis or other pricing models as appropriate.

The following table illustrates how credit risk on derivatives receivables is reduced by the use of legally enforceable netting agreements and collateral agreements. Netting agreements allow us to net balances from derivative assets and liabilities transacted with the same counterparty when the netting agreements are legally enforceable. Replacement values are disclosed net of such agreements in the consolidated balance sheets. Collateral agreements are entered into with certain counterparties based upon the nature of the counterparty and/or the transaction and require the placement of cash or securities with us as collateral for the underlying transaction. The carrying values of derivatives are presented in accordance with generally accepted accounting standards in the US and are not comparable with the derivatives metrics presented in our disclosures required under Pillar 3 of the Basel framework.

Derivative instruments by maturity

	2018				2017			
end of / due within	Less than 1 year	1 to 5 years	More than 5 years	Positive replace-ment value	Less than 1 year	1 to 5 years	More than 5 years	Positive replace-ment value
CHF billion								
Interest rate products	8.0	19.1	42.6	69.7	9.6	26.5	50.9	87.0
Foreign exchange products	14.8	7.5	5.6	27.9	16.3	8.0	6.2	30.5
Equity/index-related products	5.5	5.8	0.2	11.5	5.4	6.6	0.1	12.1
Credit derivatives	0.6	2.9	1.9	5.4	0.6	5.3	1.8	7.7
Other products [1]	0.7	0.0	1.0	1.7	0.4	0.2	1.0	1.6
OTC derivative instruments	**29.6**	**35.3**	**51.3**	**116.2**	**32.3**	**46.6**	**60.0**	**138.9**
Exchange-traded derivative instruments				12.2				9.5
Netting agreements [2]				(110.1)				(128.8)
Total derivative instruments				**18.3**				**19.6**
of which recorded in trading assets				18.3				19.6
of which recorded in other assets				0.0				0.0

1
Primarily precious metals, commodity and energy products.
2
Taking into account legally enforceable netting agreements.

Derivative transactions exposed to credit risk are subject to a credit request and approval process, ongoing credit and counterparty monitoring and a credit quality review process. The following table represents the rating split of our credit exposure from derivative instruments.

Derivative instruments by counterparty credit rating

end of	2018	2017
CHF billion		
AAA	1.3	1.5
AA	5.9	5.7
A	3.3	4.1
BBB	5.5	5.7
BB or lower	1.7	1.7
OTC derivative instruments	**17.7**	**18.7**
Exchange-traded derivative instruments [1]	0.6	0.9
Total derivative instruments [1]	**18.3**	**19.6**

1
Taking into account legally enforceable netting agreements.

Derivative instruments by maturity and by counterparty credit rating for the Bank are not materially different, neither in absolute amounts nor in terms of movements, from the information for the Group presented above.

Derivative instruments are categorized as exposures from trading activities (trading) and those qualifying for hedge accounting (hedging). Trading includes activities relating to market making, positioning and arbitrage. It also includes

economic hedges where the Group enters into derivative contracts for its own risk management purposes, but where the contracts do not qualify for hedge accounting under US GAAP. Hedging includes contracts that qualify for hedge accounting under US GAAP, such as fair value hedges, cash flow hedges and net investment hedges.
> Refer to “Note 27 – Offsetting of financial assets and financial liabilities” in VI – Consolidated financial statements – Credit Suisse Group for further information on offsetting of derivatives.
> Refer to “Note 32 – Derivatives and hedging activities” in VI – Consolidated financial statements – Credit Suisse Group for further information on derivatives, including an overview of derivatives by products categorized for trading and hedging purposes.
Forwards and futures
We enter into forward purchase and sale contracts for mortgage-backed securities, foreign currencies and commitments to buy or sell commercial and residential mortgages. In addition, we enter into futures contracts on equity-based indices and other financial instruments, as well as options on futures contracts. These contracts are typically entered into to meet the needs of customers, for trading and for hedging purposes.
On forward contracts, we are exposed to counterparty credit risk. To mitigate this credit risk, we limit transactions by counterparty, regularly review credit limits and adhere to internally established credit extension policies.
For futures contracts and options on futures contracts, the change in the market value is settled with a clearing broker in cash each day. As a result, our credit risk with the clearing broker is limited to the net positive change in the market value for a single day.

Swaps

Our swap agreements consist primarily of interest rate swaps, CDS, currency and equity swaps. We enter into swap agreements for trading and risk management purposes. Interest rate swaps are contractual agreements to exchange interest rate payments based on agreed upon notional amounts and maturities. CDS are contractual agreements in which the buyer of the swap pays a periodic fee in return for a contingent payment by the seller of the swap following a credit event of a reference entity. A credit event is commonly defined as bankruptcy, insolvency, receivership, material adverse restructuring of debt, or failure to meet payment obligations when due. Currency swaps are contractual agreements to exchange payments in different currencies based on agreed notional amounts and currency pairs. Equity swaps are contractual agreements to receive the appreciation or depreciation in value based on a specific strike price on an equity instrument in exchange for paying another rate, which is usually based on an index or interest rate movements.

Options

We write options specifically designed to meet the needs of customers and for trading purposes. These written options do not expose us to the credit risk of the customer because, if exercised, we and not our counterparty are obligated to perform. At the beginning of the contract period, we receive a cash premium. During the contract period, we bear the risk of unfavorable changes in the value of the financial instruments underlying the options. To manage this market risk, we purchase or sell cash or derivative financial instruments. Such purchases and sales may include debt and equity securities, forward and futures contracts, swaps and options.

We also purchase options to meet customer needs, for trading purposes and for hedging purposes. For purchased options, we obtain the right to buy or sell the underlying instrument at a fixed price on or before a specified date. During the contract period, our risk is limited to the premium paid. The underlying instruments for these options typically include fixed income and equity securities, foreign currencies and interest rate instruments or indices. Counterparties to these option contracts are regularly reviewed in order to assess creditworthiness.

Selected European credit risk exposures

The scope of our disclosure of European credit risk exposure includes all countries of the EU which are rated below AA or its equivalent by at least one of the three major rating agencies and where our gross exposure exceeds our quantitative threshold of EUR 0.5 billion. We believe this external rating is a useful measure in determining the financial ability of countries to meet their financial obligations, including giving an indication of vulnerability to adverse business, financial and economic conditions.

Monitoring of selected European credit risk exposures

Our credit risk exposure to these European countries is managed as part of our overall risk management process. The Group makes use of country limits and performs scenario analyses on a regular basis, which include analyses of our indirect sovereign credit risk exposures from our exposures to selected European financial institutions. This assessment of indirect sovereign credit risk exposures includes analysis of publicly available disclosures of counterparties' exposures to the European countries within the defined scope of our disclosure. We monitor the concentration of collateral underpinning our OTC derivative and reverse repurchase agreement exposures through monthly reporting. We also monitor the impact of sovereign rating downgrades on collateral eligibility. Strict limits on sovereign collateral from G7 and non-G7 countries are monitored monthly. Similar disclosure is part of our regular risk reporting to regulators.

As part of our global scenario framework, the counterparty credit risk stress testing framework measures counterparty exposure under scenarios calibrated to the 99th percentile for the worst one month and one year moves observed in the available history, as well as the absolutely worst weekly move observed in the same dataset. The scenario results are aggregated at the counterparty level for all our counterparties, including all European countries to which we have exposure. Furthermore, counterparty default scenarios are run where specific entities are set to default. In one of these scenarios, a European sovereign default is investigated. This scenario determines the maximum exposure that we have to this country in the event of its default and serves to identify those counterparties where exposure will rise substantially as a result of the modeled country defaulting.

The scenario framework also considers a range of other severe scenarios, including a specific eurozone crisis scenario which assumes the default of selected European countries, currently modeled to include Greece, Ireland, Italy, Portugal and Spain. It is assumed that the sovereigns, financial institutions and corporates within these countries default, with a 100% loss of sovereign and financial institutions exposures and a 0% to 100% loss of corporates

depending on their credit ratings. As part of this scenario, we additionally assume a severe market sell-off involving an equity market crash, widening credit spreads, a rally in the price of gold and a devaluation of the euro. In addition, the eurozone crisis scenario assumes the default of a small number of our market counterparties that we believe would be severely affected by a default across the selected European countries. These counterparties are assumed to default as we believe that they would be the most affected institutions because of their direct presence in the relevant countries and their direct exposures. Through these processes, revaluation and redenomination risks on our exposures are considered on a regular basis by our risk management function.

Presentation of selected European credit risk exposures

The basis for the presentation of the country exposure is our internal risk domicile view. The risk domicile view is based on the domicile of the legal counterparty, i.e., it may include exposure to a legal entity domiciled in the reported country even if its parent is located outside of the country.

The credit risk exposure in the table is presented on a risk-based view before deduction of any related allowance for loan losses. We present our credit risk exposure and related risk mitigation for the following distinct categories:

Gross credit risk exposure includes the principal amount of loans drawn, letters of credit issued and undrawn portions of committed facilities, the PRV of derivative instruments after consideration of legally enforceable netting agreements, the notional value of investments in money market funds and the market values of securities financing transactions and the debt cash trading portfolio (short-term securities) netted at the issuer level.

Risk mitigation includes CDS and other hedges, at their net notional amount, guarantees, insurance and collateral (primarily cash, securities and, to a lesser extent, real estate, mainly for exposures of our private banking, corporate and institutional businesses to corporates & other). Collateral values applied for the calculation of the net exposure are determined in accordance with our risk management policies and reflect applicable margining considerations.

Net credit risk exposure represents gross credit risk exposure net of risk mitigation.

Inventory represents the long inventory positions in trading and non-trading physical debt and synthetic positions, each at market value, all netted at the issuer level. Physical debt is non-derivative debt positions (e.g., bonds), and synthetic positions are created through OTC contracts (e.g., CDS purchased and/or sold and total return swaps).

CDS presented in the risk mitigation column are purchased as a direct hedge to our OTC exposure and the risk mitigation impact is considered to be the notional amount of the contract for risk purposes, with the mark-to-market fair value of CDS risk-managed against the protection provider. Net notional amounts of CDS reflect the notional amount of CDS protection purchased less the notional amount of CDS protection sold and are based on the origin of the CDS reference credit, rather than that of the CDS counterparty. CDS included in the inventory column represent contracts recorded in our trading books that are hedging the credit risk of the instruments included in the inventory column and are disclosed on the same basis as the value of the fixed income instrument they are hedging.

We do not have any tranched CDS positions on these European countries and only an insignificant amount of indexed credit derivatives is included in inventory.

The credit risk of CDS contracts themselves, i.e., the risk that the CDS counterparty will not perform in the event of a default, is managed separately from the credit risk of the reference credit. To mitigate such credit risk, generally all CDS contracts are collateralized. In addition, they are executed with counterparties with whom we have an enforceable International Swaps and Derivatives Association (ISDA) master agreement that provides for daily margining.

Development of selected European credit risk exposures

On a gross basis, before taking into account risk mitigation, our risk-based sovereign credit risk exposure to Cyprus, Croatia, Greece, Ireland, Italy, Malta, Portugal and Spain increased 11% to EUR 3,350 million as of December 31, 2018, compared to EUR 3,008 million as of December 31, 2017. Our net exposure to these sovereigns was EUR 2,640 million, 80% higher compared to EUR 1,463 million as of December 31, 2017. Our non-sovereign risk-based credit risk exposure in these countries as of December 31, 2018 included net exposures to financial institutions of EUR 2,462 million, 30% higher compared to December 31, 2017, and net exposures to corporates and other counterparties of EUR 2,869 million, 20% higher compared to December 31, 2017.

A significant majority of the purchased credit protection is transacted with central counterparties or banks outside of the disclosed countries. For credit protection purchased from central counterparties or banks in the disclosed countries, such credit risk is reflected in the gross and net exposure to each respective country.

Sovereign debt rating developments

From year-end 2017 through February 28, 2019, the long-term sovereign debt ratings of the countries listed in the table changed as follows: Standard & Poor's increased Croatia's rating from BB to BB+, increased Cyprus' rating from BB+ to BBB-, increased Greece's rating from B- to B+ and increased Spain's rating from BBB+ to A-. Fitch increased Croatia's rating from BB to BB+, increased Cyprus' rating from BB to BBB-, increased Greece's rating from B- to BB-, increased Malta's rating from A to A+ and increased Spain's rating from BBB+ to A-. Moody's increased Cyprus' rating from BA3 to BA2, increased Greece's rating from CAA2 to B3, decreased Italy's rating from BAA2 to BAA3, increased Portugal's rating from BA1 to BAA3 and increased Spain's rating from BAA2 to BAA1. These rating

changes did not have a significant impact on the Group's financial position, result of operations, liquidity or capital resources.

Selected European credit risk exposures

December 31, 2018	Gross credit risk exposure	Risk mitigation CDS	Risk mitigation Other[1]	Net credit risk exposure	Inventory[2]	Net synthetic inventory[3]	Total credit risk exposure Gross	Total credit risk exposure Net
Croatia (EUR million)								
Sovereign	0	0	0	0	6	6	6	6
Corporates & other	50	0	0	50	0	0	50	50
Total	**50**	**0**	**0**	**50**	**6**	**6**	**56**	**56**
Cyprus								
Sovereign	0	0	0	0	2	0	2	2
Financial institutions	9	0	8	1	0	0	9	1
Corporates & other	1,151	0	1,077	74	0	0	1,151	74
Total	**1,160**	**0**	**1,085**	**75**	**2**	**0**	**1,162**	**77**
Greece								
Financial institutions	154	0	153	1	0	0	154	1
Corporates & other	470	0	430	40	0	(13)	470	40
Total	**624**	**0**	**583**	**41**	**0**	**(13)**	**624**	**41**
Ireland								
Sovereign	2,004	0	0	2,004	0	0	2,004	2,004
Financial institutions	1,274	0	249	1,025	28	(14)	1,302	1,053
Corporates & other	951	0	347	604	22	(114)	973	626
Total	**4,229**	**0**	**596**	**3,633**	**50**	**(128)**	**4,279**	**3,683**
Italy								
Sovereign	984	617	93	274	0	(324)	984	274
Financial institutions	1,509	2	655	852	1	(113)	1,510	853
Corporates & other	4,208	81	3,072	1,055	34	(162)	4,242	1,089
Total	**6,701**	**700**	**3,820**	**2,181**	**35**	**(599)**	**6,736**	**2,216**
Malta								
Financial institutions	72	0	0	72	0	0	72	72
Corporates & other	533	0	511	22	0	0	533	22
Total	**605**	**0**	**511**	**94**	**0**	**0**	**605**	**94**
Portugal								
Sovereign	0	0	0	0	30	36	30	30
Financial institutions	185	0	175	10	7	(9)	192	17
Corporates & other	314	13	224	77	2	(191)	316	79
Total	**499**	**13**	**399**	**87**	**39**	**(164)**	**538**	**126**
Spain								
Sovereign	324	0	0	324	0	(49)	324	324
Financial institutions	964	12	489	463	2	(40)	966	465
Corporates & other	2,061	8	1,198	855	34	21	2,095	889
Total	**3,349**	**20**	**1,687**	**1,642**	**36**	**(68)**	**3,385**	**1,678**
Total								
Sovereign	3,312	617	93	2,602	38	(331)	3,350	2,640

Financial institutions	4,167	14	1,729	2,424	38	(176)	4,205	2,462
Corporates & other	9,738	102	6,859	2,777	92	(459)	9,830	2,869
Total	**17,217**	**733**	**8,681**	**7,803**	**168**	**(966)**	**17,385**	**7,971**

1
Includes other hedges (derivative instruments), guarantees, insurance and collateral.
2
Represents long inventory positions netted at issuer level.
3
Substantially all of which results from CDS; represents long positions net of short positions.

Balance sheet and off-balance sheet

As of the end of 2018, total assets of CHF 768.9 billion decreased 3% and total liabilities of CHF 724.9 billion decreased 4% compared to the end of 2017, primarily reflecting lower operating activities, partially offset by a positive foreign exchange translation impact.

The majority of our transactions are recorded on our balance sheet. However, we also enter into transactions that give rise to both on and off-balance sheet exposure.

Balance sheet

Total assets were CHF 768.9 billion as of the end of 2018, a decrease of CHF 27.4 billion, or 3%, compared to the end of 2017. Excluding the foreign exchange translation impact, total assets decreased CHF 29.6 billion. Trading assets decreased CHF 24.1 billion, or 15%, primarily reflecting decreases in debt and equity securities. Cash and due from banks decreased CHF 9.8 billion, or 9%, mainly driven by lower cash positions at the SNB, the ECB and the Fed. Brokerage receivables decreased CHF 8.1 billion, or 17%, primarily due to open trades with banks and customers and a decrease in margin lending. Net loans increased CHF 8.4 billion, or 3%, mainly due to higher loans to financial institutions, higher commercial and industrial loans and higher consumer mortgages. Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions increased CHF 1.7 billion, or 2%, primarily due to an increase in reverse repurchase transactions from banks and customers, partially offset by a decrease in cash collateral. All other assets increased CHF 4.4 billion, or 5%, including an increase of CHF 3.6 billion in securities received as collateral, partially offset by a decrease of CHF 1.1 billion in other investments.

Balance sheet summary

			end of	% change	
	2018	2017	2016	18 / 17	17 / 16
Assets (CHF million)					
Cash and due from banks	100,047	109,815	121,161	(9)	(9)
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	117,095	115,346	134,839	2	(14)
Trading assets	132,203	156,334	165,150	(15)	(5)
Net loans	287,581	279,149	275,976	3	1
Brokerage receivables	38,907	46,968	33,431	(17)	40
All other assets	93,083	88,677	89,304	5	(1)
Total assets	**768,916**	**796,289**	**819,861**	(3)	(3)
Liabilities and equity (CHF million)					
Due to banks	15,220	15,413	22,800	(1)	(32)
Customer deposits	363,925	361,162	355,833	1	1
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	24,623	26,496	33,016	(7)	(20)
Trading liabilities	42,169	39,119	44,930	8	(13)
Long-term debt	154,308	173,032	193,315	(11)	(10)
Brokerage payables	30,923	43,303	39,852	(29)	9
All other liabilities	93,729	95,575	87,804	(2)	9
Total liabilities	**724,897**	**754,100**	**777,550**	(4)	(3)
Total shareholders' equity	**43,922**	**41,902**	**41,897**	5	0
Noncontrolling interests	97	287	414	(66)	(31)
Total equity	**44,019**	**42,189**	**42,311**	4	0
Total liabilities and equity	**768,916**	**796,289**	**819,861**	(3)	(3)

Total liabilities were CHF 724.9 billion as of the end of 2018, a decrease of CHF 29.2 billion, or 4%, compared to the end of 2017. Excluding the foreign exchange translation impact, total liabilities decreased CHF 32.2 billion.
Long-term debt decreased CHF 18.7 billion, or 11%, primarily reflecting maturities of senior and subordinated debt, partially offset by issuances of senior and subordinated debt and valuation adjustments. Brokerage payables decreased CHF 12.4 billion, or 29%, primarily due to open trades with banks and customers and a decrease in margin lending.
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions decreased CHF 1.9 billion, or 7%, mainly reflecting decreases in cash collateral and repurchase transactions with banks, partially offset by an increase in repurchase transactions with customers. Due to banks and customer deposits were stable. Trading liabilities increased CHF 3.1 billion, or 8%, primarily reflecting an increase in short positions.
All other liabilities decreased CHF 1.8 billion, or 2%, including decreases of CHF 4.0 billion, or 15%, in short-term borrowings and CHF 1.5 billion, or 5%, in other liabilities, partially offset by an increase of CHF 3.6 billion, or 10%, in obligation to return securities received as collateral.
> Refer to “Liquidity and funding management” and “Capital management” for more information, including our funding of the balance sheet and the leverage ratio.
Off-balance sheet
We enter into off-balance sheet arrangements in the normal course of business. Off-balance sheet arrangements are transactions or other contractual arrangements with, or for the benefit of, an entity that we do not consolidate. These transactions include derivative instruments, guarantees and similar arrangements, retained or contingent interests in assets transferred to an unconsolidated entity in connection with our involvement with special purpose entities (SPEs), and obligations and liabilities (including contingent obligations and liabilities) under variable interests in unconsolidated entities that provide financing, liquidity, credit and other support.
Derivative instruments
We enter into derivative contracts in the normal course of business for market making, positioning and arbitrage purposes, as well as for our own risk management needs, including mitigation of interest rate, foreign exchange and credit risk.
> Refer to “Derivative instruments” in Risk management – Risk review and results – Credit risk review and “Note 32 – Derivatives and hedging activities” and “Note 35 – Financial instruments” in VI – Consolidated financial statements – Credit Suisse Group for further information.
Guarantees and similar arrangements
In the ordinary course of business, guarantees and indemnifications are provided that contingently obligate us to make payments to a guaranteed or indemnified party based on changes in an asset, liability or equity security of the guaranteed or indemnified party. We may be contingently obligated to make payments to a guaranteed party based on another entity’s failure to perform, or we may have an indirect guarantee of the indebtedness of others. Guarantees provided include, but are not limited to, customary indemnifications to purchasers in connection with the sale of assets or businesses; to investors in private equity funds sponsored by us regarding potential obligations of their employees to return amounts previously paid as carried interest; and to investors in our securities and other arrangements to provide gross-up payments if there is a withholding or deduction because of a tax assessment or other governmental charge.
In connection with the sale of assets or businesses, we sometimes provide the acquirer with certain indemnification provisions. These indemnification provisions vary by counterparty in scope and duration and depend upon the type of assets or businesses sold. They are designed to transfer the potential risk of certain unquantifiable and unknowable loss contingencies, such as litigation, tax and intellectual property matters, from the acquirer to the seller. We closely monitor all such contractual agreements in order to ensure that indemnification provisions are adequately provided for in our consolidated financial statements.
US GAAP requires disclosure of our maximum potential payment obligations under certain guarantees to the extent that it is possible to estimate them and requires recognition of a liability for the fair value of obligations undertaken for guarantees issued or amended after December 31, 2002.
> Refer to “Note 33 – Guarantees and commitments” in VI – Consolidated financial statements – Credit Suisse Group for disclosure of our estimated maximum payment obligations under certain guarantees and related information.
Representations and warranties on residential mortgage loans sold

In connection with the Global Markets division's sale of US residential mortgage loans, we have provided certain representations and warranties relating to the loans sold. We have provided these representations and warranties relating to sales of loans to institutional investors, primarily banks, and non-agency, or private label, securitizations. The loans sold are primarily loans that we have purchased from other parties. The scope of representations and warranties, if any, depends on the transaction, but can include: ownership of the mortgage loans and legal capacity to sell the loans; loan-to-value ratios and other characteristics of the property, the borrower and the loan; validity of the liens securing the loans and absence of delinquent taxes or related liens; conformity to underwriting standards and completeness of documentation; and origination in compliance with law. If it is determined that representations and warranties were breached, we may be required to repurchase the related loans or indemnify the investors to make them whole for losses. Whether we will incur a loss in connection with repurchases and make whole payments depends on:

the extent to which claims are made; the validity of such claims made within the statute of limitations (including the likelihood and ability to enforce claims); whether we can successfully claim against parties that sold loans to us and made representations and warranties to us; the residential real estate market, including the number of defaults; and whether the obligations of the securitization vehicles were guaranteed or insured by third parties.
> Refer to “Representations and warranties on residential mortgage loans sold” in Note 33 – Guarantees and commitments in VI – Consolidated financial statements – Credit Suisse Group for further information.
Involvement with special purpose entities
In the normal course of business, we enter into transactions with, and make use of, SPEs. An SPE is an entity in the form of a trust or other legal structure designed to fulfill a specific limited need of the company that organized it and is generally structured to isolate the SPE’s assets from creditors of other entities, including the Group. The principal uses of SPEs are to assist us and our clients in securitizing financial assets and creating investment products. We also use SPEs for other client-driven activity, such as to facilitate financings, and for Group tax or regulatory purposes.
> Refer to “Note 34 – Transfers of financial assets and variable interest entities” in VI – Consolidated financial statements – Credit Suisse Group for further information.
From time to time, we may issue subordinated and senior securities through SPEs that lend the proceeds to the Group.
Contractual obligations and other commercial commitments
In connection with our operating activities, we enter into certain contractual obligations and commitments to fund certain assets. Our contractual obligations and commitments include short and long-term on-balance sheet obligations as well as future contractual interest payments and off-balance sheet obligations. Total obligations decreased CHF 30.1 billion in 2018 to CHF 637.9 billion, primarily reflecting decreases in long-term debt of CHF 18.7 billion to CHF 154.3 billion, in brokerage payables of CHF 12.4 billion to CHF 30.9 billion and in short-term borrowings of CHF 4.0 billion to CHF 21.9 billion. The decreases were partially offset by increases in trading liabilities of CHF 3.1 billion to CHF 42.2 billion and in customer deposits of CHF 2.8 billion to CHF 363.9 billion.
> Refer to “Note 25 – Long-term debt” and “Note 33 – Guarantees and commitments in VI – Consolidated financial statements – Credit Suisse Group for further information.
Contractual obligations and other commercial commitments

					2018	2017
Payments due within	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total	Total
On- and off-balance sheet obligations (CHF million)						
Due to banks	14,880	226	0	114	15,220	15,413
Customer deposits	362,284	708	126	807	363,925	361,162
Short-term borrowings	21,926	0	0	0	21,926	25,889
Long-term debt [1]	26,471	37,291	32,955	57,591	154,308[2]	173,032[2]
Contractual interest payments [3]	956	881	794	930	3,561[4]	4,637[5]
Trading liabilities	42,169	0	0	0	42,169	39,119
Brokerage payables	30,923	0	0	0	30,923	43,303
Operating lease obligations	501	776	567	1,980	3,824	5,234
Purchase obligations	978	563	312	187	2,040	1,183
Total obligations [6]	**501,088**	**40,445**	**34,754**	**61,609**	**637,896**	**668,972**

1
Refer to "Debt issuances and redemptions" in Liquidity and funding management and "Note 25 – Long-term debt" in VI – Consolidated financial statements – Credit Suisse Group for further information on long-term debt.
2
Includes non-recourse liabilities from consolidated VIEs of CHF 1,764 million and CHF 863 million as of December 31, 2018 and 2017, respectively.
3

Includes interest payments on fixed rate long-term debt, fixed rate interest-bearing deposits (excluding demand deposits) and fixed rate short-term borrowings, which have not been effectively converted to variable rate on an individual instrument level through the use of swaps.

4

Due to the non-determinable nature of interest payments, the following notional amounts have been excluded from the table: variable rate long-term debt of CHF 68,443 million, variable rate short-term borrowings of CHF 18,474 million, variable rate interest-bearing deposits and demand deposits of CHF 146,477 million, fixed rate long-term debt and fixed rate interest-bearing deposits converted to variable rate on an individual instrument level through the use of swaps of CHF 83,763 million and CHF 4,023 million, respectively.

5

Prior period has been corrected.

6

Excludes total accrued benefit liability for pension and other post-retirement benefit plans of CHF 508 million and CHF 533 million as of December 31, 2018 and 2017, respectively, recorded in other liabilities in the consolidated balance sheets, as the accrued liability does not represent expected liquidity needs. Refer to "Note 31 – Pension and other post-retirement benefits" in VI – Consolidated financial statements – Credit Suisse Group for further information on pension and other post-retirement benefits.

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IV – Corporate Governance
Corporate Governance

Corporate Governance

The Group's corporate governance reflects our commitment to safeguarding the interests of our stakeholders.

Overview

The Group's corporate governance complies with internationally accepted standards, and we recognize the importance of good corporate governance. We know that transparent disclosure of our governance helps stakeholders assess the quality of the Group's corporate governance and assists investors in their investment decisions.

Corporate Governance developments

During 2018, the Group's corporate governance continued to align with the implementation of the Group's strategy and risk and control framework. The key corporate governance developments for the Group in 2018 and in early 2019 included:

- The election of two new Group Board of Directors (Board) members, Michael Klein and Ana Paula Pessoa, at the 2018 Annual General Meeting (AGM);
- The appointment of Board member Andreas Gottschling as the new Risk Committee Chair, succeeding Richard E. Thornburgh, effective as of the 2018 AGM;
- The selection and nomination of two new Board member candidates, Christian Gellerstad and Shan Li, for election at the 2019 AGM;
- The appointment of two new Executive Board members, Lydie Hudson as Chief Compliance Officer and Antoinette Poschung as Global Head of Human Resources, succeeding Peter Goerke, and the appointment of Executive Board member Lara Warner to the role of Chief Risk Officer, succeeding Joachim Oechslin. These changes to the Executive Board became effective on February 26, 2019;
- The Board's decision to establish a new Board committee, the Conduct and Financial Crime Control Committee, effective as of January 1, 2019, which will oversee the Group's financial crime compliance programs and the related initiatives aimed at ensuring that the highest standards of conduct and vigilance are maintained throughout the Group. The Board has appointed Urs Rohner to chair the Conduct and Financial Crime Control Committee;
- The Board's decision to propose PricewaterhouseCoopers AG to succeed KPMG AG as the Group's new statutory auditor at the 2020 AGM, effective for the fiscal year ending December 31, 2020, concluding a tender for the Group audit mandate conducted by the Audit Committee in the second half of 2018;
- The wind-down of the Strategic Resolution Unit as a separate division as of December 31, 2018, having achieved its targets;
- The creation of a new role of conduct and ethics ombudsperson to ensure appropriate senior management awareness of and attention to claims of sexual harassment, which is accountable to the CEO and the Group Conduct and Ethics Board; and
- Continued progress in aligning and developing the governance of the Group's major subsidiaries, including changes in the non-executive chairs of the boards of the Group's major subsidiaries in the US, the UK and Switzerland, in the context of board succession planning at the subsidiary level.

We regularly monitor developments in corporate governance guidelines, regulations and best practice standards in all jurisdictions relevant to our business operations. In 2018, the Swiss parliament continued to debate the proposed revisions to Swiss corporate law, which include proposals that impact executive compensation, carrying over the regulations of the Swiss Ordinance Against Excessive Compensation with respect to Listed Corporations (Compensation Ordinance) into general Swiss corporate law, shareholder meetings and gender diversity at the board and executive board levels. In July 2018, the Financial Reporting Council published a revised UK Corporate Governance Code, which became effective January 1, 2019. The revised code sets standards of good governance practice, including in the areas of board leadership and effectiveness, remuneration, shareholder relations and corporate culture.

Corporate Governance framework

The Group's corporate governance framework consists of its governing bodies and its corporate governance policies and procedures, which define the competencies of the governing bodies and other corporate governance rules, as well as the practices to be followed throughout the Group, in line with Swiss corporate law and international best practice standards for corporate governance. The governing bodies of the Group are:

- the General Meeting of Shareholders;
- the Board of Directors;

the Executive Board; and
the external auditors.

The shareholders elect the members of the Board and the external auditors on an annual basis and approve required resolutions at the AGM, such as the consolidated financial statements, capital increases and Board and Executive Board compensation. The Board is responsible for the overall strategic direction, supervision and control of the Group and appoints the members of the Executive Board. The Executive Board is responsible for the day-to-day operational management of the Group's business and for developing and implementing business plans.

The Group is engaged in the banking business and is structured into five business divisions – Swiss Universal Bank; International Wealth Management; Asia Pacific; Global Markets; and Investment Banking & Capital Markets. In the fourth quarter of 2015, we formed the Strategic Resolution Unit to oversee the effective wind-down of businesses and positions that did not fit our strategic direction in the most efficient manner possible. Beginning in 2019, the Strategic Resolution Unit has ceased to exist as a separate division of the Group. The residual portfolio remaining as of December 31, 2018 is now managed in an Asset Resolution Unit (ARU) and will be separately disclosed within the Corporate Center. The divisions are supported by corporate functions that provide infrastructure and services and have internal control responsibilities. The Group's banking business is carried out through its legal entities, which are operational in various jurisdictions and subject to the governance rules and supervision of the regulators in those jurisdictions. The Group has identified certain major subsidiary companies, which, in aggregate, account for a significant proportion of the Group's business operations. These major subsidiaries are Credit Suisse (Schweiz) AG, Credit Suisse Holdings (USA) Inc., Credit Suisse International and Credit Suisse Securities (Europe) Ltd., all subsidiaries of Credit Suisse AG. Corporate governance at these major subsidiaries is closely aligned with the Group's corporate governance.

The Group's corporate governance framework is depicted in the chart above. The duties and responsibilities of the governing bodies are described in further detail in the sections below.

The Group's corporate governance policies and procedures, adopted by the Board, are defined in a series of documents, all of which are available on our website at *credit-suisse.com/governance*, and include:

Articles of Association (AoA): define the purpose of the business, the capital structure and the basic organizational framework. The AoA of Credit Suisse Group AG (Group) are dated June 6, 2017, and the AoA of Credit Suisse AG (Bank) are dated September 4, 2014. The Group's and the Bank's AoAs are available on our website at *credit-suisse.com/articles.*

Code of Conduct: defines the Group's ethical values and professional standards that the Board and all employees are required to follow, including adherence to all relevant laws, regulations and policies in order to maintain and strengthen our reputation for integrity, fair dealing and measured risk taking. Our Code of Conduct is available on our website at *credit-suisse.com/code* in ten languages.

Organizational Guidelines and Regulations (OGR): define the organizational structure of the Group and the responsibilities and sphere of authority of the Board, its committees and the various senior management bodies within the Group, as well as the relevant reporting procedures.

Board charter: outlines the organization and responsibilities of the Board. The Board charter is available on our website at: *credit-suisse.com/boardcharter*.

Board committee charters: define the organization and responsibilities of the committees.

Compensation policy: provides a foundation for the development of sound compensation plans and practices. The Group's compensation policy is available on our website at *credit-suisse.com/compensationpolicy*.

The summaries herein of the material provisions of our AoA and the Swiss Code of Obligations do not purport to be complete and are qualified in their entirety by reference to the AoA and the Swiss Code of Obligations.

Credit Suisse Group AG and Credit Suisse AG are registered companies in Switzerland. The Group's shares are listed on the SIX Swiss Exchange (SIX) and – in the form of American Depositary Shares (ADS), as evidenced by American Depositary Receipts – on the New York Stock Exchange (NYSE). The business purpose of the Group, as set forth in Article 2 of its AoA, is to hold direct or indirect interests in all types of businesses in Switzerland and abroad, in particular in the areas of banking, finance, asset management and insurance. The business purpose of the Bank, as set forth in Article 2 of its AoA, is to operate as a bank, with all related banking, finance, consultancy, service and trading activities in Switzerland and abroad. The AoA of the Group and the Bank set forth their powers to establish new businesses, acquire a majority or minority interest in existing businesses and provide related financing and to acquire, mortgage and sell real estate properties both in Switzerland and abroad.

Employee relations

As of December 31, 2018, we had 45,680 employees worldwide, of which 15,840 were in Switzerland and 29,840 were abroad. Our corporate titles include managing director, director, vice president, assistant vice president and non-officer staff. The majority of our employees do not belong to unions. We have not experienced any significant strikes, work stoppages or labor disputes in recent years. We consider our relations with our employees to be good.

> Refer to "Credit Suisse" in II – Operating and financial review for further information on our responsibility as an employer.

Company details

	Group	Bank
Legal name	Credit Suisse Group AG	Credit Suisse AG
Business purpose	Operate as a holding company	Operate as a bank
Registration details	Commercial register of the Canton of Zurich as of March 3, 1982; No. CHE-105.884.494	Commercial register of the Canton of Zurich as of April 27, 1883; No. CHE-106.831.974
Date incorporated, with unlimited duration	March 3, 1982	July 5, 1856
Registered office	Paradeplatz 8 8001 Zurich Switzerland	Paradeplatz 8 8001 Zurich Switzerland
Equity listing	SIX Swiss Exchange SIX number 1213853 NYSE in the form of ADS	–
Authorized representative in the US	Credit Suisse (USA), Inc., 11 Madison Avenue, New York, New York, 10010	Credit Suisse (USA), Inc., 11 Madison Avenue, New York, New York, 10010

> Refer to "II – Operating and financial review" for a detailed review of our operating results.

> Refer to "Note 40 – Significant subsidiaries and equity method investments" in VI – Consolidated financial statements – Credit Suisse Group for a list of significant subsidiaries and associated entities.

Code of Conduct

At Credit Suisse, we are convinced that our responsible approach to business is a decisive factor in determining our long-term success. We therefore expect all of our employees and members of the Board to observe the professional standards and ethical values set out in our Code of Conduct, including our commitment to complying with all applicable laws, regulations and policies in order to safeguard our reputation for integrity, fair dealing and measured risk-taking. The Code of Conduct also implements requirements stipulated under the US Sarbanes-Oxley Act of 2002 (SOX) by including provisions on ethics for our CEO and our principal financial and accounting officers and other persons performing similar functions. No waivers or exceptions are permissible under our Code of Conduct.

> Refer to "credit-suisse.com/code" for our Code of Conduct.

Corporate Responsibility

For Credit Suisse, corporate responsibility is about creating sustainable value for clients, shareholders, employees and other stakeholders. We strive to comply with the ethical values and professional standards set out in our Code of Conduct in every aspect of our work, including in our relationship with stakeholders. We do so based on a broad understanding of our duties as a financial services provider and employer and as an integral part of the economy and society. This approach also reflects our commitment to protecting the environment. We publish a Corporate Responsibility Report each year and aim to focus our corporate responsibility reporting activities on topics that are relevant to our business and our stakeholders, including through a materiality assessment that we undertake in order to identify critical economic, environmental and social issues.

The Group's reporting on corporate responsibility reflects the GRI Standards for sustainability reporting (Core option) while also providing information on the progress we have made in implementing the Ten Principles of the United Nations (UN) Global Compact as well as examples of how we can contribute to the realization of the UN Sustainable Development Goals. Our Corporate Responsibility Report 2018 will be voluntarily reported to the SIX in accordance with the opting-in regulation for companies issuing sustainability reports.

Our approach to corporate responsibility is broad and considers our respective responsibilities toward clients, shareholders, employees, the environment and society as a whole, which we believe is essential for our long-term success. Competence, client focus, compliance, diligence and responsible conduct from qualified and motivated employees are key to the success of our business. As a global bank, we see ourselves as an integral part of the economy and society. Through our role as a financial intermediary, the Group supports entrepreneurship and economic growth and makes an economic contribution as an employer, taxpayer and contractual partner. We also support various humanitarian and charitable organizations and projects as well as cultural and sporting events. The Group supports environmental sustainability, for example, through the development of sustainable and impact investment products and services.

We publish a Statement on Sustainability, which is available on our website. Our understanding of corporate responsibility is illustrated in the chart and further details, including highlights from 2018 activities, can be found in our Corporate Responsibility Report.

> Refer to "credit-suisse.com/responsibility" for our Corporate Responsibility Report.

Shareholders

Capital structure

Our total issued share capital as of December 31, 2018 was CHF 102,240,469 divided into 2,556,011,720 shares, with a nominal value of CHF 0.04 per share. On December 12, 2018, the Group announced that the Board had approved a share buyback program for 2019 to purchase up to CHF 1.5 billion of Group ordinary shares and the expectation of a buyback of at least CHF 1.0 billion in 2019, subject to market and economic conditions. The launch of a similar share buyback program is expected for 2020, subject to approval by the Board; the level of the buyback for 2020 will be set in light of the Group's capital plans and subject to prevailing market conditions, but is expected to be in line with our intention to distribute at least 50% of net income.

> Refer to "Share repurchases" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Capital management for further information.

> Refer to "Note 15 – Share capital, conditional, conversion and authorized capital of Credit Suisse Group" in VII – Parent company financial statements – Credit Suisse Group and our AoA (Articles 26, 26c and 27) for information on changes to our capital structure during the year.

Shareholder information

Shareholder base

We have a broad shareholder base, with the majority of shares owned directly or indirectly by institutional investors outside Switzerland. As of December 31, 2018, 112,411 shareholders were registered in our share register with 1,475,529,019 shares, representing 58% of the total shares issued. The remaining 42% of shares are not registered in our share register. As of December 31, 2018, 99,907,263 or 3.9%, of the issued shares were in the form of ADS. The information provided in the following tables reflects the distribution of Group shares as registered in our share register as of December 31, 2018.

Distribution of Group shares

end of	2018				2017			
	Number of shareholders	%	Number of shares	%	Number of shareholders	%	Number of shares	%
Distribution of Group shares								
Private investors	109,205	97	201,455,312	8	108,856	97	178,205,123	7
of which								
Switzerland	99,472	88	178,240,134	7	99,164	88	157,977,712	6
of which foreign	9,733	9	23,215,178	1	9,692	9	20,227,411	1
Institutional investors	3,206	3	1,274,073,707	50	3,283	3	1,266,696,202	50
of which								
Switzerland	2,773	2	291,385,944	11	2,827	3	290,518,357	11
of which foreign [1]	433	0	982,687,763	38	456	0	976,177,845	38
Shares registered in share register	**112,411**	100	**1,475,529,019**	58	**112,139**	100	**1,444,901,325**	57
of which								
Switzerland	102,245	91	469,626,078	18	101,991	91	448,496,069	18
of which Europe	9,178	8	623,937,087	24	9,175	8	610,345,374	24
of which US [1]	144	0	356,918,183	14	162	0	362,822,676	14
of which other	844	1	25,047,671	1	811	1	23,237,206	1
Shares not registered in share register	**–**	–	**1,080,482,701**	42	**–**	–	**1,111,110,395**	43
Total shares issued	**–**	–	**2,556,011,720**	100	**–**	–	**2,556,011,720**	100

1 Includes shares issued in the form of ADS.

Distribution of institutional investors in share register by industry

end of	2018				2017			
	Number of shareholders	%	Number of shares	%	Number of shareholders	%	Number of shares	%
Institutional investors by industry								
Banks	21	1	1,235,285	0	20	1	795,084	0
Insurance companies	83	3	17,129,086	1	77	2	16,310,918	1
Pension funds	431	13	62,737,967	5	449	14	60,280,116	5
Investment trusts	371	12	207,173,146	16	391	12	233,752,140	18
Other trusts	524	16	9,247,355	1	552	17	9,160,647	1
Governmental institutions	22	1	646,705	0	23	1	648,134	0
Other [1]	1,642	51	157,040,518	12	1,657	50	161,226,970	13
Direct entries	**3,094**	97	**455,210,062**	36	**3,169**	97	**482,174,009**	38
Fiduciary holdings	**112**	3	**818,863,645**	64	**114**	3	**784,522,193**	62
Total institutional investors	**3,206**	100	**1,274,073,707**	100	**3,283**	100	**1,266,696,202**	100

Rounding differences may occur.

1 Includes various other institutional investors for which a breakdown by industry type was not available.

Through the use of an external global market intelligence firm, we regularly gather additional information on the composition of our shareholder base, including information on shares that are not registered in our share register. According to this data, our shareholder base as of December 31, 2018 comprised 88% institutional investors, with around half of such investors located in North America. The distribution of Group shareholdings by investor type and region is shown as follows:

Shareholder engagement

The Group engages regularly with its shareholders and proxy advisors. The purpose of such engagements is to understand the perspectives of its shareholders, exchange views about the Group's strategy, financial performance, corporate governance and compensation and other matters of importance to the Group or its shareholders. Shareholder engagement meetings may be attended by the Chairman of the Board (Chairman), the Compensation Committee Chair, the CEO, CFO and other members of the Board or senior management. The responsibility for shareholder engagement is overseen by our Investor Relations department. The Group aims to ensure that all shareholders receive the relevant information they need to keep abreast of current Group developments and make informed decisions.

Information policy

We are committed to an open and fair information policy with our shareholders and other stakeholders. Our Investor Relations and Corporate Communications departments are responsible for addressing inquiries received. All Group shareholders registered in our share register receive an invitation to our AGM, including an order form to receive the annual report and other reports. Each registered shareholder may elect to receive the quarterly reports on our financial performance. All of these reports and other information can be accessed on our website at *credit-suisse.com/investors*.

Notices required under Swiss law

Notices to shareholders required under Swiss law are made by publication in the Swiss Official Gazette of Commerce. The Board may designate further means of communication for publishing notices to shareholders. Notices required under the listing rules of the SIX will either be published in two Swiss newspapers in German and French and sent to the SIX or otherwise communicated to the SIX in accordance with applicable listing rules. The SIX may further disseminate the relevant information.

Significant shareholders

Under the Swiss Federal Act on Financial Market Infrastructure and Market Conduct in Securities and Derivative Trading (FMIA), anyone holding shares in a company listed on the SIX is required to notify the company and the SIX if their holding reaches, falls below or exceeds the following thresholds: 3%, 5%, 10%, 15%, 20%, 25%, 33⅓%, 50% or 66⅔% of the voting rights entered into the commercial register, whether or not the voting rights can be exercised

(that is, notifications must also include certain derivative holdings such as options or similar instruments). Following receipt of such notification, the company has an obligation to inform the public. In addition, pursuant to the Swiss Code of Obligations, a company must disclose in the notes to its annual consolidated financial statements the identity of any shareholders

who own in excess of 5% of its shares. The following provides an overview of the holdings of our significant shareholders, including any rights to purchase or dispose of shares, based on the most recent disclosure notifications. In line with the FMIA requirements, the percentages indicated below were calculated in relation to the share capital reflected in the AoA at the time of the disclosure notification. As shareholders are only required to notify the company and the SIX if their holding reaches, falls below or exceeds the thresholds listed above, the percentage holdings of our significant shareholders may vary at any given time compared to the date of submission of the most recent notification for these respective shareholders. The full text of all notifications can be found on our website at *credit-suisse.com/shareholders*. Each share entitles the holder to one vote, except as described below.

> Refer to "Note 3 – Business developments, significant shareholders and subsequent events" in VI – Consolidated financial statements – Credit Suisse Group for further information on significant shareholders.

The Group also holds positions in its own shares, including shares acquired through the share buyback program described above, which are subject to the same disclosure requirements as significant external shareholders. These positions fluctuate and, in addition to the activity from our share buyback program, primarily reflect activities related to market making, facilitating client orders and satisfying the obligations under our employee compensation plans. Shares held by the Group have no voting rights. As of December 31, 2018, our holdings amounted to 2.78% purchase positions (0.15% registered shares and 2.636% share acquisition rights) and 4.87% sales positions (disposal rights), mainly related to the Group's outstanding tier 1 capital instruments, which would be converted into Group ordinary shares upon the occurrence of certain specified triggering events. As a result of the share buyback program for 2019, the Group's purchase positions in its own shares are expected to increase steadily during 2019.

> Refer to "Issuances and redemptions" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Capital management for further information.

Cross shareholdings

The Group has no cross shareholdings in excess of 5% of capital or voting rights with any other company.

Significant shareholders

	Group publication of notification	Number of shares (million)	Approximate shareholding %[1]	Purchase rights %
December 31, 2018 or the most recent notification date				
Qatar Investment Authority (registered entity – Qatar Holding LLC)	September 6, 2018	133.2	5.21	0.39[2]
Norges Bank	February 15, 2018	127.4	4.98	–
The Olayan Group (registered entity – Competrol Establishment)	December 12, 2018	126.0	4.93	0.07[3]
BlackRock Inc.	September 2, 2017	86.9	4.17	–
Harris Associates L.P.	November 9, 2013[4]	81.5	5.17	–
Dodge & Cox	December 28, 2018[5]	78.2	3.06	–
Silchester International Investors LLP	December 7, 2018	77.4	3.03	–
December 31, 2017 or the most recent notification date				
Norges Bank	February 15, 2018	127.4	4.98	–
Qatar Investment Authority (registered entity – Qatar Holding LLC)	August 16, 2017	126.2	4.94	10.97
The Olayan Group (registered entity – Crescent Holding GmbH)	June 2, 2017	106.6	4.93	5.29

BlackRock Inc.	September 2, 2017	86.9	4.17	–
Harris Associates L.P.	November 9, 2013	81.5	5.17	–
Capital Group Companies, Inc.	October 31, 2017	76.6	3.01	–
December 31, 2016 or the most recent notification date				
The Olayan Group (registered entity – Crescent Holding GmbH)	September 16, 2016	111.3	5.41	5.31
Norges Bank	December 3, 2016	104.4	4.99	–
Qatar Investment Authority (registered entity – Qatar Holding LLC)	November 16, 2016	103.0	4.93	12.81
Capital Group Companies, Inc.	January 28, 2017	96.7	4.91	–
Harris Associates L.P.	November 9, 2013	81.5	5.17	–
BlackRock Inc.	January 25, 2013	38.6	3.01	–

1
The approximate shareholding percentages were calculated in relation to the share capital at the time of the relevant disclosure notification. They therefore do not reflect changes in such percentages that would result from changes in the number of outstanding shares, following the date of the disclosure notification.

2
Credit Suisse Group (Guernsey) II Limited redeemed its CHF 2.5 billion 9.0% and USD 1.72 billion 9.5% high-trigger tier 1 capital instruments (perpetual security with mandatory contingent conversion into shares) for redemption on October 23, 2018. As a result of this transaction, the 10.97% purchase rights for Qatar Investment Authority disclosed in the prior year no longer exist. The 0.39% purchase rights relate to put options.

3
Credit Suisse Group (Guernsey) II Limited redeemed its USD 1.725 billion 9.5% high-trigger tier 1 capital instruments (perpetual security with mandatory contingent conversion into shares) for redemption on October 23, 2018. As a result of this transaction, 5.24% of the 5.29% purchase rights for The Olayan Group disclosed in the prior year no longer exist. The 0.07% purchase rights relate to put options and perpetual tier 1 contingent convertible capital notes.

4
This position includes the reportable position of Harris Associates Investment Trust (4.97% shares), as published by the SIX on August 1, 2018.

5
This position includes the reportable position of Dodge & Cox International Stock Fund (3.09% shares), as published by SIX on February 5, 2019.

Shareholder rights

We are fully committed to the principle of equal treatment of all shareholders. The following information summarizes certain shareholder rights at the Group.

Voting rights and transfer of shares

There is no limitation under Swiss law or the AoA on the right to own Group shares.

In principle, each share represents one vote at the AGM. Shares held by the Group have no voting rights. Shares for which a single shareholder or shareholder group can exercise voting rights may not exceed 2% of the total outstanding share capital, unless one of the exemptions discussed below applies. The restrictions on voting rights do not apply to:

- the exercise of voting rights by the independent proxy as elected by the AGM;
- shares in respect of which the shareholder confirms to us that the shareholder has acquired the shares in the shareholder's name for the shareholder's own account and in respect of which the disclosure requirements in accordance with the FMIA and the relevant ordinances and regulations have been fulfilled; or
- shares that are registered in the name of a nominee, provided that this nominee is willing to furnish us, on request, the name, address and shareholdings of any beneficial owner or group of related beneficial owners on behalf of whom the nominee holds 0.5% or more of the total outstanding share capital of the Group.

To execute voting rights, shares need to be registered in the share register directly or in the name of a nominee. In order to be registered in the share register, the purchaser must file a share registration form with the depository bank. The registration of shares in the share register may be requested at any time. Failing such registration, the purchaser may not vote or participate in shareholders' meetings. However, each shareholder, whether registered in the share register or not, is entitled to receive dividends or other distributions approved at the AGM. Transfer restrictions apply regardless of the way and the form in which the registered shares are kept in the accounts and regardless of the provisions applicable to transfers. The transfer of intermediated securities based on Group shares, and the pledging of these intermediated securities as collateral, is based on the provisions of the Swiss Federal Intermediated Securities Act. The transfer or pledging of shares as collateral by means of written assignment is not permitted.

Annual General Meeting

We encourage shareholders to participate at our AGM. Under Swiss law, the AGM must be held within six months of the end of the fiscal year. Notice of an AGM, including agenda items and proposals submitted by the Board and by shareholders, must be published in the Swiss Official Gazette of Commerce at least 20 days prior to the AGM. Shares only qualify for voting at an AGM if they are registered in the share register with voting rights no later than three days prior to the AGM.

Convocation of shareholder meetings

The AGM is convened by the Board or, if necessary, by the statutory auditors, with 20 days' prior notice. The Board is further required to convene an Extraordinary General Meeting (EGM) if so resolved at a shareholders' meeting or if so requested by shareholders holding in aggregate at least 10% of the nominal share capital. The request to call an EGM must be submitted in writing to the Board, and, at the same time, Group shares representing at least 10% of the nominal share capital must be deposited for safekeeping. The shares remain in safekeeping until the day after the EGM.

Request to place an item on the agenda

Shareholders holding shares with an aggregate nominal value of at least CHF 40,000 have the right to request that a specific item be placed on the agenda and voted upon at the AGM. The request to include a particular item on the agenda, together with a relevant proposal, must be submitted in writing to the Board no later than 45 days before the meeting and, at the same time, Group shares with an aggregate nominal value of at least CHF 40,000 must be deposited for safekeeping. The shares remain in safekeeping until the day after the AGM.

Quorum requirements

The AGM may, in principle, pass resolutions without regard to the number of shareholders present at the meeting or represented by proxy, except as discussed below. Resolutions and elections generally require the approval of a majority of the votes represented at the meeting, except as otherwise provided by mandatory provisions of law or by the AoA.

Shareholders' resolutions that require a vote by a majority of the votes represented include:

- amendments to the AoA, unless a supermajority is required;

election of members of the Board, the Chairman, the members of the Compensation Committee, the independent proxy and statutory auditors;

approval of the compensation of the members of the Board and the Executive Board;

approval of the annual report and the statutory and consolidated accounts;

discharge of the acts of the members of the Board and Executive Board; and

determination of the appropriation of retained earnings.

A quorum of at least two-thirds of the votes represented is required for resolutions on:

change of the purpose of the company;

creation of shares with increased voting powers;

implementation of transfer restrictions on shares;

increase in conditional and authorized capital;

increase of capital by way of conversion of capital surplus or by contribution in kind;

restriction or suspension of pre-emptive rights;
change of location of the principal office; and
dissolution of the company without liquidation.

A quorum of at least half of the total share capital and approval by at least three-quarters of the votes represented is required for resolutions on:

the conversion of registered shares into bearer shares;
amendments to the AoA relating to registration and voting rights of nominee holders; and
the dissolution of the company.

A quorum of at least half of the total share capital and the approval of at least seven-eighths of the votes cast is required for amendments to provisions of the AoA relating to voting rights.

Say on pay

In accordance with the Swiss Code of Best Practice for Corporate Governance, the Group submitted the compensation report (contained in the Compensation section of the Annual Report) for a consultative vote by shareholders at the 2018 AGM. In accordance with the Compensation Ordinance, the Group will submit the following Board and Executive Board compensation recommendations for binding votes by shareholders at the 2019 AGM:

For the Board: a maximum amount of compensation for the Board for the period from the 2019 AGM to the 2020 AGM;
For the Executive Board: an aggregate amount of variable compensation in the form of short-term incentive (STI) awards to be granted to Executive Board members for the 2018 financial year;
For the Executive Board: a maximum amount of fixed compensation for the Executive Board for the period from the 2019 AGM to the 2020 AGM; and
For the Executive Board: an aggregate amount of variable compensation in the form of long-term incentive (LTI) awards to be granted to Executive Board members for the 2019 financial year (based on fair value at grant).

In line with current practice, the Group will continue to submit the compensation report for a consultative vote by shareholders.

> Refer to “V – Compensation” for further information on the binding vote.

Discharge of the acts of the Board and the Executive Board

According to Swiss law, the AGM has the power to discharge the actions of the members of the Board and the Executive Board. The 2018 AGM granted discharge to the members of the Board and the Executive Board for the 2017 financial year.

Pre-emptive rights

Under Swiss law, any share issue, whether for cash or non-cash consideration or no consideration, is subject to the prior approval of the shareholders. Shareholders of a Swiss corporation have certain pre-emptive rights to subscribe for new issues of shares in proportion to the nominal amount of shares held. A resolution adopted at a shareholders’ meeting with a supermajority may, however, limit or suspend pre-emptive rights in certain limited circumstances.

Duty to make an offer

Swiss law provides that anyone who, directly or indirectly or acting in concert with third parties, acquires 33⅓% or more of the voting rights of a listed Swiss company, whether or not such rights are exercisable, must make an offer to acquire all of the listed equity securities of such company, unless the AoA of the company provides otherwise. Our AoA does not include a contrary provision. This mandatory offer obligation may be waived under certain circumstances by the Swiss Takeover Board or the Swiss Financial Market Supervisory Authority FINMA (FINMA). If no waiver is granted, the mandatory offer must be made pursuant to procedural rules set forth in the FMIA and implementing ordinances.

Clauses on changes in control

To the best of our knowledge, there are no agreements in place that could lead to a change in control of the Group. Subject to certain provisions in the Group’s employee compensation plans, which allow for the Compensation Committee or Board to determine the treatment of outstanding awards for all employees, including the Executive Board members, in the case of a change in control, there are no provisions that require the payment of extraordinary benefits in the agreements and plans benefiting members of the Board and the Executive Board or any other members of senior management. Specifically, there are no contractually agreed severance payments in the case of a change in control of the Group.

> Refer to “Contract lengths, termination and change in control provisions” in V – Compensation – Executive Board compensation for 2017 for further information on the clauses on changes in control.

Borrowing and raising funds

Neither Swiss law nor our AoA restrict our power to borrow and raise funds in any way. The decision to borrow funds is passed by or under the direction of our Board, with no shareholders’ resolution required.

Liquidation

Under Swiss law and our AoA, the Group may be dissolved at any time by a shareholders’ resolution which must be passed by:

- a supermajority of at least three-quarters of the votes cast at the meeting in the event the Group were to be dissolved by way of liquidation; and
- a supermajority of at least two-thirds of the votes represented and an absolute majority of the par value of the shares represented at the meeting in other cases.

Dissolution by order of FINMA is possible if we become bankrupt. Under Swiss law, any surplus arising out of liquidation (after the settlement of all claims of all creditors) is distributed to shareholders in proportion to the paid-up par value of shares held.

Board of Directors

General information

Membership and qualifications

The AoA provide that the Board shall consist of a minimum of seven members. The Board currently consists of 12 members. We believe that the size of the Board must be such that the committees can be staffed with qualified members. At the same time, the Board must be small enough to ensure an effective and rapid decision-making process. Board members are elected at the AGM by our shareholders individually for a period of one year and are eligible for re-election. Shareholders will also elect a member of the Board as the Chairman and each of the members of the Compensation Committee for a period of one year. One year of office is understood to be the period of time from one AGM to the close of the next AGM. Members of the Board shall generally retire after having served on the Board for 12 years. Under certain circumstances, the Board may extend the limit of terms of office for a particular Board member for a maximum of three additional years.

An overview of the Board and the committee membership is shown in the following table. The composition of the Boards of the Group and the Bank is identical.

Board composition and succession planning

The Governance and Nominations Committee (formerly Chairman's and Governance Committee) regularly considers the composition of the Board as a whole and in light of staffing requirements for the committees. The Governance and Nominations Committee recruits and evaluates candidates for Board membership based on criteria as set forth by the OGR. The Governance and Nominations Committee may also retain outside consultants with respect to the identification and recruitment of potential new Board members. In assessing candidates, the Governance and Nominations Committee considers the requisite skills and characteristics of Board members as well as the composition of the Board as a whole. Among other considerations, the Governance and Nominations Committee takes into account skills, management experience, independence and diversity in the context of the needs of the Board to fulfill its responsibilities. The Governance and Nominations Committee also considers other activities and commitments of an individual in order to be satisfied that a proposed member of the Board can devote enough time to a Board position at the Group.

> Refer to "Mandates" for further information.

Members of the Board of Directors

	Board member since	Independence	Governance and Nominations Committee	Audit Committee	Compensation Committee	Conduct and Financial Crime Committee[1]	Risk Committee
Elected at 2018 AGM							
Urs Rohner, Chairman	2009	Independent	Chair	–	–	Chair	–
Iris Bohnet	2012	Independent	–	–	Member	–	–
Andreas Gottschling	2017	Independent	Member	Member	–	–	Chair
Alexander Gut	2016	Independent	–	Member	–	–	–
Michael Klein	2018	Independent	–		–	–	Member
Andreas N. Koopmann	2009	Independent	–	–	Member	–	–
Seraina Macia	2015	Independent	–	–	–	–	Member
Kai S. Nargolwala	2013	Independent	Member	–	Chair	Member	–
Ana Paula Pessoa	2018	Independent	–	Member	–	Member	–
Joaquin J. Ribeiro	2016	Independent	–	Member	–	–	–
Severin Schwan, Vice-Chair and Lead Independent Director	2014	Independent	Member	–	–	–	Member
John Tiner	2009	Independent	Member	Chair	–	Member	Member
Alexandre Zeller[2]	2017	Independent	Member	–	Member	Member	–

1

Establishment effective as of January 1, 2019.
2
Alexandre Zeller stepped down from the Board as of February 28, 2019.
197

The background, skills and experience of our Board members are diverse and broad and include holding or having held top management positions at financial services and other companies in Switzerland and abroad, as well as leading positions in government, academia and international organizations. The Board is composed of individuals with wide-ranging professional expertise in key areas including finance and financial management, risk management, audit, innovation and technology, legal, compliance and regulatory affairs, advertising, marketing and media, and human resources and incentive structures. Diversity of culture, experience and opinion are important aspects of Board composition, as well as gender diversity. While the ratio of female-to-male Board members may vary in any given year, the Board is committed to maintaining a good gender balance over the long term. The collective experience and expertise of our Board members as of the end of 2018 across those key areas considered particularly relevant for the Group is illustrated in the following chart.

In areas where the Board's collective experience and expertise may require strengthening, the Board may either decide to nominate a new Board member candidate with specialist expertise, engage outside experts or take other measures. For example, after former Board member and technology expert Sebastian Thrun stepped down from the Board in 2016, the Board established the interdisciplinary Innovation and Technology Committee as an advisory body to further the Group's strategic goals with respect to innovation and technology. Mr. Thrun was retained in an advisory capacity to chair the committee, which includes an external cybersecurity expert and regularly engages internal technology experts.

To maintain a high degree of expertise, diversity and independence in the future, the Board has a succession planning process in place to identify potential candidates for the Board at an early stage. With this process, we are well prepared when Board members rotate off the Board. The objectives of the succession planning process are to ensure adequate representation of key Board competencies and a Board composition that is well-suited to address future challenges, while maintaining the stability and professionalism of the Board. Potential candidates are evaluated according to criteria defined to assess the candidates' expertise and experience, which include the following:

- proven track record as an executive with relevant leadership credentials gained in an international business environment in financial services or another industry;
- relevant functional skills and credentials in the key areas listed above;
- understanding of global banking, financial markets and financial regulation;
- broad international experience and global business perspective, with a track record of having operated in multiple geographies;
- ability to bring insight and clarity to complex situations and to both challenge and constructively support management;
- high level of integrity and affinity with the Group's values and corporate culture; and
- willingness to commit sufficient time to prepare for and attend Board and committee meetings.

The evaluation of candidates also considers formal independence and other criteria for Board membership, consistent with legal and regulatory requirements and the Swiss Code of Best Practice for Corporate Governance. Furthermore, we believe that other aspects, including team dynamics and personal reputation of Board members, play a critical role in ensuring the effective functioning of the Board. This is why the Group places the utmost importance on the right mix of personalities who are also fully committed to making their blend of specific skills and experience available to the Board.

While the Board is continually engaged in considering potential candidates throughout the year, succession planning for the next year is typically kicked off at the Board's annual strategy offsite, which is held mid-year. In addition to its discussions of the Group's strategy, the Board holds a dedicated session on corporate governance, at which, among other topics, current Board composition and future needs are discussed, including the needs for suitable Board committee composition. Based on the outcome of these discussions, the interest and availability of certain candidates will be explored further. The Board's discussions will continue at its annual self-assessment session, which usually takes place at year-end, and it will consider specific changes in Board composition to be proposed at the next AGM. The Board will ultimately approve candidates to be nominated as new Board members for election at the AGM at its February or March meetings, shortly before the publication of this report.

New members and continuing training

Any newly appointed member is required to participate in an orientation program to become familiar with our organizational structure, strategic plans, significant financial, accounting and risk issues and other important matters relating to the governance of the Group. The orientation program is designed to take into account the new Board member's individual background and level of experience in each specific area. Moreover, the program's focus is aligned with any committee memberships of the person concerned. Board members are encouraged to engage in continuing training. The Board and the committees of the Board regularly ask specialists within the Group to speak about specific topics in order to enhance the Board members' understanding of issues that already are, or may become, of particular importance to our business.

Meetings

In 2018, the Board held six meetings in person and four additional meetings. In addition, the Board held a two and a half-day strategy session. The members of the Board are encouraged to attend all meetings of the Board and the committees on which they serve.

All members of the Board are expected to spend the necessary time outside of these meetings needed to discharge their responsibilities appropriately. The Chairman calls the meeting with sufficient notice and prepares an agenda for each meeting. However, any other Board member has the right to call an extraordinary meeting, if deemed necessary. The Chairman has the discretion to invite members of management or others to attend the meetings. Generally, the members of the Executive Board attend part of the meetings to ensure effective interaction with the Board. The Board also holds separate private sessions without management present. Minutes are kept of the proceedings and resolutions of the Board.

From time to time, the Board may make certain decisions via circular resolution, unless a member asks that the matter be discussed in a meeting and not decided upon by way of written consent.

Meeting attendance – Board and Board committees

	Board of Directors[1]	Governance and Nominations Committee[2]	Audit Committee[3]	Compensation Committee[4]	Risk Committee[5]
in 2018					
Total number of meetings held	11	9	18	9	6
Number of members who missed no meetings	12	6	5	2	6
Number of members who missed one meeting	2	0	1	1	1
Number of members who missed two or more meetings	0	1	1	1	0
Meeting attendance, in %	98	93	97	92	97

Meeting attendance is shown for the calendar year 2018, which spans two Board periods. While there were 12 members prior to the 2018 AGM and 13 members thereafter, there were a total of 14 individuals who served as Board members during 2018.

1
The Board consisted of 12 and 13 members at the beginning of the year and the end of the year, respectively, with 2 members joining the Board (Michael Klein and Ana Paula Pessoa) and 1 member leaving the Board (Richard E. Thornburgh).

2
The Governance and Nominations Committee consisted of 6 members at the beginning and at the end of the year, with 1 member joining the committee (Andreas Gottschling) and 1 member leaving the committee (Richard E. Thornburgh).

3
The Audit Committee consisted of 5 members at the beginning and the end of the year, with 2 members joining the committee (Andreas Gottschling and Ana Paula Pessoa) and 2 members leaving the committee (Richard E. Thornburgh and Seraina Macia).

4
The Compensation Committee consisted of four members at the beginning and the end of the year.

5
The Risk Committee consisted of 5 members at the beginning and at the end of the year, with 2 members joining the committee (Seraina Macia and Michael Klein) and 2 members leaving the committee (Richard E. Thornburgh and Andreas N. Koopmann).

Meeting attendance – individual Board members

Attendance (%)	< 75	75–84	85–94	95–100
Board member				
Urs Rohner, Chairman				
Iris Bohnet				
Andreas Gottschling				
Alexander Gut				
Michael Klein [1]				
Andreas N. Koopmann				
Seraina Macia				
Kai S. Nargolwala				
Ana Paula Pessoa [1]				
Joaquin J. Robeiro				
Severin Schwan				
John Tiner				

Alexandre Zeller [2]

Includes Board and Committee meeting attendance.

1

Board member as of the 2018 AGM.

2

Alexandre Zeller stepped down from the Board as of February 28, 2019.

Mandates

Our Board members may assume board or executive level or other roles in companies and organizations outside of the Group, which are collectively referred to as mandates. The Compensation Ordinance sets out that companies must include provisions in their articles of association to define the activities that fall within the scope of a mandate and set limits on the number of mandates that board members and executive management may hold. According to the Group's AoA, mandates include activities in the most senior executive and management bodies of listed companies and all other legal entities that are obliged to obtain an entry in the Swiss commercial register or a corresponding foreign register.

The limitations on mandates assumed by Board members outside of the Group are summarized in the table below.

Type of mandate and limitation – Board

Type of mandate	Limitation
Listed companies	No more than four other mandates
Other legal entities [1]	No more than five mandates
Legal entities on behalf of the Group [2]	No more than ten mandates
Charitable legal entities [3]	No more than ten mandates

1

Includes private non-listed companies.

2

Includes memberships in business and industry associations.

3

Also includes honorary mandates in cultural or educational organizations.

No Board member holds mandates in excess of these restrictions. The restrictions shown above do not apply to mandates of Board members in legal entities controlled by the Group such as subsidiary boards.

> Refer to "Audit Committee" in Board committees for further information on limits on Audit Committee service.

Independence

The Board consists solely of non-executive directors within the Group, of which at least the majority must be determined to be independent. In its independence determination, the Board takes into account the factors set forth in the OGR, the committee charters and applicable laws and listing standards. Our independence standards are also periodically measured against other emerging best practice standards.

The Governance and Nominations Committee performs an annual assessment of the independence of each Board member and reports its findings to the Board for the final determination of independence of each individual member. The Board has applied the independence criteria of the SIX Exchange Directive on Information relating to Corporate Governance, FINMA, the Swiss Code of Best Practice for Corporate Governance and the rules of the NYSE and the Nasdaq Stock Market (Nasdaq) in determining the definition of independence.

Independence criteria applicable to all Board members

In general, a director is considered independent if the director:

- is not, and has not been for the prior three years, employed as an executive officer or in another function at the Group or any of its subsidiaries;
- is not, and has not been for the prior three years, an employee or affiliate of our external auditor; and
- does not maintain a material direct or indirect business relationship with the Group or any of its subsidiaries.

Whether or not a relationship between the Group or any of its subsidiaries and a member of the Board is considered material depends in particular on the following factors:

- the volume and size of any transactions concluded in relation to the financial status and credit standing of the Board member concerned or the organization in which he or she is a partner, significant shareholder or executive officer;
- the terms and conditions applied to such transactions in comparison to those applied to transactions with counterparties of a similar credit standing;
- whether the transactions are subject to the same internal approval processes and procedures as transactions that are concluded with other counterparties;
- whether the transactions are performed in the ordinary course of business; and
- whether the transactions are structured in such a way and on such terms and conditions that the transaction could be concluded with a third party on comparable terms and conditions.

Moreover, a Board member is not considered independent if the Board member is, or has been at any time during the prior three years, part of an interlocking directorate in which a member of the Executive Board serves on the compensation committee of another company that employs the Board member. Significant shareholder status is generally also not considered a criterion for independence unless the shareholding exceeds 10% of the Group's share capital or in instances where the shareholder may otherwise influence the Group in a significant manner. Board members with immediate family members who would not qualify as independent are also not considered independent.

Specific independence considerations

Board members serving on the Audit Committee are subject to independence requirements in addition to those required of other Board members. None of the Audit Committee members may be an affiliated person of the Group or may, directly or indirectly, accept any consulting, advisory or other compensatory fees from us other than their regular compensation as members of the Board and its committees.

For Board members serving on the Compensation Committee, the independence determination considers all factors relevant to determining whether a director has a relationship with the Group that is material to that director's ability to be independent from management in connection with the duties of a Compensation Committee member, including, but not limited to:

- the source of any compensation of the Compensation Committee member, including any consulting, advisory or other compensatory fees paid by the Group to such director; and
- whether the Compensation Committee member is affiliated with the Group, any of its subsidiaries or any affiliates of any of its subsidiaries.

Other independence standards

While the Group is not subject to such standards, the Board acknowledges that some proxy advisors apply different standards for assessing the independence of our Board members, including the length of tenure a Board member has served, the full-time status of a Board Member, annual compensation levels of Board members within a comparable range to executive pay or a Board member's former executive status for periods further back than the preceding three years.

Independence determination

As of December 31, 2018, all members of the Board were determined by the Board to be independent.

Board leadership

Chairman of the Board

The Chairman is a non-executive member of the Board, in accordance with Swiss banking law, and performs his role on a full-time basis, in line with the practice expected by FINMA, our main regulator. The Chairman:

- coordinates the work within the Board;
- works with the committee chairmen to coordinate the tasks of the committees;
- ensures that the Board members are provided with the information relevant for performing their duties;

- drives the Board agenda;
- drives key Board topics, especially regarding the strategic development of the Group, succession planning, the structure and organization of the Group, corporate governance, as well as compensation and compensation structure, including the performance evaluation and compensation of the CEO and the Executive Board;
- chairs the Board, the Governance and Nominations Committee, the Conduct and Financial Crime Control Committee and the Shareholder Meetings;
- takes an active role in representing the Group to key shareholders, investors, regulators and supervisors, industry associations and other external stakeholders;
- has no executive function within the Group;
- with the exception of the Governance and Nominations Committee and the Conduct and Financial Crime Control Committee, is not a member of any of the other Board standing committees; and
- may attend all or parts of selected committee meetings as a guest without voting power.

Vice-Chair

The Vice-Chair:

- is a member of the Board;
- is a designated deputy to the Chairman; and
- assists the Chairman by providing support and advice to the Chairman, assuming the Chairman's role in the event of the Chairman's absence or indisposition and leading the Board accordingly.

There may be one or more Vice-Chairs. Severin Schwan currently serves as Vice-Chair.

Lead Independent Director

According to the Group's OGR, the Board may appoint a Lead Independent Director. If the Chairman is determined not to be independent by the Board, the Board must appoint a Lead Independent Director. The Lead Independent Director:

- may convene meetings without the Chairman being present;
- takes a leading role among the Board members, particularly when issues between a non-independent Chairman and the independent Board members arise (for example, when the non-independent Chairman has a conflict of interest);
- leads the Board's annual assessment of the Chairman; and
- ensures that the work of the Board and Board-related processes continue to run smoothly.

Severin Schwan currently also serves as the Lead Independent Director.

Segregation of duties

In accordance with Swiss banking law, the Group operates under a dual board structure, which strictly segregates the duties of supervision, which are the responsibility of the Board, from the duties of management, which are the responsibility of the Executive Board. The roles of the Chairman (non-executive) and the CEO (executive) are separate and carried out by two different people.

Board responsibilities

In accordance with the OGR, the Board delegates certain tasks to Board committees and delegates the management of the company and the preparation and implementation of Board resolutions to certain management bodies or executive officers to the extent permitted by law, in particular Article 716a and 716b of the Swiss Code of Obligations, and the AoA.

With responsibility for the overall direction, supervision and control of the company, the Board:

- regularly assesses our competitive position and approves our strategic and financial plans and risk appetite statement and overall risk limits;
- receives a status report at each ordinary meeting on our financial results, capital, funding and liquidity situation;
- receives, on a monthly basis, management information packages, which provide detailed information on our performance and financial status, as well as quarterly risk reports outlining recent developments and outlook scenarios;
- is provided by management with regular updates on key issues and significant events, as deemed appropriate or requested;
- has access to all information concerning the Group in order to appropriately discharge its responsibilities;
- reviews and approves significant changes in our structure and organization;
- approves the annual variable compensation pools for the Group and the divisions and recommends total compensation of the Board and Executive Board for shareholder approval at the AGM;
- provides oversight on significant projects including acquisitions, divestitures, investments and other major projects; and
- along with its committees, is entitled, without consulting with management and at the Group's expense, to engage external legal, financial or other advisors, as it deems appropriate, with respect to any matters within its authority.

Governance of Group subsidiaries

The Board assumes oversight responsibility for establishing appropriate governance for Group subsidiaries. The governance of the Group is based on the principles of an integrated oversight and management structure with global scope, which enables management of the Group as one economic unit. The Group sets corporate governance standards to ensure the efficient and harmonized steering of the Group. In accordance with the OGR, the Board appoints or dismisses the chairperson and the members of the board of directors of the major subsidiaries of the Group and approves their compensation. A policy naming the subsidiaries in scope and providing guidelines for the nomination

and compensation process is periodically reviewed by the Board. The governance of the major subsidiaries, subject to compliance with all applicable local laws and regulations, should be consistent with the corporate governance principles of the Group, as reflected in the OGR and other corporate governance documents. In order to facilitate consistency and alignment of Group and subsidiary governance, it is the Group's policy for the Board to appoint at least one Group director to each of the boards of its major subsidiaries. Directors and officers of the Group and its major subsidiaries are committed to ensuring transparency and collaboration throughout the Group.

Board evaluation

The Board performs a self-assessment once a year, where it reviews its own performance against the responsibilities listed in its charter and the Board's objectives and determines future objectives, including any special focus objectives for the coming year. The Chairman does not participate in the discussion of his own performance. As part of the self-assessment, the Board evaluates its effectiveness with respect to a number of different aspects, including board structure and composition, communication and reporting, agenda setting and continuous improvement. From time to time, the Board may also mandate an external advisor to facilitate the evaluation process. The Board last mandated an external firm to perform a board effectiveness evaluation toward the end of 2016, which included a comprehensive review of Board processes and documentation, interviews by the external assessor with the Chairman and the individual Board members and the participation of the external assessor as an observer in Board and Board committee meetings. The results were presented to the Board in 2017 and the Board continued to monitor progress on the various recommendations made from the external evaluation during 2018. The Board agreed to target performing an external board effectiveness evaluation every three years.

Board changes

At the 2018 AGM, Michael Klein and Ana Paula Pessoa were elected as new members of the Board. Richard E. Thornburgh stepped down from the Board. The Board proposes Christian Gellerstad, former CEO of Pictet Wealth Management, and Shan Li, CEO of Silk Road Finance Corporation Limited, for election as new non-executive Board members at the AGM on April 26, 2019. Andreas Koopmann will not stand for re-election and Alexandre Zeller stepped down from the Board with effect from February 28, 2019. The Board proposes that all other current members of the Board be re-elected to the Board, proposes the re-election of Urs Rohner as Chairman and proposes Iris Bohnet, Christian Gellerstad, Kai S. Nargolwala and Michael Klein as members of the Compensation Committee.

Board – 2018 activities

During 2018, the Board focused on a number of key areas, including but not limited to the activities described below. Specifically, the Board:

- continued to closely supervise the Group's strategy implementation in the final year of the three-year restructuring program, with particular focus in 2018 on achieving profitability targets, execution of the cost savings program and the successful wind-down of the Strategic Resolution Unit by year-end 2018;
- held its annual strategy workshop with the Executive Board to assess the strategic ambitions of each of the business divisions for 2019 and beyond;
- conducted strategic business reviews, including a review of our Asia Pacific Wealth Management & Connected business and opportunities for increasing the collaboration between our investment banking and wealth management businesses;
- closely monitored progress of the Group's strategic EU program in an effort to ensure a smooth transition of all impacted business areas in anticipation of the UK's expected withdrawal from the EU in 2019;
- reviewed and approved the Group's key financial targets for 2019 and the launch of a share buyback program, as announced at the 2018 Investor Day;
- approved the establishment of a new Board committee, the Conduct and Financial Crime Control Committee, which will further focus the Board's ongoing oversight of the effectiveness of the Group's financial crime compliance programs;
- continued to monitor progress on management's implementation of the global Conduct and Ethics program, including enhanced oversight activities of the Conduct and Ethics Board (CEB), extensive employee engagement sessions and the development of a Group-wide Conduct and Ethics measurement dashboard;
- held a comprehensive session on the Group's talent management strategy, including key initiatives within the areas of recruitment, training and diversity and inclusion;
- reviewed and approved variable compensation for the 2017 financial year for the Group and for the Executive Board; recommended the proposals for Executive Board compensation to the 2018 AGM for approval;
- continued to focus on corporate governance at the Group's major subsidiaries and held the third annual board leadership event, involving board members of the Group and each of the major subsidiaries;
- reviewed and approved the Group's risk appetite for 2019 and the risk management framework, following an assessment by the Risk Committee;

took the decision in December 2018 to propose PricewaterhouseCoopers AG as the new statutory auditor at the 2020 AGM, following a comprehensive evaluation process during 2018 led by the Audit Committee;

conducted an in-depth session on the scope and key elements of the Group's cybersecurity programs, the evolving technology risk landscape and an assessment of the Group's protection, detection and response capabilities; and

maintained Board-level focus on innovation and technology through the Board's advisory Innovation and Technology Committee, including receiving updates from internal and external technology experts regarding emerging trends.

Board committees

The Board has five standing committees: the Governance and Nominations Committee, the Audit Committee, the Compensation Committee, the Risk Committee and the Conduct and Financial Crime Control Committee, which became effective in 2019. In addition, the Board retains an advisory committee, the Innovation and Technology Committee. Except for the Compensation Committee members, who are elected by the shareholders on an annual basis, the committee members are appointed by the Board for a term of one year.

At each Board meeting, the Chairs of the committees report to the Board about the activities of the respective committees. In addition, the minutes and documentation of the committee meetings are accessible to all Board members.

Each committee has its own charter, which has been approved by the Board. Each standing committee performs a self-assessment once a year, where it reviews its own performance against the responsibilities listed in its charter and the committee's objectives and determines any special focus objectives for the coming year.

Governance and Nominations Committee

The Governance and Nominations Committee consists of the Chairman, the Vice-Chair and the Chairs of the committees of the Board and other members appointed by the Board. It may include non-independent Board members. Our Governance and Nominations Committee currently consists of five members, following Alexandre Zeller's departure from the Board as of February 28, 2019. All of our Governance and Nominations Committee members are independent.

The Governance and Nominations Committee generally meets on a monthly basis and the meetings are usually attended by the CEO. It may also ask other members of management or specialists to attend a meeting.

As part of its main duties and responsibilities, the Governance and Nominations Committee:

- acts as counselor to the Chairman and supports him in the preparation of the Board meetings;
- addresses the corporate governance issues affecting the Group and develops and recommends to the Board corporate governance principles and such other corporate governance-related documents as it deems appropriate for the Group;
- reviews the independence of the Board members annually and recommends its assessment to the Board for final determination;
- is responsible for setting selection criteria for Board membership, which shall reflect the requirements of applicable laws and regulations, and identifying, evaluating and nominating candidates for Board membership;
- guides the Board's annual performance assessment of the Chairman, the CEO and the members of the Executive Board;
- proposes to the Board the appointment, replacement or dismissal of members of the Executive Board as well as other appointments requiring endorsement by the Board; and
- reviews succession plans with the Chairman and the CEO relating to Executive Board positions and keeps informed on other top management succession plans.

Governance and Nominations Committee – 2018 activities

During 2018, the Governance and Nominations Committee focused on a number of key areas, including but not limited to the activities described below. Specifically, the Governance and Nominations Committee:

- received regular updates from and continued to support the CEO on the execution of the Group's three-year strategic restructuring plan announced in October 2015;
- supported the Chairman in planning for the Board's annual strategy workshop in 2018, which was focused on defining the Group's strategic priorities following completion of the restructuring at the end of 2018;
- assessed potential new Board member candidates during 2018 and recommended that Christian Gellerstad and Shan Li be proposed as new Board members for election at the 2019 AGM;
- advised on the set-up of the new Conduct and Financial Crime Control Committee;
- reviewed and endorsed board succession plans for our major subsidiary boards, including the appointments of new non-executive chairs of our major US and UK subsidiaries;
- provided guidance for the annual performance assessments of the Chairman and the CEO; and
- prepared the annual independence assessment of the Board members and recommended its approval by the Board.

Audit Committee

The Audit Committee consists of at least three members, all of whom must be independent. The Chair of the Risk Committee is generally appointed as one of the members of the Audit Committee. Our Audit Committee currently consists of five members, all of whom are independent.

The Audit Committee charter stipulates that all Audit Committee members must be financially literate. In addition, they may not serve on the Audit Committee of more than two other companies, unless the Board deems that such membership would not impair their ability to serve on our Audit Committee.

Furthermore, the US Securities and Exchange Commission (SEC) requires disclosure about whether a member of the Audit Committee is an audit committee financial expert within the meaning of SOX. The Board has determined that John Tiner is an audit committee financial expert.

Pursuant to its charter, the Audit Committee holds meetings at least once each quarter, prior to the publication of our consolidated financial statements. Typically, the Audit Committee convenes for a number of additional meetings and workshops throughout the year. The meetings are attended by management representatives, as appropriate, the Head of Internal Audit and senior representatives of the external auditor. A private session with Internal Audit and the external auditors is regularly scheduled to provide them with an opportunity to discuss issues with the Audit Committee without management being present. The Head of Internal Audit reports directly to the Audit Committee Chair.

As part of its main duties and responsibilities, the Audit Committee:

- monitors and assesses the overall integrity of the financial statements as well as disclosures of the financial condition, results of operations and cash flows;
- monitors the adequacy of the financial accounting and reporting processes and the effectiveness of internal controls over financial reporting;
- monitors processes designed to ensure compliance by the Group in all significant respects with legal and regulatory requirements, including disclosure controls and procedures;
- monitors the adequacy of the management of operational risks jointly with the Risk Committee, including the assessment of the effectiveness of internal controls that go beyond the area of financial reporting;
- monitors the adequacy of the management of reputational risks, jointly with the Risk Committee; and
- monitors the qualifications, independence and performance of the external auditors and of Internal Audit.

The Audit Committee is regularly informed about significant projects and initiatives aimed at further improving processes and receives regular updates on significant legal, compliance, disciplinary, tax and regulatory matters.

Furthermore, the Audit Committee has established procedures for the receipt, retention and treatment of complaints of a significant nature regarding accounting, internal accounting controls, auditing or other matters alleging potential misconduct, including a whistleblower hotline to provide the option to report complaints on a confidential, anonymous basis.

Audit Committee – 2018 activities

During 2018, the Audit Committee focused on a number of key areas, including but not limited to the activities described below. Specifically, the Audit Committee:

- performed its regular review of the quarterly and annual financial results and related accounting, reporting and internal control matters;
- held specific reviews on certain accounting and reporting matters of particular relevance in 2018, such as Group tax matters, including the assessment of the US base erosion and anti-abuse tax;
- maintained a focus on compliance topics through briefings at every regular meeting by the Chief Compliance and Regulatory Affairs Officer at the time on key compliance risks and associated internal controls;
- conducted a comprehensive session on the Group’s anti-money laundering compliance framework and related processes and controls;
- reviewed the Group’s whistleblowing processes and governance, as well as select cases and their resolution;
- conducted a comprehensive review of the Group’s External Asset Manager business and the related risk management framework;
- continued to monitor the Strategic Resolution Unit, with a particular focus on its wind-down and the subsequent transfer of the residual portfolio to the newly established ARU, separately disclosed within the Group’s Corporate Center;

reviewed, jointly with the Risk Committee, the governance, compliance and control framework at smaller business locations;

reviewed, jointly with the Risk Committee, the Group's data management framework and related commitments made to regulators;

received regular updates by the Head of Internal Audit on key audit findings and held a dedicated workshop with the Internal Audit senior leadership team about their risk assessments for the organization and emerging risk and control themes;

led the tender of the Group audit mandate and recommended to the Board that PricewaterhouseCoopers AG be proposed as the new statutory auditor at the 2020 AGM.

Internal Audit

Our Internal Audit function comprises a team of around 350 professionals, substantially all of whom are directly involved in auditing activities. The Head of Internal Audit reports directly to the Audit Committee Chair and the Audit Committee oversees the activities of the Internal Audit function.

Internal Audit performs an independent and objective assurance function that is designed to add value to our operations. Using a systematic and disciplined approach, the Internal Audit team evaluates and enhances the effectiveness of our risk management, control and governance processes.

Internal Audit is responsible for carrying out periodic audits in line with the Charter for Internal Audit approved by the Audit Committee. It regularly and independently assesses the risk exposure of our various business activities, taking into account industry trends, strategic and organizational decisions, best practice and regulatory matters. Based on the results of its assessment, Internal Audit develops detailed annual audit objectives, defining key risk themes and specifying resource requirements for approval by the Audit Committee.

As part of its efforts to achieve best practice, Internal Audit regularly benchmarks its methods and tools against those of its peers. In addition, it submits periodic internal reports and summaries thereof to the management teams as well as the Chairman and the Audit Committee Chair. The Head of Internal Audit reports to the Audit Committee at least quarterly and more frequently as appropriate. Internal Audit coordinates its operations with the activities of the external auditor for maximum effect.

The Audit Committee annually assesses the performance and effectiveness of the Internal Audit function. For 2018, the Audit Committee concluded that the Internal Audit function was effective.

External Audit

The Audit Committee is responsible for the oversight of the external auditor. The external auditor reports directly to the Audit Committee and the Board with respect to its audit of the Group's financial statements and is ultimately accountable to the shareholders. The Audit Committee pre-approves the retention of, and fees paid to, the external auditor for all audit and non-audit services.

> Refer to "External audit" in Additional information for further information.

External Auditor rotation

A tender of the Group audit mandate was conducted in the second half of 2018. All critical aspects of the tender, including the selection of audit firms to invite, the nature and extent of information sharing with the participating firms, as well as the evaluation criteria and process, were determined by the Audit Committee at the outset of the tender and subject to Audit Committee oversight during execution.

In advance of the tender, a review was undertaken by the Audit Committee to ensure impartiality among all individuals who would be involved in the process. As a precaution, one member of the Audit Committee was recused from participating in all aspects of the tender due to a potential conflict of interest.

A structured approach to evaluating the participating firms' proposals was followed using a robust and objective set of assessment criteria that was shared with participating audit firms at the outset of the tendering process to provide transparency over how they would be evaluated.

At the conclusion of its evaluation, the Audit Committee recommended to the Board of Directors, and the Board of Directors approved, that PricewaterhouseCoopers be proposed as the new statutory auditor to the AGM in April 2020. The appointment is proposed to be effective for the fiscal year ending December 31, 2020 and is subject to shareholder approval.

Compensation Committee

The Compensation Committee consists of at least three members of the Board, all of whom must be independent. Our Compensation Committee currently consists of three members following Alexandre Zeller's departure from the Board as of February 28, 2019, and will again consist of four members, subject to the election of the proposed Compensation Committee members at the 2019 AGM. All of our Compensation Committee members are independent.

Pursuant to its charter, the Compensation Committee holds at least four meetings per year. Additional meetings may be scheduled at any time. The meetings are attended by management representatives, as appropriate.

As part of its main duties and responsibilities, the Compensation Committee:

- reviews the Group's compensation policy;
- establishes new compensation plans or amending existing plans and recommends them to the Board for approval;
- reviews the performance of the Group and the divisions and recommends the variable compensation pools for the Group and the divisions to the Board for approval;
- proposes individual compensation for the Board members to the Board;
- discusses and recommends to the Board a proposal for the CEO's compensation;
- discusses and recommends to the Board the Executive Board members' compensation based on proposals by the CEO; and
- reviews and recommends to the Board the compensation for individuals being considered for an Executive Board position.

In accordance with the Compensation Ordinance, all compensation proposals for members of the Board and the Executive Board are subject to AGM approval.

The Compensation Committee is authorized to retain outside advisors, at the Group's expense, for the purpose of providing guidance to the Compensation Committee as it carries out its responsibilities. Prior to their appointment, the Compensation Committee conducts an independence assessment of the advisors pursuant to the rules of the SEC and the listing standards of the NYSE and Nasdaq.

> Refer to "The Compensation Committee" in V – Compensation – Compensation governance for information on our compensation approach, principles and objectives and outside advisors.

Compensation Committee – 2018 activities

During 2018, the Compensation Committee focused on a number of key areas, including but not limited to the activities described below. Specifically, the Compensation Committee:

- continued to engage extensively with shareholders on compensation, including holding numerous meetings with shareholders involving the Chairman, the Compensation Committee Chair and the Chief Human Resources Officer at the time; feedback and key issues resulting from these meetings were addressed regularly by the full committee;
- reviewed and approved the Executive Board compensation design for 2019, which remained consistent with the 2018 compensation design, and recommended the performance metrics and targets for the 2019 STI and LTI awards, reflecting the Group's strategy and financial goals for 2019;
- conducted the annual review of the Group's compensation framework and determined that it remains fit for purpose and aligned with our compensation objectives overall;
- assessed the Group's performance and determined the variable compensation pools for 2018, taking into account the input from the Group's risk and control functions, including the Conduct and Ethics boards;
- previewed the proposed variable compensation amounts for specific groups of employees, in line with regulatory guidance and the Group's compensation policy, including any disciplinary issues and/or points of positive recognition;
- received and assessed periodic reports on industry and regulatory developments, including executive pay trends, competitor practices and key corporate governance developments and regulatory themes with implications for compensation; and
- reviewed and approved the 2018 edition of the Group's Compensation Policy and Implementation Standards and continued to focus on ensuring comprehensive and transparent disclosure in the Group's compensation report.

Risk Committee

The Risk Committee consists of at least three members. It may include non-independent members. The Chair of the Audit Committee is generally appointed as one of the members of the Risk Committee. Our Risk Committee currently consists of five members, all of whom are independent.

Pursuant to its charter, the Risk Committee holds at least four meetings a year. In addition, the Risk Committee usually convenes for additional meetings throughout the year in order to appropriately discharge its responsibilities. The meetings are attended by management representatives, as appropriate.

The Risk Committee is responsible for assisting the Board in fulfilling its oversight responsibilities by periodically reviewing the Group's risk management function, its resources and key risks.

As part of its main duties and responsibilities, the Risk Committee:

- reviews and assesses the integrity and adequacy of the risk management function of the Group;
- reviews and calibrates risk appetite at the Group level and at the level of key businesses, considering capital, liquidity, funding, credit, market, climate and, jointly with the Audit Committee, operational and reputational risk;
- reviews and calibrates major risk concentrations;
- reviews and assesses, jointly with the Audit Committee, the status of major infrastructure and committed change programs;
- reviews and assesses, jointly with the Audit Committee, the internal control environment of the Group, including business continuity management, the enterprise risk and control framework and the firm-wide risk management framework as well as the control functions' input into remuneration; and
- reviews the Group's policy in respect of corporate responsibility and sustainable development.

The Risk Committee is regularly informed about the risk profile of the Group, including major risk topics and key initiatives aimed at responding to regulatory change and further improving risk management across the Group.

The Risk Committee furthermore looks to ensure that key risk developments are addressed appropriately, such as the evolving cyber risk landscape. Senior management, including the Board and its Risk Committee, is actively engaged and regularly informed on the extent of the threats and mitigations in place to manage cyber incidents. Related business continuity and response plans are rehearsed regularly at all levels, up to and including the Executive Board. Significant incidents are escalated to the Risk Committee together with lessons learned and mitigation plans.

Risk Committee – 2018 activities

During 2018, the Risk Committee focused on a number of key areas, including but not limited to the activities described below. Specifically, the Risk Committee:

- maintained its focus on supporting the Board in reviewing strategically important topics, including adequacy of capital, liquidity and funding and the allocation of capital to Group businesses and major legal entities;
- received regular updates on key change programs in line with regulatory expectations including the Basel Committee on Banking Supervision 239 principles for effective risk data aggregation and risk reporting;
- reviewed and endorsed the 2019 risk appetite framework, including the risk appetite statement for the Group, based on an integrated risk and financial planning process;
- oversaw the Group's responses to key risk developments, including sanctions, reputational risks and various country risks;
- monitored aspects of the Group's risk management framework, for example, with respect to liquidity risk, stress testing and the control framework;
- conducted focused credit risk reviews for a number of risk concentrations, including key lending businesses, collateral concentrations and unsecured exposures;
- regularly monitored the risk profile and risk appetite for various businesses, including our commodity trade finance, asset management and income producing real estate businesses;
- monitored the migration of certain business activities between Group entities with a focus on capital and risk management;
- reviewed, jointly with the Audit Committee, risks related to customer risk, data management and conduct risk; and
- reviewed the Group's policy and position with respect to reputational risk and sustainability, with particular focus on changes made to our reputational risk framework and policy in 2018, reputational risk assessments conducted in the divisions and international policy developments in the area of sustainability, such as in connection with the recommendations of the Financial Stability Board's Task Force on Climate-related Financial Disclosures and our

sustainability risk review process.

Conduct and Financial Crime Control Committee

In 2018, the Board decided to establish the Conduct and Financial Crime Control Committee, which became effective in 2019, reflecting the Group's priority to rigorously address financial crime risk and ensure that the highest standards of conduct and vigilance are maintained throughout the Group. The Conduct and Financial Crime Control Committee consists of at least three members. It may include non-independent members. The Chair of the Audit Committee is generally appointed as one of the members of the Conduct and Financial Crime Control Committee. The Conduct and Financial Crime Control Committee currently consists of five members, all of whom are independent.

Pursuant to its charter, the Conduct and Financial Crime Control Committee holds at least four meetings a year. The Conduct and Financial Crime Control Committee may convene for additional meetings throughout the year in order to appropriately discharge its responsibilities. The meetings are attended by management representatives and representatives of Internal Audit and the Group's external auditors, as appropriate.

The Conduct and Financial Crime Control Committee assists the Board in fulfilling its oversight duties with respect to the Group's exposure to financial crime risk. It is tasked with monitoring and assessing the effectiveness of financial crime compliance programs and initiatives focused on improving conduct and vigilance within the context of combatting financial crime.

As part of its main duties and responsibilities, the Conduct and Financial Crime Control Committee:

- reviews and assesses the Group's overall compliance framework for addressing financial crime risk, including policies, procedures and organizational set-up;
- monitors and assesses the effectiveness of financial crime compliance programs, including those with respect to the following areas: anti-money laundering, client identification and know-your-client procedures, client on and off boarding, politically exposed persons, economic and trade sanctions, anti-bribery, anti-corruption and client tax compliance;
- reviews the status of the relevant policies and procedures and the implementation of significant initiatives focused on improving conduct and vigilance within the context of combatting financial crime, including employee awareness and training programs;
- reviews and monitors investigations into allegations of financial crime or other reports of misconduct pertaining to the areas specified above;
- provides input, as relevant and appropriate, for the Group's compensation process with respect to financial crime compliance and related conduct matters; and
- reviews jointly with the Audit Committee and/or Risk Committee any matters for which a joint review is determined to be appropriate, including the annual compliance risk assessment and the Group's framework for addressing conduct risk.

The Conduct and Financial Crime Control Committee is regularly updated by management and, as appropriate, by external experts, on regulatory, legislative and industry specific developments with respect to financial crime compliance.

The responsibilities assumed by the new Conduct and Financial Crime Control Committee were previously performed by the Audit Committee in the context of its oversight role over significant compliance matters.

Innovation and Technology Committee

The Board established an Innovation and Technology Committee as an interdisciplinary advisory group in 2015. The group acts as a senior platform to discuss internal progress in relation to innovation and technology initiatives, as well as relevant industry-wide technology trends. The Innovation and Technology Committee is chaired by former Group Board member Sebastian Thrun in his role as senior advisor. Participants in the Innovation and Technology Committee include Board members, members of management, internal technology experts and a senior cybersecurity advisor. In 2018, the Innovation and Technology Committee held three meetings. Committee activities included a review of selected innovation projects in the area of online banking and the digital transformation within our compliance function and an assessment of the Group's cyber and information security-related operations and future outlook, which supplemented a cybersecurity review performed by the Board earlier in the year. The committee was regularly briefed about the activities and progress of Credit Suisse Labs, a business wholly owned and operated by Credit Suisse, which focuses on the development of new business and technology concepts, products and platforms for use by Credit Suisse and potentially the broader banking industry. The committee also received updates on emerging technology and cybersecurity trends.

Biographies of the Board members

Urs Rohner
Born 1959
Swiss Citizen
Board member since 2009
Chairman of the Board

Professional history

2004–present	Credit Suisse Chairman of the Board and the Governance and Nominations Committee (2011–present) Chair of the Conduct and Financial Crime Control Committee (2019–present) Member of the Innovation and Technology Committee (2015–present) Member of the board of Credit Suisse (Schweiz) AG (Swiss subsidiary) (2015–present) Vice-Chair of the Board and member of the Governance and Nominations Committee (2009–2011) Member of the Risk Committee (2009–2011) Chief Operating Officer (2006–2009) General Counsel (2004–2009) Member of the Executive Board (2004–2009)
2000–2004	ProSiebenSat.1 Media AG, Chairman of the Executive Board and CEO
1983–1999	Lenz & Staehelin Partner (1992–1999) Attorney (1983–1988; 1990–1992)
1988–1989	Sullivan & Cromwell LLP, New York, attorney

Education

1990	Admission to the bar of the State of New York
1986	Admission to the bar of the Canton of Zurich
1983	Master in Law (lic.iur.), University of Zurich, Switzerland

Other activities and functions

GlaxoSmithKline plc, board member
Swiss Bankers Association, vice-chairman[1]
Swiss Finance Council, board member[1]
Institute of International Finance, board member[1]
European Banking Group, member[1]
European Financial Services Roundtable, member[1]
University of Zurich Department of Economics, chairman of the advisory board
Lucerne Festival, board of trustees member
1 Mr. Rohner performs functions in these organizations in his capacity as Chairman of the Group.

Iris Bohnet
Born 1966
Swiss Citizen
Board member since 2012

Professional history

2012–present	Credit Suisse Member of the Compensation Committee (2012–present) Member of the Innovation and Technology Committee (2015–present)

1998–present	Harvard Kennedy School Academic Dean (2018–present, 2010–2014) Albert Pratt Professor of Business and Government (2018–present) Director of the Women and Public Policy Program (2008–present) Professor of public policy (2006–2018) Associate professor of public policy (2003–2006) Assistant professor of public policy (1998–2003)
1997–1998	Haas School of Business, University of California at Berkeley, visiting scholar

Education

1997	Doctorate in Economics, University of Zurich, Switzerland
1992	Master’s degree in Economic History, Economics and Political Science, University of Zurich, Switzerland

Other activities and functions

Applied, board member
Economic Dividends for Gender Equality (EDGE), advisory board member
We share tech, advisory board member
Women in Banking and Finance, patron
UK Government's Equalities Office/BIT, advisor
Take The Lead Women, advisor
genEquality, advisor
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Andreas Gottschling
Born 1967
German Citizen
Board member since 2017

Professional history

2017–present	Credit Suisse Chair of the Risk Committee (2018–present) Member of the Governance and Nominations Committee (2018–present) Member of the Audit Committee (2018–present) Member of the Risk Committee (2017–present) Member of the board of Credit Suisse International and Credit Suisse Securities (Europe) Limited (UK subsidiaries) (2018–present)
2013–2016	Erste Group Bank, Vienna, Chief Risk Officer and Member of the Management Board
2012–2013	McKinsey and Company, Zurich, Senior Advisor Risk Practice
2005–2012	Deutsche Bank, London, Frankfurt and Zurich Member of the Risk Executive Committee & Divisional Board (2005–2012) Global Head Operational Risk (2006-2010)
2003–2005	LGT Capital Management, Switzerland, Head of Quant Research
2000–2003	Euroquants, Germany, Consultant
1997–2000	Deutsche Bank, Frankfurt, Head of Quantitative Analysis

Education

1997	Doctorate in Economics, University of California, San Diego, USA
1991	Postgraduate Studies in Physics, Mathematics and Economics, Harvard University, Cambridge, US
1990	Degrees in Mathematics and Economics, University of Freiburg, Germany

Other activities and functions

Mr. Gottschling currently does not hold directorships in other organizations.

Alexander Gut
Born 1963
Swiss and British Citizen
Board member since 2016

Professional history

2016–present	Credit Suisse Member of the Audit Committee (2016–present) Member of the Innovation and Technology Committee (2017–present) Member of the board of Credit Suisse (Schweiz) AG (Swiss subsidiary) (2016–present)
2007–present	Gut Corporate Finance AG, managing partner
2003–2007	KPMG Switzerland Member of the Executive Committee, Switzerland (2005–2007) Partner and Head of Audit Financial Services, Switzerland (2004–2007) and region Zurich (2003–2004)
2001–2003	

	Ernst & Young, partner of the Transaction Advisory Services practice
1991–2001	KPMG Switzerland Senior Manager, Audit Financial Services Senior Manager, Banking Audit Banking auditor

Education

1996	Swiss Certified Accountant, Swiss Institute of Certified Accountants and Tax Consultants
1995	Doctorate in Business Administration, University of Zurich
1990	Masters degree in Business Administration, University of Zurich

Other activities and functions

Adecco Group Ltd., board member and chairman of the governance and nomination committee
SIHAG Swiss Industrial Holding Ltd, board member

Michael Klein
Born 1963
US Citizen
Board member since 2018

Professional history

2018–present	Credit Suisse Member of the Risk Committee (2018–present)
2010–present	M Klein & Company, Managing Partner
1985–2008	Citigroup Vice Chairman Chairman Institutional Clients Group Chairman & Co-CEO Markets & Banking Co-President Markets & Banking CEO, Global Banking CEO Markets and Banking EMEA Various senior management positions

Education

1985	Bachelors of Science in Economics (Finance and Accounting), The Wharton School, University of Pennsylvania

Other activities and functions

Churchill Capital Corporation, co-founder and chairman of the board
TBG Limited, member of the board
Akbank, member of the international advisory board
Harvard Global Advisory Council, member
Peterson Institute for International Economics, board member
The World Food Programme, investment advisory board member
Conservation International, board member
Horace Mann School, board of trustees member

Andreas N. Koopmann
Born 1951
Swiss and French Citizen
Board member since 2009

Professional history

2009–present	Credit Suisse Member of the Compensation Committee (2013–present) Member of the Risk Committee (2009–2018) Member of the board of Credit Suisse (Schweiz) AG (Swiss subsidiary) (2015–2017)
1982–2009	Bobst Group S.A., Lausanne Group CEO (1995–2009) Member of the board (1998–2002) Executive Vice President (1994–1995) Member of the Group Executive Committee, head of manufacturing (1991–1994) Management positions in engineering and manufacturing (1982–1991)
Prior to 1982	Bruno Piatti AG and Motor Columbus AG, various positions

Education

1978	MBA, International Institute for Management Development, Switzerland
1976	Master's degree in Mechanical Engineering, Swiss Federal Institute of Technology, Switzerland

Other activities and functions

Georg Fischer AG, chairman of the board
CSD Group, vice-chairman of the board
Sonceboz SA, board member
Swiss Board Institute, member of the board of trustees
Economiesuisse, board member
EPFL, Lausanne, Switzerland, strategic advisory board member
EPFL+ Foundation, member of the board of trustees

Seraina Macia
Born 1968
Swiss and Australian Citizen
Board member since 2015

Professional history

2015–present	Credit Suisse Member of the Risk Committee (2018–present) Member of the Audit Committee (2015–2018)
2017–present	Blackboard U.S. Holdings, Inc. (AIG Corporation) Executive vice president & CEO of Blackboard (AIG technology-focused subsidiary; formerly Hamilton USA)
2016–2017	Hamilton Insurance Group CEO Hamilton USA
2013–2016	AIG Corporation Executive vice-president and CEO Regional Management & Operations of AIG, New York (2015–2016) CEO and President of AIG EMEA, London (2013–2016)
2010–2013	XL Insurance North America, chief executive
2002–2010	Zurich Financial Services President Specialties Business Unit, Zurich North America Commercial, New York (2007–2010) CFO, Zurich North America Commercial, New York (2006–2007) Various positions, among others: head of the joint investor relations and rating agencies management departments; head of rating agencies management; senior investor relations officer (2002–2008)
2000–2002	NZB Neue Zuercher Bank, founding partner and financial analyst
1990–2000	Swiss Re Rating agency coordinator, Swiss Re Group (2000) Senior underwriter and deputy head of financial products, Melbourne (1996–1999) Various senior underwriting and finance positions, Zurich (1990–1996)

Education

2001	Chartered Financial Analyst (CFA), CFA Institute, US
1999	MBA, Monash Mt Eliza Business School, Australia
1997	Post-graduate certificate in Management, Deakin University, Australia

Other activities and functions

BanQu, chair
CFA Institute, member
Food Bank for New York City, board member

Kai S. Nargolwala
Born 1950
Singaporean Citizen
Board member since 2013

Professional history

2008–present	Credit Suisse Member of the Conduct and Financial Crime Control Committee (2019–present) Chair of the Compensation Committee (2017–present)

	Member of the Governance and Nominations Committee (2017-present)
	Member of the Innovation and Technology Committee (2015–present)
	Member of the Compensation Committee (2014–present)
	Member of the Risk Committee (2013–2017)
	Non-executive chairman of Credit Suisse's Asia-Pacific region (2010–2011)
	Member of the Executive Board (2008–2010)
	CEO of Credit Suisse Asia Pacific region (2008–2010)
1998–2007	Standard Chartered plc, main board executive director
Prior to 1998	Bank of America
	Group executive vice president and head of Asia Wholesale Banking group in Hong Kong (1990–1995)
	Head of High Technology Industry group in San Francisco and New York (1984–1990)
	Various management and other positions in the UK (1976–1984)
	Peat Marwick Mitchell & Co., London, accountant (1970–1976)

Education

1974	Fellow of the Institute of Chartered Accountants (FCA), England and Wales
1969	BA in Economics, University of Delhi

Other activities and functions

Prudential plc, board member
Prudential Corporation Asia Limited, director and non-executive chairman
PSA International Pte. Ltd. Singapore, board member
Clifford Capital Pte. Ltd., director and non-executive chairman
Duke-NUS Graduate Medical School, Singapore,
chairman of the governing board
Singapore Institute of Directors, Fellow

Ana Paula Pessoa
Born 1967
Brazilian Citizen
Board member since 2018

Professional history

2018–present	Credit Suisse
	Member of the Conduct and Financial Crime Control Committee (2019–present)
	Member of the Audit Committee (2018–present)
	Member of the Innovation and Technology Committee (2018–present)
2017–present	Kunumi AI, Partner, Investor and Chair
2015–2017	Olympic & Paralympic Games 2016, CFO of
	Organising Committee
2012–2015	Brunswick Group, Managing partner of Brazilian Branch
2001–2011	Infoglobo Newspaper Group, CFO and Innovation Director
1993–2001	Globo Organizations, Senior Management positions in several media divisions

Education

1991	MA, FRI (Development Economics), Stanford University, California
1988	BA, Economics and International Relations, Stanford University, California

Other activities and functions

Aegea Saneamento SA, board member
Vinci Group, board member
News Corporation, board member
Instituto Atlántico de Gobierno, advisory board member
The Nature Conservancy, advisory board member
Stanford Alumni Brasil Association (SUBA), board member
Fundação Roberto Marinho, member of the audit committee
Global Advisory Council for Stanford University, member

Joaquin J. Ribeiro
Born 1956
US Citizen
Board member since 2016

Professional history

2016–present	Credit Suisse
	Member of the Audit Committee (2016–present)
1997–2016	Deloitte LLP (USA)
	Vice chairman (2010–2016)
	Chairman of Global Financial Services Industry practice (2010–2016)
	Head of US Financial Services Industry practice (2003–2010)
	Head of Global Financial Services Industry practice in Asia (1997–2003)
	Head of South East Asian Corporate Restructuring practice (1997–2000)
2005–2010	World Economic Forum, senior advisor to Finance Governor's Committee

Education

1996	Executive Business Certificate, Columbia Business School, New York
1988	MBA in Finance, New York University, New York
1980	Certified Public Accountant, New York
1978	Bachelor degree in Accounting, Pace University, New York

Other activities and functions

Pace University, member of the board of trustees and
chair of the audit committee
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Severin Schwan
Born 1967
Austrian and German Citizen
Board member since 2014
Vice-Chair of the Board
Lead Independent Director

Professional history

2014–present	Credit Suisse Vice-Chair and Lead Independent Director (2017–present) Member of the Governance and Nominations Committee (2017–present) Member of the Risk Committee (2014–present) Member of the board of Credit Suisse (Schweiz) AG (Swiss subsidiary) (2015–2017)
1993–present	Roche Group CEO (2008–present) Member of the board of Roche Holding Ltd. (2013–present) CEO, Division Roche Diagnostics (2006–2008) Head Asia Pacific Region, Roche Diagnostics Singapore (2004–2006) Head Global Finance & Services, Roche Diagnostics Basel (2000–2004) Various management and other positions with Roche Germany, Belgium and Switzerland (1993–2000)

Education

1993	Doctor of Law, University of Innsbruck, Austria
1991	Master's degrees in Economics and Law, University of Innsbruck, Austria

Other activities and functions

International Federation of Pharmaceutical Manufacturers & Associations (IFPMA), vice-president
International Business Leaders Advisory Council for the Mayor of
Shanghai, member

John Tiner
Born 1957
British Citizen
Board member since 2009

Professional history

2009–present	Credit Suisse Member of the Conduct and Financial Crime Control Committee (2019–present) Chair of the Audit Committee (2011–present) Member of the Governance and Nominations Committee (2011–present) Member of the Risk Committee (2011–present) Member of the Audit Committee (2009–present) Member of the board of Credit Suisse Holdings (USA), Inc. / Credit Suisse (USA), Inc. / Credit Suisse Securities (USA), LLC (US subsidiaries) (2015–present)
2008–2013	Resolution Operations LLP, CEO
2001–2007	Financial Services Authority (FSA) CEO (2003–2007) Managing director of the investment, insurance and consumer directorate (2001–2003)
Prior to 2001	Arthur Andersen, UK

Managing partner, UK Business Consulting (1998–2001)
Managing partner, Worldwide Financial Services practice (1997–2001)
Head of UK Financial Services practice (1993–1997)
Partner in banking and capital markets (1988–1997)
Auditor and consultant, Tansley Witt
(later Arthur Andersen UK) (1976–1988)

Education

2010	Honorary Doctor of Letters, Kingston University, London
1980	UK Chartered Accountant, Institute of Chartered Accountants in England and Wales

Other activities and functions

Ardonagh Group Limited, chairman
Salcombe Brewery Limited, chairman
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Alexandre Zeller
Born 1961
Swiss Citizen
Board member 2017–2019

Professional history

2016–2019	Credit Suisse[1] Member of the Governance and Nominations Committee (2017–2019) Member of the Compensation Committee (2017–2019) Member of the Innovation and Technology Committee (2018–2019) Chairman of the board of Credit Suisse (Schweiz) AG (Swiss subsidiary) (2016–2019)
2013–2016	SIX Group AG, Chairman of the Board
2008–2012	HSBC Private Bank (Suisse) CEO, Country Manager Switzerland (2008–2012) Regional CEO Global Private Banking EMEA (2010–2012)
2002–2008	Banque Cantonale Vaudoise (BCV), CEO
1987–2002	Credit Suisse CEO Private Banking Switzerland (2002) Member of the Executive Board Private Banking Switzerland (1999–2002) Various management positions, including Head French speaking Switzerland and Vaud Region, Credit Suisse Private Banking and Head Corporate Clients (1987–1999)
1984–1987	Nestlé SA, Switzerland, International Operational Auditor

Education

1999	Advanced Management Program, Harvard Business School, US
1989	Corporate Finance and Capital Markets, International Bankers School, US
1982	Degree in Economics (Business Administration), University of Lausanne, Switzerland

Other activities and functions

Kudelski S.A., board member
Maus Frères S.A., board member
Swiss Finance Council, chairman[2]
Swiss Board Institute, advisory council member
Schweizer Berghilfe, foundation board member
Studienzentrum Gerzensee, foundation board member

1 Mr. Zeller stepped down from the Board as of February 28, 2019.
2 Mr. Zeller performed functions in this organization in his former capacity as chairman of Credit Suisse (Schweiz) AG.

Honorary Chairman of Credit Suisse Group AG

Rainer E. Gut, born 1932, Swiss Citizen, was appointed Honorary Chairman of the Group in 2000 after he retired as Chairman, a position he had held from 1986 to 2000. Mr. Gut was a member of the board of Nestlé SA, Vevey, from 1981 to 2005, where he was vice-chairman from 1991 to 2000 and chairman from 2000 to 2005.

As Honorary Chairman, Mr. Gut does not have any function in the governance of the Group and does not attend the meetings of the Board.

Secretaries of the Board

Joan E. Belzer
Roman Schaerer

Executive Board

Membership

The Executive Board is the most senior management body of the Group. Its members are appointed by the Board. Prior to the appointment of an Executive Board member, the terms and conditions of the individual's employment contract with the Group are reviewed by the Compensation Committee. The Executive Board currently consists of twelve members. The composition of the Executive Board of the Group and the Bank is identical, with the exception of Thomas Gottstein, who is a member of the Executive Board of the Group, but not the Bank. There were no changes in the composition of the Executive Board during 2018. The individual members of the Executive Board are listed in the tables below.

Members of the Executive Board as of December 31, 2018

	Executive Board member since	Role
December 31, 2018		
Tidjane Thiam, Chief Executive Officer	2015	Group CEO
James L. Amine, CEO Investment Banking & Capital Markets	2014	Divisional Head
Pierre-Olivier Bouée, COO	2015	Corporate Function Head
Romeo Cerutti, General Counsel	2009	Corporate Function Head
Brian Chin, CEO Global Markets	2016	Divisional Head
Peter Goerke, Chief Human Resources Officer	2015	Corporate Function Head
Thomas P. Gottstein, CEO Swiss Universal Bank	2015	Divisional Head
Iqbal Khan, CEO International Wealth Management	2015	Divisional Head
David R. Mathers, Chief Financial Officer	2010	Corporate Function Head
Joachim Oechslin, Chief Risk Officer	2014	Corporate Function Head
Helman Sitohang, CEO Asia Pacific	2015	Divisional Head
Lara J. Warner, Chief Compliance and Regulatory Affairs Officer	2015	Corporate Function Head

Executive Board changes

On February 26, 2019, the Group announced several changes to the Executive Board with immediate effect. Lydie Hudson and Antoinette Poschung were appointed as new Executive Board members in the roles of Chief Compliance Officer and Global Head of Human Resources, respectively. Lara Warner, who previously held the role of Chief Compliance and Regulatory Affairs Officer, was appointed Chief Risk Officer. Peter Goerke, former Chief Human Resources Officer, and Joachim Oechslin, former Chief Risk Officer, stepped down from the Executive Board.

Members of the Executive Board as of February 26, 2019

	Executive Board member since	Role
February 26, 2019		
Tidjane Thiam, Chief Executive Officer	2015	Group CEO
James L. Amine, CEO Investment Banking & Capital Markets	2014	Divisional Head
Pierre-Olivier Bouée, COO	2015	Corporate Function Head
Romeo Cerutti, General Counsel	2009	Corporate Function Head
Brian Chin, CEO Global Markets	2016	Divisional Head

Thomas P. Gottstein, CEO Swiss Universal Bank	2015	Divisional Head Corporate
Lydie Hudson, Chief Compliance Officer	2019	Function Head
Iqbal Khan, CEO International Wealth Management	2015	Divisional Head Corporate
David R. Mathers, Chief Financial Officer	2010	Function Head Corporate
Antoinette Poschung, Global Head of Human Resources	2019	Function Head
Helman Sitohang, CEO Asia Pacific	2015	Divisional Head Corporate
Lara J. Warner, Chief Risk Officer	2015	Function Head

Responsibilities

The Executive Board is responsible for the day-to-day operational management of the Group under the leadership of the CEO.

As part of its main duties and responsibilities, the Executive Board:

- establishes the strategic business plans for the Group overall as well as for the principal businesses, subject to approval by the Board;
- regularly reviews and coordinates significant initiatives, projects and business developments in the divisions and the corporate functions, including important risk management matters;
- regularly reviews the consolidated and divisional financial performance, including progress on key performance indicators, as well as the Group's capital and liquidity positions and those of its major subsidiaries;
- appoints and dismisses senior managers, with the exception of managers from Internal Audit, and periodically reviews senior management talent across the Group and talent development programs;
- reviews and approves business transactions, including mergers, acquisitions, establishment of joint ventures and establishment of subsidiary companies; and
- approves key policies for the Group.

Executive Board committees

The Executive Board has several standing committees, which are chaired by an Executive Board member and meet periodically throughout the year and/or as required. These committees are:

Capital Allocation & Risk Management Committee (CARMC): CARMC is responsible for overseeing and directing our risk profile, recommending risk limits at the Group level to the Risk Committee and the Board, establishing and allocating risk appetite among the various businesses, reviewing new significant business strategies or changes in business strategies including business migrations, making risk-related decisions on escalations and for applying measures, methodologies and tools to monitor and manage the risk portfolio. CARMC meets monthly and conducts reviews according to three rotating cycles: the asset & liability management cycle (chaired by the CFO), the market & credit risks cycle (chaired by the Chief Risk Officer (CRO)) and the internal control system cycle (jointly chaired by the CRO and the Chief Compliance and Regulatory Affairs Officer (CCRO) or the Chief Compliance Officer (CCO) since the organizational change on February 26, 2019).

Valuation Risk Management Committee (VARMC): the VARMC (chaired by the CFO) is responsible for establishing policies regarding the valuation of certain material assets and the policies and calculation methodologies applied in the valuation process. Additionally, the VARMC is responsible for monitoring and assessing valuation risks, reviewing inventory valuation conclusions and directing the resolution of significant valuation issues.

Risk Process & Standards Committee (RPSC): the RPSC (chaired by the CRO) reviews major risk management processes, issues general instructions, standards and processes concerning risk management, approves material changes in market, credit and operational risk management standards, policies and related methodologies and approves the standards of our internal models used for calculating regulatory capital.

Reputational Risk & Sustainability Committee (RRSC): the RRSC (chaired by the CRO) sets policies and reviews processes and significant cases relating to reputational risks and sustainability issues. It also reviews adherence to our reputational and sustainability policies and oversees their implementation.

Group Conduct and Ethics Board: the Group CEB (co-chaired by the Chief Human Resources Officer and the CCRO or the Global Head of Human Resources and the CCO since the organizational change on February 26, 2019) is responsible for overseeing how conduct and ethics matters are handled within the divisions and corporate functions and ensuring consistency and alignment of practices across the Group. The Group CEB conducts reviews of employee sanctions and may perform subsequent evaluations for specific matters that have been escalated by the CEBs established for each division and the corporate functions. The Group CEB also oversees the activities of the newly established role of the conduct and ethics ombudsperson.

In July 2018, the new role of conduct and ethics ombudsperson was created as a result of a review of the Group's global approach to handling claims of sexual harassment. The review was initiated by our Chief Executive Officer in March 2018 and led by our General Counsel and our Chief Compliance and Regulatory Affairs Officer and our Chief Human Resources Officer at the time. The ombudsperson is accountable directly to the Chief Executive Officer and the Group Conduct and Ethics Board. The ombudsperson's role is to serve as a point of immediate escalation when sexual harassment claims arise and to ensure there is appropriate awareness of and attention to such claims. The

ombudsperson works with our Compliance, General Counsel and Human Resources functions as well as our business divisions to review our relevant global training programs, policies and protocols, so that they can be further enhanced as part of our efforts to prevent sexual harassment at work and to make sure all cases are managed in a fair, accurate and consistent way within our global framework.

> Refer to “Risk management” in III – Treasury, Risk, Balance sheet and Off-balance sheet for information on our risk management oversight.

Executive Board mandates

Our Executive Board members may, similar to our Board members, assume board or executive level or other roles in companies and organizations outside of the Group, which are collectively referred to as mandates. According to the Group's AoA, the number of mandates Executive Board members may hold in listed companies and other organizations outside of the Group is subject to certain restrictions, in order to comply with the Compensation Ordinance and to ensure that our Executive Board members dedicate sufficient time to fulfil their executive roles. The limitations on mandates assumed by Executive Board members outside of the Group are summarized in the table below.

Type of mandate and limitation – Executive Board

Type of mandate	Limitation
Listed Companies	No more than one other mandate
Other legal entities [1]	No more than two mandates
Legal entities on behalf of the Group [2]	No more than ten mandates
Charitable legal entities [3]	No more than ten mandates

1
Includes private non-listed companies.

2
Includes memberships in business and industry associations.

3
Also includes honorary mandates in cultural or educational organizations.

No Executive Board member holds mandates in excess of these restrictions. The restrictions shown above do not apply to mandates of Executive Board members in legal entities controlled by the Group, such as subsidiary boards.

> Refer to "Mandates" in Board of Directors for further information.

Biographies of the Executive Board members

Tidjane Thiam
Born 1962
French and Ivorian Citizen
Member since 2015
Chief Executive Officer

Professional history

2015–present	Credit Suisse Chief Executive Officer of the Group (2015–present) Member of the board of Credit Suisse (Schweiz) AG (Swiss subsidiary) (2016–present)
2008–2015	Prudential plc Group Chief Executive (2009–2015) Chief Financial Officer (2008–2009)
2002–2008	Aviva Chief Executive, Europe (2006–2008) Managing director, International (2004–2006) Group strategy & development director (2002–2004)
2000–2002	McKinsey & Co, partner, Paris
1998–1999	Minister of planning and development, Côte d'Ivoire
1994–1999	National Bureau for Technical Studies & Development, Côte d'Ivoire, Chairman and Chief Executive
Prior to 1994	McKinsey & Co, consultant, Paris, London and New York

Education

1988	Master of Business Administration, INSEAD
1986	Advanced Mathematics and Physics, Ecole Nationale Supérieure des Mines de Paris
1984	Ecole Polytechnique, Paris

Other activities and functions

21st Century Fox, board member
Group of Thirty (G30), member
International Business Council of the World Economic Forum, member
Swiss-American Chamber of Commerce, board member

James L. Amine
Born 1959
US Citizen
Member since 2014
CEO
Investment Banking
& Capital Markets

Professional history

1997–present	Credit Suisse CEO Investment Banking & Capital Markets (2015–present) Member of the board of Credit Suisse Holdings (USA), Inc. / Credit Suisse (USA), Inc. / Credit Suisse Securities (USA) LLC (US subsidiaries) (2014–present)

	Joint Head of Investment Banking, responsible for the Investment Banking Department (2014–2015) Head of Investment Banking Department (2012–2015) Member of the executive board of Credit Suisse Holdings (USA), Inc. (2010–2015) Co-Head of Investment Banking Department, responsible for the Americas and Asia Pacific (2010–2012) Co-Head of Investment Banking Department, responsible for EMEA and Asia Pacific and Head of Global Market Solutions Group (2008–2010) Head of European Global Markets Solutions Group and Co-Head of Global Leveraged Finance (2005–2008) Head of European Leveraged Finance (1999–2000; 2003–2005), Co-Head (2000–2003) Various functions within High-Yield Capital Markets of Credit Suisse First Boston (1997–1999)
Prior to 1997	Cravath, Swaine & Moore, attorney
Education	
1984	JD, Harvard Law School
1981	BA, Brown University
Other activities and functions	
Brown University, President's Advisory Council on Economics New York Cares, board member Americas Diversity Council, member Leadership Committee of Lincoln Center Corporate Fund, member Caramoor Center for Music and the Arts, board member Harvard Law School, dean’s advisory board member Credit Suisse Americas Foundation, board member	

Pierre-Olivier Bouée
Born 1971
French Citizen
Member since 2015
Chief Operating Officer

Professional history

2015–present	Credit Suisse Chief Operating Officer (2015–present) Member of the Innovation and Technology Committee (2017–present) Chief of Staff (2015)
2008–2015	Prudential plc Group Risk Officer (2013–2015) Managing director, CEO office (2009–2013) Business representative Asia (2008–2013)
2004–2008	Aviva Director, Central & Eastern Europe (2006–2008) Director, Group strategy (2004–2006)
2000–2004	McKinsey & Company Associate principal (2004) Engagement manager (2002–2004) Associate (2000–2002)
1997–2000	French Government Ministry of Economy and Finance, Treasury Department Deputy General Secretary of the Paris Club Deputy Head, International Debt office (F1)

Education

1997	Master in Public Administration, Ecole Nationale d'Administration (ENA)
1991	Master in Business and Finance, Hautes Etudes Commerciales (HEC)
1991	Master in Corporate Law, Faculté de Droit Paris XI, Jean Monnet

Other activities and functions

Mr. Bouée currently does not hold directorships in other organizations.

Romeo Cerutti
Born 1962
Swiss and Italian Citizen
Member since 2009
General Counsel

Professional history

2006–present	Credit Suisse General Counsel (2009–present) Global Co-Head of Compliance (2008–2009) General Counsel, Private Banking (2006–2009)
1999–2006	Lombard Odier Darier Hentsch & Cie Partner of the Group Holding (2004–2006) Head of Corporate Finance (1999–2004)

1995–1999	Homburger Rechtsanwälte, Zurich, attorney-at-law
Prior to 1995	Latham and Watkins, Los Angeles, attorney-at-law

Education

1998	Post-doctorate degree in Law (Habilitation), University of Fribourg
1992	Admission to the bar of the State of California
1992	Master of Law (LLM), University of California, Los Angeles
1990	Doctorate in Law, University of Fribourg
1989	Admission to the bar of the Canton of Zurich
1986	Master in Law (lic.iur.), University of Fribourg

Other activities and functions

Vifor Pharma Ltd., board member
Swiss Finance Institute (SFI), chairman
American-Swiss Chamber of Commerce, legal group member
Ulrico Hoepli Foundation, board of trustees member

Brian Chin
Born 1977
US Citizen
Member since 2016
CEO
Global Markets

Professional history

2003–present	Credit Suisse CEO Global Markets (2016–present) Member of the board of Credit Suisse Holdings (USA), Inc. / Credit Suisse (USA), Inc. / Credit Suisse Securities (USA) LLC (US subsidiaries) (2016–present) Co-Head of Credit Pillar within Global Markets (2015–2016) Global Head of Securitized Products and Co-Head of Fixed Income, Americas (2012–2016) Other senior positions within Investment Banking (2003–2012)
2000–2003	Deloitte & Touche LLP, senior analyst, Securitization Transaction Team
Prior to 2000	PriceWaterhouseCoopers LLP, Capital Markets Advisory Services The United States Attorney's Office, Frauds division

Education

2000	BS in Accounting, Rutgers University

Other activities and functions

Credit Suisse Americas Foundation, board member

Peter Goerke
Born 1962
Swiss Citizen
Member 2015–2019
Chief Human Resources Officer

Professional history

2015–present	Credit Suisse Chief Human Resources Officer (2017–2019) Head of Human Resources, Communications & Branding (2015–2017)
2011–2015	Prudential plc Group Human Resources director and member of the Group Executive Committee (2011–2015) Chairman of the Group Head Office Management Committee (2012–2015) Director of Corporate Property (2012–2015)
2005–2010	Zurich Financial Services, AG, Switzerland, Group Head of Human Resources and Member of the Group Management Board
2000–2005	Egon Zehnder International, Switzerland, Head of Global Insurance Practice
1997–2000	McKinsey & Company, Zurich and Chicago, Senior engagement manager
1989–1996	

	Abegglen Management Consultants, Switzerland, Various positions up to partner

Education

2002	Advanced Management Program (AMP), University of Pennsylvania – The Wharton School
1998	lic.oec., University of St. Gallen

Other activities and functions

Credit Suisse Foundation, board member

Thomas P. Gottstein
Born 1964
Swiss Citizen
Member since 2015
CEO
Swiss Universal Bank

Professional history

1999–present	Credit Suisse CEO Credit Suisse (Schweiz) AG (2016-present) CEO Swiss Universal Bank (2015–present) Member of the Executive Board of Credit Suisse AG (2015-2016) Head of Premium Clients Switzerland & Global External Asset Managers (2014–2015) Head of Investment Banking Coverage Switzerland (2010–2013) Co-Head of Equity Capital Markets EMEA (2007–2009) Head of Equity Capital Markets Switzerland, Austria and Scandinavia, London (2005–2007) Head of Equity Capital Markets Switzerland, Zurich (2002–2005) Investment Banking Department Switzerland (1999–2002)
Prior to 1999	UBS, Telecoms Investment Banking and Equity Capital Markets

Education

1996	Doctoral degree in Finance and Accounting, University of Zurich
1989	Degree in Business Administration and Economics, University of Zurich

Other activities and functions

Pension Fund of Credit Suisse Group (Switzerland), member of the foundation board and investment committee
Credit Suisse Foundation, member of the foundation board
Private Banking Steering Committee of the Swiss Banking Association, member
FINMA Private Banking Panel, member
Swiss Entrepreneurs Foundation, member of the foundation board
Opernhaus Zurich, board member

Lydie Hudson
Born 1979
US Citizen
Member since 2019
Chief Compliance Officer

Professional history

2008–present	Credit Suisse Chief Compliance Officer (2019–present) Chief Operating Officer, Global Markets (2015–2019) Chief Operating Officer, Global Equities (2014–2015) Various management and strategy roles in Equities, Fixed Income and Asset Management (2008–2014)
2006–2008	The Boston Consulting Group, consultant
2001–2004	Lehman Brothers, associate, analyst, Global Real Estate Group

Education

2006	Master in Business Administration (MBA), Harvard Business School
2001	Bachelor of Arts, International Politics and Economics, Middlebury College

Other activities and functions

Good Shepherd Services, board member
World Economic Forum, Young Global Leader
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Iqbal Khan
Born 1976
Swiss Citizen
Member since 2015
CEO
International Wealth
Management

Professional history

2013–present	Credit Suisse CEO International Wealth Management (2015–present) CFO Private Banking & Wealth Management (2013–2015)
2001–2013	Ernst & Young, Switzerland Managing Partner Assurance and Advisory Services – Financial Services (2011-2013) Member of Swiss Management Committee (2011–2013) Industry Lead Partner Banking and Capital Markets, Switzerland and EMEA Private Banking (2009-2011) Various positions (2001–2009)

Education

2012	Advanced Master of International Business Law (LLM), University of Zurich
2004	Certified Financial Analyst
2002	Swiss Certified Public Accountant
1999	Swiss Certified Trustee

Other activities and functions

Credit Suisse Foundation, board member

David R. Mathers
Born 1965
British Citizen
Member since 2010
Chief Financial Officer

Professional history

1998–present	Credit Suisse Chief Financial Officer (2010–present) CEO of Credit Suisse International and Credit Suisse Securities (Europe) Limited (UK subsidiaries) (2016–present) Head of Strategic Resolution Unit (2015–2018) Head of IT and Operations (2012–2015) Head of Finance and COO of Investment Banking (2007–2010) Senior positions in Credit Suisse's Equity business, including Director of European Research and Co-Head of European Equities (1998–2007)
Prior to 1998	HSBC Global head of equity research (1997–1998) Research analyst, HSBC James Capel (1987–1997)

Education

1991	Associate Certification, Society of Investment Analysis
1991	MA in Natural Sciences, University of Cambridge, England
1987	BA in Natural Sciences, University of Cambridge, England

Other activities and functions

European CFO Network, member
Academic awards and grants at Robinson College, Cambridge, sponsor
224

Joachim Oechslin
Born 1970
Swiss Citizen
Member 2014–2019
Chief Risk Officer

Professional history

2014–present	Credit Suisse Chief Risk Officer (2014–2019) Member of the board of Credit Suisse Holdings (USA), Inc. / Credit Suisse (USA), Inc. / Credit Suisse Securities (USA) LLC (US subsidiaries) (2016–2019)
2007–2013	Munich Re Group, Chief Risk Officer
2007	AXA Group, deputy Chief Risk Officer
2001–2006	Winterthur Swiss Insurance Company Member of the executive board (2006) Chief Risk Officer (2003–2006) Head of risk management (2001–2003)
1998–2001	McKinsey & Company, consultant

Education

1998	Licentiate/Master of Science in Mathematics, Swiss Federal Institute of Technology (ETH), Zurich
1994	Engineering degree, Higher Technical Institute (HTL), Winterthur

Other activities and functions

International Financial Risk Institute, member
Credit Suisse Foundation, board member

Antoinette Poschung
Born 1956
Swiss Citizen
Member since 2019
Global Head of Human Resources

Professional history

2008–present	Credit Suisse Global Head of Human Resources (2019-present) Conduct and ethics ombudsperson (2018–present) Head of Human Resources for Corporate Functions (2018–2019) Head of Talent Development & Organizational Effectiveness (2015–2017) Head of Compensation, Benefits & Payroll (2012–2014) Head of Human Resources Shared Services (2008–2012)
2007–2008	AXA-Winterthur, member of the Executive Board and Head of Human Resources
2003–2007	Winterthur Swiss Insurance Group, Head of Human Resources
2001–2003	Canton Zurich, Head of Human Resources for the Cantonal Administration
1998–2001	Baloise Group, Head of Human Resources Basler Insurance

Education

2016	Certificate of Organizational and Executive Coaching, Columbia University
1989	Master in Education, Psychology and Philosophy, University of Zurich

Other activities and functions

Ms. Poschung currently does not hold directorships in other organizations.

Helman Sitohang
Born 1965
Indonesian Citizen
Member since 2015
CEO
Asia Pacific

Professional history

1999–present	Credit Suisse CEO Asia Pacific (2015–present) Regional CEO APAC (2014–2015) Head of Investment Banking Asia Pacific (2012–2015) Co-Head of the Emerging Markets Council (2012–2015) CEO of South East Asia (2010–2015) Co-Head of the Investment Banking Department - Asia Pacific (2009–2012) Co-Head of the Global Markets Solutions Group - Asia Pacific (2009–2012) Country CEO, Indonesia (1999–2010)
Prior to 1999	Bankers Trust, derivatives group

Education

1989	BS in Engineering, Bandung Institute of Technology

Other activities and functions

Credit Suisse Foundation, board member
Room to Read Singapore Ltd., advisory board member

Lara J. Warner
Born 1967
Australian and US Citizen
Member since 2015
Chief Risk Officer

Professional history

2002–present	Credit Suisse Chief Risk Officer (2019–present) Chief Compliance and Regulatory Affairs Officer (2015–2019) Chief Operating Officer, Investment Banking (2013–2015) Chief Financial Officer, Investment Banking (2010–2015) Head of Global Fixed Income Research (2009–2010) Head of US Equity Research (2004–2009) Senior Equity Research Analyst (2002–2004)
1999–2001	Lehman Brothers, equity research analyst
Prior to 1999	AT&T Director of Investor Relations (1997–1999) Chief Financial Officer, Competitive Local Exchange Business (1995-1997) Various finance and operating roles (1988-1995)

Education

1988	Bachelor of Science – Finance, Pennsylvania State University

Other activities and functions

Pennsylvania State University Board of Visitors, member

Women’s Leadership Board of Harvard University’s John F. Kennedy
School of Government, chair emeritus
Aspen Institute’s Business and Society Program, board member
Harvard Kennedy School – Dean's Executive Committee, board member
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Additional information

Banking relationships with Board and Executive Board members and related party transactions

The Group is a global financial services provider. Many of the members of the Board and the Executive Board, their close family members or companies associated with them maintain banking relationships with us. The Group or any of its banking subsidiaries may from time to time enter into financing and other banking agreements with companies in which current members of the Board or the Executive Board have a significant influence as defined by the SEC, such as holding executive and/or board level roles in these companies. With the exception of the transactions described below, relationships with members of the Board or the Executive Board and such companies are in the ordinary course of business and are entered into on an arm's length basis. Also, unless otherwise noted, all loans to members of the Board, members of the Executive Board, their close family members or companies associated with them were made in the ordinary course of business, were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons and did not involve more than the normal risk of collectability or present other unfavorable features. As of December 31, 2018, 2017 and 2016, there were no loan exposures to such related parties that were not made in the ordinary course of business and at prevailing market conditions.

> Refer to "Board loans" and "Executive Board loans (audited)" in V – Compensation – Board of Directors compensation and – Executive Board compensation for 2018, respectively, for the outstanding loans to members of the Board and the Executive Board.

Related party transactions

Tier 1 capital instruments

Beginning in February 2011, the Group entered into agreements with entities affiliated with Qatar Investment Authority (QIA) and The Olayan Group, each of which has significant holdings of Group shares and other Group financial products, to purchase tier 1 high-trigger capital instruments. The agreements were subsequently amended in 2012 and 2013.

In October 2018, the Group redeemed the following tier 1 high-trigger capital instruments:

- USD 1.725 billion, 9.5%, held by an affiliate of The Olayan Group;
- USD 1.72 billion, 9.5%, held by an affiliate of QIA; and
- CHF 2.5 billion, 9.0%, held by an affiliate of QIA.

At the time of the original transaction, the Group determined that this was a material transaction and deemed QIA and The Olayan Group to be related parties of our then Board members Jassim Bin Hamad J.J. Al Thani and Aziz R.D. Syriani for purposes of evaluating the terms and corporate governance of the original transaction. At that time, the Board (except for Mr. Bin Hamad J.J. Al Thani and Mr. Syriani, who abstained from participating in the determination process) determined that the terms of the original transaction, given its size, the nature of the contingent capital instrument, for which there was no established market, and the terms of the notes issued and held by QIA and The Olayan Group, were fair. As of April 26, 2013 and April 28, 2017, respectively, Mr. Syriani and Mr. Bin Hamad J.J. Al Thani retired from the Board and no other person affiliated with The Olayan Group or with QIA has been elected as a Board member.

> Refer to "Note 30 – Related parties" in VI – Consolidated financial statements – Credit Suisse Group for further information on related party transactions.

Other

In December 2018, a subsidiary of the Group executed a transaction with an affiliate to sell a minority interest in a trading platform for a gain of approximately USD 80 million.

External Audit

> Refer to "Audit Committee" in Board of Directors – Board committees for further information on the responsibilities of the audit committee.

External audit forms an integral part of the Group's corporate governance framework and plays a key role by providing an independent assessment of our operations and internal controls.

The AGM elects the external auditors annually. Our statutory auditor is KPMG AG (KPMG), Badenerstrasse 172, 8004 Zurich, Switzerland. The mandate was first given to KPMG for the business year 1989/1990. The lead audit partners are subject to periodic rotation requirements. The lead Group engagement partners are Anthony Anzevino, Global Lead Partner (since 2012) and Nicholas Edmonds, Group Engagement Partner (since 2016).

In 2018, upon the recommendation of the Audit Committee, the Board proposed PricewaterhouseCoopers as the new statutory auditor at the 2020 AGM, effective for the fiscal year ending December 31, 2020 and subject to shareholder approval.

In addition, we have mandated BDO AG, Fabrikstrasse 50, 8031 Zurich, Switzerland, as special auditor for the purposes of issuing the legally required report for capital increases in accordance with Article 652f of the Swiss Code of Obligations, mainly relating to the valuation of companies in consideration of the qualified capital increases involving contributions in kind.

Audit committee pre-approval policy

The Audit Committee monitors and pre-approves the fees to be paid to KPMG for its services. It has developed and approved a policy on the engagement of public accounting firms that is designed to help ensure that the independence of the external auditor is maintained at all times.

The policy limits the scope of services that the external auditor may provide to us or any of our subsidiaries in connection with its audit and stipulates certain permissible types of non-audit services, including audit-related services, tax services and other services that have been pre-approved by the Audit Committee. The

Audit Committee pre-approves all other services on a case-by-case basis. The external auditor is required to report periodically to the Audit Committee about the scope of the services it has provided and the fees for the services it has performed to date.

Fees paid to external auditors

in	2018	2017	% change
Fees paid to external auditors (CHF million)			
Audit services [1]	49.8	51.4	(3)
Audit-related services [2]	5.7	7.2	(21)
Tax services [3]	3.0	3.3	(9)

1
Audit services include the integrated audit of the Group's consolidated and statutory financial statements, interim reviews and comfort and consent letters. Additionally they include all assurance and attestation services related to the regulatory filings of the Group and its subsidiaries. Audit fees exclude value-added taxes.

2
Audit-related services are primarily in respect of: (i) reports related to the Group's compliance with provisions of agreements or calculations required by agreements; (ii) accounting advice; (iii) audits of private equity funds and employee benefit plans; and (iv) regulatory advisory services.

3
Tax services are in respect of tax compliance and consultation services, including: (i) preparation and/or review of tax returns of the Group and its subsidiaries; (ii) assistance with tax audits and appeals; and (iii) confirmations relating to the Qualified Intermediary status of Group entities.

KPMG attends all meetings of the Audit Committee and reports on the findings of its audit and/or interim review work. The Audit Committee reviews KPMG’s audit plan on an annual basis and evaluates the performance of KPMG and its senior representatives in fulfilling their responsibilities. Moreover, the Audit Committee recommends to the Board the appointment or replacement of the external auditor, subject to shareholder approval as required by Swiss law.

KPMG provides a report as to its independence to the Audit Committee at least once a year. In accordance with our pre-approval policy and as in prior years, all KPMG non-audit services provided in 2018 were pre-approved. KPMG is required to report to the Audit Committee periodically regarding the extent of services provided by KPMG and the fees for the services performed as of that date.

Other information

Complying with rules and regulations

We fully adhere to the principles set out in the Swiss Code of Best Practice for Corporate Governance, dated August 28, 2014, including its appendix stipulating recommendations on the process for setting compensation for the Board and the Executive Board.

In connection with our primary listing on the SIX, we are subject to the SIX Directive on Information relating to Corporate Governance, dated March 20, 2018. Our shares are also listed on the NYSE in the form of ADS and certain of the Group’s exchange traded notes are listed on Nasdaq. As a result, we are subject to certain US rules and regulations. We adhere to the NYSE’s and Nasdaq’s corporate governance listing standards (NYSE and Nasdaq standards), with a few exceptions where the rules are not applicable to foreign private issuers.

The following are the significant differences between our corporate governance standards and the corporate governance standards applicable to US domestic issuers listed on the NYSE and Nasdaq:

Approval of employee benefit plans: NYSE and Nasdaq standards require shareholder approval of the establishment of, and material revisions to, certain equity compensation plans. We comply with Swiss law, which requires that shareholders approve the creation of conditional capital used to allow for the issuance of shares for employee benefit plans and other equity compensation plans, but does not require shareholders to approve the terms of those plans.

Risk assessment and risk management: NYSE standards allocate to the Audit Committee responsibility for the discussion of guidelines and policies governing the process by which risk assessment and risk management is undertaken, while at the Group these duties are assumed by the Risk Committee. Whereas our Audit Committee members satisfy the NYSE as well as Nasdaq independence requirements, our Risk Committee may include non-independent members.

Independence of nominating and corporate governance committee: NYSE and Nasdaq standards require that all members of the nominating and corporate governance committee be independent. The Group's Governance and Nominations Committee is currently composed entirely of independent members, but according to its charter, may include non-independent members.

Reporting: NYSE standards require that certain board committees report specified information directly to shareholders, while under Swiss law only the Board reports directly to the shareholders and the committees submit their reports to the full Board.

Appointment of the external auditor: NYSE and Nasdaq standards require that an Audit Committee of a listed company comply with and have the authority necessary to comply with the requirements of Rule 10A-3 of the Securities Exchange Act of 1934. Rule 10A-3 requires the Audit Committee to be directly responsible for the appointment, compensation, retention and oversight of the external auditor unless there is a conflicting requirement under home country law. Under Swiss law, the appointment of the external auditor must be approved by the shareholders at the AGM based on the proposal of the Board, which receives the advice and recommendation of the Audit Committee.

Audit Committee charter: Nasdaq standards require the Audit Committee to review and assess the adequacy of its charter on an annual basis, while our Audit Committee's charter only requires review and assessment from time to time.

Executive sessions: NYSE and Nasdaq standards require the board of directors to meet regularly in executive sessions composed solely of independent directors. Our Board meets regularly in executive sessions comprising all directors, including any directors determined to be not independent. If any item discussed at the meeting raises a conflict of interest for any of our directors, however, such director does not participate in the related decision making. In line with Swiss law, the Board does not include any directors who are also members of management.

Quorums: Nasdaq standards require that the company's by-laws provide for a quorum of at least 33⅓% of the outstanding

shares of the company's common stock for any meeting of the holders of common stock. The Group's AoA call for a quorum in certain instances, but do not require a quorum of 33⅓% or greater of the holders of the outstanding shares of common stock for any meeting of shareholders.

Independence: NYSE and Nasdaq independence standards specify thresholds for the maximum permissible amount of (i) direct compensation that can be paid by the company to a director or an immediate family member thereof, outside of such director's directorship fees and other permitted payments; and (ii) payments between the company and another company at which such director or an immediate family member thereof is an executive officer, controlling shareholder, partner or employee. Our independence standards do not specify thresholds for direct compensation or cross-company revenues, but consider these facts in the overall materiality of the business relationship determination for independence purposes.

Fiduciary duties and indemnification

The Swiss Code of Obligations requires directors and members of senior management to safeguard the interests of the corporation and, in connection with this requirement, imposes the duties of care and loyalty on directors and members of senior management. While Swiss law does not have a general provision on conflicts of interest, the duties of care and loyalty are generally understood to disqualify directors and members of senior management from participating in decisions that could directly affect them. Directors and members of senior management are personally liable to the corporation for any breach of these provisions.

The Group's AoA and the Bank's AoA do not contain provisions regarding the indemnification of directors and officers. According to Swiss statutory law, an employee has a right to be indemnified by the employer against losses and expenses incurred by such person in the execution of such person's duties under an employment agreement, unless the losses and expenses arise from the employee's gross negligence or willful misconduct. It is our policy to indemnify current and former directors and/or employees against certain losses and expenses in respect of service as a director or employee of the Group, one of the Group's affiliates or another entity that we have approved, subject to specific conditions or exclusions. We maintain directors' and officers' insurance for our directors and officers.

Fees and charges for holders of ADS

In November 2016, the Group entered into a deposit agreement with The Bank of New York Mellon as depositary for the ADS (Depositary). In accordance with the deposit agreement, the Depositary may charge holders of our ADS, either directly or indirectly, fees or charges up to the amounts described below.

The Depositary collects its fees and related expenses for the delivery and surrender of ADS directly from investors depositing or surrendering ADS for the purpose of withdrawal or from intermediaries acting for them. The Depositary collects fees and expenses for making distributions to holders by deducting those fees and expenses from the amounts distributed or by selling a portion of distributable property to pay the fees and expenses. The Depositary may generally refuse to provide fees and expenses until its fees for those services are paid.

Fees and charges for holders of ADS

Fees	
USD 5 (or less) per 100 ADS (or portion thereof)	For the issuance of ADS, including issuances resulting from a distribution of shares, share dividends, share splits and other property; for ADS issued upon the exercise of rights; and for the surrender of ADS for cancellation and withdrawal of shares.
USD 0.05 (or less) per ADS	For any distribution of cash to ADS registered holders, including upon the sale of rights or other entitlements.
Registration or transfer fees	For the transfer and registration of shares on our share register to or from the name of the Depositary or its agent when the holder deposits or withdraws shares.
Charges	
Expenses of the Depositary	For cable and facsimile transmissions (when expressly provided in the deposit agreement); and for converting foreign currency to US dollars.
Taxes and other governmental charges	Paid, as necessary, to the Depositary or the custodian who pays certain charges on any ADS or share underlying an ADS, for example, stock transfer taxes, stamp duty or applicable interest or penalty thereon.
Other charges	Paid, as necessary, to the Depositary or its agents for servicing the deposited shares.

Amounts paid by the Depositary to the Group

In 2018, in accordance with the deposit agreement, the Depositary made payments to the Group in an aggregated amount of USD 400 million, including for the reimbursement of expenses relating to its ADS program. The Depositary has also contractually agreed to provide certain ADS program-related services free of charge.

Under certain circumstances, including removal of the Depositary or termination of the ADS program by the Group, the Group is required to repay certain amounts paid to the Group and to compensate the Depositary for payments made or services provided on behalf of the Group.

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V – Compensation
Compensation
Report of the Statutory Auditor

Compensation

Letter from the Chair of the Compensation Committee

Kai S. Nargolwala

Chair of the Compensation Committee

Dear shareholders

As Chair of the Compensation Committee of the Board of Directors (Compensation Committee), I am pleased to present to you the 2018 Compensation Report. The changes that we introduced last year to the structure and presentation of the report were well received, and we have retained and built on this approach for the 2018 Compensation Report.

Key compensation and performance highlights

For 2018, the Compensation Committee reviewed not only the performance during the year, but also the level of achievement of the three-year restructuring program over the years 2016, 2017 and 2018. When the program was announced in October 2015, there were three main objectives. Firstly, there were some urgent matters to be addressed, namely the capital position, the absolute level of risk, and the cost base. Secondly, the Group defined a strategy to be a leading wealth manager with strong investment banking capabilities for sustainable, compliant and profitable growth. Thirdly, the goal was to significantly upgrade our risk and compliance controls and to improve our culture. Some of the ways in which senior management has successfully addressed these objectives are reflected in the table and charts below, as well as in the following Group performance highlights:

Achieved first annual post-tax profit since 2014, with CHF 2.02 billion of net income attributable to shareholders;

Significantly strengthened the Group's capital position, with a look-through common equity tier 1 (CET1) ratio of 12.6% at the end of 2018 compared with 11.4% at the end of 2015, and as demonstrated by the launch of the Group's share buyback program of up to CHF 1.5 billion for 2019;

Reduced the adjusted operating cost base by CHF 4.6 billion since 2015, exceeding the target of costs below CHF 17 billion for 2018. This protected the Group's returns and profitability as revenues came under pressure in the second half of 2018 due to market conditions;

Successfully closed the Strategic Resolution Unit and significantly de-risked the Global Markets businesses, which positioned the Group well to weather the widening of credit spreads in the fourth quarter of 2018;

Rebalanced the Group's activities to shift capital towards the Wealth Management-related and Investment Banking & Capital Markets businesses, which typically generate higher returns and are less volatile; and

Took a number of steps to improve risk and compliance controls, including increasing our headcount in compliance, decreasing the number of high severity compliance incidents, implementing a single client view, and introducing other measures focused on further enhancing the conduct and ethics culture of the Group.

Key financial and strategic achievements in 2018

	2018	2017	Change	Change
Financial performance (in CHF billion)				
Reported income before taxes	3.4	1.8	+1.6	+88%
Adjusted income before taxes	4.2	2.8	+1.4	+52%
Adjusted net revenues	20.8	20.9	-0.1	0%
of which Wealth Management-related [1]	13.2	12.9	+0.3	+2%
Adjusted operating cost base	16.5	18.0	-1.5	-8%
Net new assets from Wealth Management [2]	34.4	37.2	-2.8	-8%

Adjusted results are non-GAAP financial measures which exclude certain items included in our reported results. Refer to "Reconciliation of adjusted results" in I – Information on the company – Strategy and II – Operating and financial review – Credit Suisse for further information.

1 References to our Wealth Management-related businesses mean our Swiss Universal Bank division, our International Wealth Management division and our Wealth Management & Connected business within our Asia Pacific division or their combined results.

2 Referring to the combined net new assets of Private Clients within Swiss Universal Bank, Private Banking within International Wealth Management and Private Banking within Wealth Management & Connected in Asia Pacific.

> Adjusted results are non-GAAP financial measures which exclude certain items included in our reported results. Refer to “Reconciliation of adjusted results” in I – Information on the company – Strategy and II – Operating and financial review – Credit Suisse for further information. 2015 adjusted income before taxes excludes a goodwill impairment of CHF 3,797 million, major litigation provisions of CHF 820 million, restructuring expenses of CHF 355 million, a positive fair value impact from movements in own credit spreads of CHF 298 million, real estate gains of CHF 95 million and gains from business sales of CHF 34 million.

The Group’s key financial and strategic achievements and overall performance during 2018 were taken into consideration by the Board of Directors (Board) in its approval of the following compensation decisions for the Group and the Executive Board:

- Group variable incentive compensation pool of CHF 3,195 million, stable compared with the prior year, while taking the opportunity to increase the level of differentiation for high performers;
- Total aggregate Executive Board compensation of CHF 93.49 million, 17% higher than the prior year (before the 40% voluntary reduction in the 2017 long-term incentive (LTI) maximum opportunity); and
- Total CEO compensation of CHF 12.65 million, 13% higher than the prior year (before the 40% voluntary reduction in the 2017 LTI maximum opportunity).

2018 compensation decisions

Group compensation

The Group takes a total compensation approach, whereby fixed and variable compensation are assessed in total at the individual level to determine an appropriate balance between the two components. Overall Group compensation and benefits expense for 2018 decreased by 7%, from CHF 10,367 million in 2017 to CHF 9,620 million.

In addition to the Group’s financial performance in 2018, the Compensation Committee considered a range of other factors in determining the Group’s variable incentive compensation pool. These included progress made against strategic objectives, relative performance, market position and market trends, as well as control, risk, compliance and ethical considerations. Taking all of these factors into account, the Board approved a total Group variable incentive compensation pool of CHF 3,195 million, stable compared with 2017.

Market conditions in the second half of 2018 became more challenging for the financial services industry, with a significant drop in client activity resulting from a combination of factors including increasing trade tensions, rising US interest rates and greater geopolitical uncertainty. Against the backdrop of these conditions, the Compensation Committee decided to keep the Group variable incentive compensation pool stable to the previous year, notwithstanding an increase in adjusted income before taxes of 52% over the same period, to protect returns and profitability in light of downward pressure on revenues during the second half of the year.

> Refer to the “Group compensation and benefits expense” table and “Determination of variable incentive compensation pools” in Group Compensation for further information.

The Group variable incentive compensation pool includes the amounts for the Executive Board and the CEO. Although the overall pool is stable compared with the previous year, differentiation has been made such that high-performing employees received year-on-year increases in variable incentive compensation to reflect their contribution to the Group’s improved financial performance. In addition, as a result of high deferral rates and the granting of share-based deferred awards, the realized compensation of senior employees and the Executive Board members is aligned with shareholders’ interests.

Executive Board compensation

Total aggregate Executive Board compensation for 2018 is CHF 93.49 million, which is comprised of:

- CHF 29.20 million total fixed compensation;
- CHF 30.56 million total 2018 short-term incentive (STI) award, subject to shareholder approval at the 2019 AGM;
- CHF 33.73 million total 2018 LTI award at fair value at the time of grant, with a maximum opportunity of CHF 58.5 million, as approved at the 2018 AGM.

> Refer to "Executive Board compensation for 2018" for further information.

Compared with the amount for 2017, before the voluntary 40% reduction in the LTI maximum opportunity, total compensation for 2018 is 17% higher than the prior year. The main drivers of this change are improved performance in exceeding the cost target and significantly higher profitability as reflected in the 2018 STI awards, increases to the maximum opportunities for certain selected Executive Board members based on role expansion and scope of responsibilities, and a higher fair value for the 2018 LTI awards calculated by one of the major international accounting firms. It is important to note that taking the Executive Board as a whole (excluding the CEO), maximum opportunities average 54% of the STI cap of 2.5 times base salary and 55% of the LTI cap of 4.25 times base salary.

The year-on-year change in Executive Board compensation disclosed for 2018 is largely driven by the 2018 LTI award, which was approved at the 2018 AGM. The drivers of the higher LTI award amount are the return to the LTI opportunity levels before the voluntary 40% reduction that was reflected in the 2017 LTI award, increases to the maximum opportunities of selected Executive Board members and a higher fair valuation of the awards.

As part of the annual review and assessment of market benchmarking data, the maximum opportunities of certain individual members were adjusted to better reflect the expansion of their roles and responsibilities, and in a small number of cases, to more closely align with the increased market value of such roles. While the review of benchmarking data is an annual process, adjustments to maximum opportunities are made selectively and do not happen frequently for individual Executive Board members.

The STI award amount is determined based on performance against financial and non-financial metrics. The financial metrics (66⅔% weighting) consist of pre-defined performance levels for adjusted income before taxes and a cost target, and the Group's financial performance in 2018 resulted in a payout of approximately 85% of the maximum opportunity for the financial performance component. The non-financial metrics (33⅓% weighting) cover strategic repositioning, client focus/quality of business/innovation, talent management, risk and regulatory, conduct and ethics, and teamwork and leadership. As described in more detail later in this report, the Compensation Committee considered the performance of each Executive Board member against individual metrics related to the above mentioned six broad categories, and determined that as a whole, the Executive Board (excluding the CEO) achieved approximately 89% of the maximum opportunity for the non-financial performance component of the total STI award pool. The overall amount represents, on average, 87% of the pre-defined maximum opportunity of each Executive Board member.

> Refer to "Executive Board compensation for 2018" for further information on the 2018 STI award financial and non-financial performance assessments.

For the Executive Board compensation framework, the variable compensation elements are comprised of STI and LTI opportunities, which at their maximum potential value represent 78% of total compensation. To align with the Group's longer-term strategy, approximately two-thirds of the variable maximum opportunity is in the form of the LTI award and one-third in the form of the STI award. The cash-based STI award achievement level is assessed against pre-determined financial and non-financial performance targets applicable to the financial year. The share-based LTI award utilizes metrics which are aligned to longer-term shareholder objectives, including relative total shareholder return (RTSR), return on tangible equity (RoTE) and tangible book value per share (TBVPS) performance targets over a three-year period. The number of shares that may vest is determined based on achievement of performance targets at the end of the performance period, and cannot exceed the maximum number of shares granted. The value of the LTI award is further subject to the prevailing share price on the dates the shares are settled.

We believe this framework closely aligns the value delivered under these awards to the shareholder experience over the same time period, as illustrated by the vesting percentages and current value in shares of the 2016 LTI award where 41% of the maximum number of shares were earned after the end of the performance period.

> Refer to the "2016 LTI awards in the 2016-2018 performance cycle" in Executive Board compensation for 2018 for further information.

CEO compensation

Following a review of Executive Board compensation at the beginning of 2018, the Compensation Committee considered the overall Executive Board compensation design to be appropriate, but recommended an adjustment, which was approved by the Board, to increase the Group CEO's STI maximum opportunity by CHF 1.0 million, from 1.5 times base salary to 1.83 times base salary for 2018. This adjustment is designed to acknowledge the strong performance of Mr. Thiam over the course of his tenure to date and the successful execution of the three-year restructuring program. It represents the first change to Mr. Thiam's maximum opportunity levels since his appointment in 2015. Aside from the CEO, no changes were made to the overall cap on the 2018 STI maximum opportunity for the Executive Board.

Mr. Thiam's proposed total compensation for 2018 of CHF 12.65 million is 13% higher than it was for the prior year, before the voluntary reduction in his 2017 LTI award. This is mainly driven by improved performance, the increase in his STI award maximum opportunity and the higher fair value for the 2018 LTI award, with no change to the LTI maximum opportunity.

> Refer to "Compensation of the CEO and the highest paid Executive Board member" in Executive Board compensation for 2018 for further information.

Board of Directors compensation

No changes were made to the Board's compensation framework for 2018, which continues to be based on a fixed fee structure with pre-defined fees for Board membership, committee membership and chairing a committee. The fee amounts are set at levels comparable with those at other leading Swiss companies and global financial services firms. With the exception of the Chairman, 50% of the Group-level Board fees are paid in Group shares, subject to blocking restrictions for four years. In line with industry practice, Board fees are not linked to the financial performance of the Group. Fees for specific Board leadership roles are reviewed periodically and adjusted as required. Base Board fees have been unchanged for over 10 years. In the past few years, the Chairman has voluntarily waived all or part of his chair fee. For the 2018 AGM to 2019 AGM period, the Chairman's compensation has returned to the previously approved level, in light of the completion of the Group's restructuring program and return to profitability. Total board fees, including subsidiary board fees, for the 2018 AGM to 2019 AGM period are within the approved amount and 2% higher than the prior period, primarily reflecting an additional Board member.

> Refer to "Board of Directors compensation" for further information.

Annual review of our compensation framework

During 2018, the Compensation Committee conducted its annual review of the overall compensation framework at Credit Suisse, to ensure that it remains fit for purpose and aligned with the objectives of our compensation strategy. In particular, the Compensation Committee assessed the extent to which the framework (i) aligns pay and performance, (ii) supports a performance culture based on merit, (iii) attracts, retains, rewards and motivates the talented individuals needed for our long-term success as a client-focused and capital-efficient business, (iv) recognizes and rewards excellent short- and long-term performance, and (v) aligns with the Group's values. In addition, the Compensation Committee reviewed market developments to assess whether current practices remain appropriately competitive. As a result of this review, it determined that the overall compensation framework continues to be appropriate for 2019. No changes to its structure are therefore proposed, aside from updating some of the STI performance metrics and performance target levels for the STI and LTI awards in relation to the Executive Board.

2019 STI and LTI awards

For the 2019 STI awards, we have updated the measures to more appropriately reflect the Group's strategy after the restructuring period and the achievement of our previously communicated cost target in 2018. As such, the performance criteria for the 2019 STI awards will consist of adjusted income before taxes (33⅓% weighting), reported RoTE (33⅓% weighting) and a non-financial assessment (33⅓% weighting). RoTE is a key measure of return generation and therefore its inclusion as a performance metric for the STI award, focused on the 2019 financial year, complements the RoTE measure in the LTI award which is measured as an average over a three-year period. Following the successful completion of our three-year cost reduction program, cost management remains an important aspect of our strategy and will be captured by the adjusted income before taxes metric rather than a specific cost target. This update of the performance metrics ensures that management is focused on, and will be rewarded for, successful delivery of our key priorities for 2019.

For the 2019 LTI awards, no changes have been made to the design or the performance metrics, since they continue to reflect the longer-term strategy of the Group. However, the AGM proposal put forward for shareholder approval will be based on the fair value of the 2019 LTI awards at grant date, instead of the maximum opportunity. The rationale for using fair value as the basis for shareholder approval is to align the proposal with the disclosure of Executive Board compensation in the Compensation Report. In addition, the fair value of the LTI awards is closer to the historical vesting of such awards than the maximum opportunity. The AGM invitation and accompanying materials will continue to contain the same level of information regarding the LTI award proposal as provided previously. Following the recently announced changes to the composition of the Executive Board, the aggregate maximum opportunity for the 2019 LTI awards will be CHF 57.5 million, slightly below the 2018 level, resulting from modifications to the scope of the roles for the incoming members. Further, the two departing Executive Board members will not be granted any entitlements they have with respect to the 2019 STI and LTI awards in their roles as Executive Board members.

2019 AGM say on pay proposals

At the 2019 AGM on April 26, 2019, we plan to submit the following proposals related to Executive Board and Board of Directors compensation:

- Maximum aggregate amount of CHF 31.0 million in total fixed compensation for the Executive Board for the 2019 AGM to 2020 AGM period – no change compared with the prior year's proposal approved at the 2018 AGM;
- CHF 30.6 million total 2018 STI award to be granted to the Executive Board – 20% higher compared with the prior year's amount approved for the 2017 STI award;
- CHF 30.2 million total 2019 LTI award at fair value at the time of grant, with a maximum opportunity of CHF 57.5 million – CHF 1 million less than the maximum opportunity approved at the 2018 AGM; and
- Maximum aggregate amount of CHF 12.0 million in total compensation for the Board for the 2019 AGM to 2020 AGM period – no change compared with the prior year's proposal approved at the 2018 AGM.

Shareholder engagement

During 2017, we undertook several rounds of consultation to listen to shareholders and receive feedback on our compensation arrangements. Taking on board the views that we heard, we announced a number of changes in our 2017 Compensation Report to address some key themes on compensation design for the Executive Board and Board of Directors raised by shareholders during this process. The consultative vote on the 2017 Compensation Report received 81% of votes in favor at our 2018 AGM, a material year-on-year increase.

We are of course conscious that there remains room for improvement. With this in mind, we continued to engage with key shareholders and external stakeholders during 2018, both to listen to their views on the changes made in 2018, and to understand any thoughts they had on areas of focus for the Compensation Committee in future years. Going forward, shareholder engagement will remain a key pillar of our annual compensation design process, with discussions on potential future changes in the third quarter, further consultation towards the end of the year, and communication of the compensation framework and proposals in the lead up to the AGM.

On behalf of the Compensation Committee, I would like to thank you for your support and feedback, which we will continue to seek as we review and refine our compensation practices to ensure that they remain fully compliant with all regulatory requirements and aligned with the interests of our shareholders.

Kai S. Nargolwala
Chair of the Compensation Committee
Member of the Board of Directors
March 2019

Compensation design

Compensation strategy and objectives

Consistent with prior years, our key compensation objectives are to maintain compensation practices that:

- foster a **performance culture** based on merit that differentiates and rewards excellent performance;
- **attract and retain employees**, and motivate them to achieve results with integrity and fairness;
- **balance the mix of fixed and variable** compensation to appropriately reflect the value and responsibility of the role performed, and to influence appropriate behaviors and actions;
- promote **effective risk management** practices that are aligned with the Group's compliance and control cultures;
- create a culture that adheres **to high conduct and ethics standards** through a system of applying both malus and rewards;
- encourage **teamwork and collaboration** across the Group;
- achieve a **balanced distribution of profitability between shareholders and employees** over the long term, subject to Group performance and market conditions; and
- take into account the long-term performance of the Group, in order to **create sustainable value for shareholders**.

Executive Board compensation framework for 2018: key elements

The key changes introduced for 2018 include:

- **Revised metrics** for assessing Executive Board performance, including **removal of capital-based performance metrics** and use of **only Group-level metrics**
- **Reduced STI and LTI payout levels** for achievement of target performance
- **Reduced payout for below median RTSR ranking** and zero payout for a bottom quartile ranking
- **Increased shareholding requirements** (500,000 shares for the CEO and 300,000 shares for other Executive Board members)

> Refer to "Executive Board compensation for 2018" for further information.

Determination of Group variable incentive compensation pool

The Group variable incentive compensation pool for all employees including the CEO and the Executive Board is determined on an annual basis, with accruals made throughout the year. The process for determining variable incentive compensation is performed at the Group level, as well as the divisional and functional levels, as shown in the illustrative example below.

> Refer to “Determination of variable incentive compensation pools” in Group compensation – Compensation framework for further information.

Group employees’ compensation framework for 2018: key elements

The overall structure and design remains the same as the prior year.

> Refer to “Group compensation” for further information.

Compensation governance

The Compensation Committee

The Compensation Committee is the supervisory and governing body for compensation policies, practices and plans. In designing and setting compensation, the Compensation Committee aims to make decisions in the best interests of the Group and also to align the interests of the Group's employees to those of shareholders. The Compensation Committee reviews proposals regarding Group, Executive Board and Board compensation, and makes recommendations to the Board for approval. Total Executive Board compensation and Board compensation are also subject to shareholder approval pursuant to the Swiss Ordinance Against Excessive Compensation with respect to Listed Stock Corporations (Compensation Ordinance) and the Articles of Association of Credit Suisse Group AG (AoA).

The Compensation Committee consists of at least three members of the Board, all of whom must be independent. The members during 2018 were Kai S. Nargolwala (Chair), Iris Bohnet, Andreas N. Koopmann and Alexandre Zeller. The Board has applied the independence criteria of the SIX Swiss Exchange Directive on Information relating to Corporate Governance, Swiss Financial Market Supervisory Authority FINMA (FINMA), the Swiss Code of Best Practice for Corporate Governance, and the listing standards of the New York Stock Exchange (NYSE) and the Nasdaq Stock Market (Nasdaq), in determining that all of these individuals are independent.

> Refer to "Independence" in IV – Corporate Governance – Board of Directors for more information on how the Group determines the independence of its Board members.

Compensation Committee activities

The Chairman and the CEO may attend the Compensation Committee meetings, and the Compensation Committee Chair determines the attendance of other Board members, Executive Board members, senior management, compensation advisers and external legal counsel, as appropriate. The Chairman, CEO, Executive Board members and senior management do not participate in discussions which relate to their own compensation.

In addition to the 26 investor meetings held by the Compensation Committee Chair, during 2018, the Compensation Committee held 9 meetings and calls, with an overall attendance rate of 92%. The Compensation Committee's focus areas in 2018 are summarized in the following table:

Compensation Committee activities in 2018

	Jan	Feb	Mar	Apr	Jun	Jul	Aug	Oct	Dec
Compensation governance, design and disclosure									
Review of compensation policy and charter updates									
Review of Compensation Report									
Review and refinement of Executive Board compensation design									
Review of Group compensation structure and award plans									
Compensation Committee self-assessment and focus areas									
Risk and regulatory									
Review of input from control functions									
Review of any disciplinary events/potential application of malus									
Review of regulatory developments									
Annual compensation review									
Accruals and full year forecast of									

variable incentive compensation pools
Performance assessment and overall Group pool recommendation
CEO and Executive Board performance objectives and target setting
CEO and Executive Board performance assessment and awards
Review of Board fees

External
Review of shareholder engagement and feedback
Review of market trends
Review of benchmarking data

Advisers to the Compensation Committee

The Compensation Committee is authorized to retain external advisers to provide support as it carries out its responsibilities. Deloitte LLP (Deloitte) has been retained to assist the Compensation Committee in ensuring that the Group's compensation programs remain competitive, responsive to regulatory developments and in line with the compensation policy. Deloitte has appointed a senior consultant to advise the Compensation Committee. Apart from assisting the Compensation Committee, this senior consultant does not provide any other services to the Group. The Compensation Committee also obtained external legal advice during 2018 on various matters relating to compensation policy and design. Prior to appointment, the Compensation Committee conducted an independence assessment of its advisers pursuant to the rules of the US Securities and Exchange Commission (SEC) and the listing standards of the NYSE and the Nasdaq.

Other aspects of compensation governance

Compensation policy

The compensation policy applies to all employees and compensation plans of the Group. It contains a detailed description of the Group's compensation principles and objectives as well as the compensation programs. It also sets out the standards and processes relating to the development, management, implementation and governance of compensation. The compensation policy is available at *credit-suisse.com/compensationpolicy*.

Approval authority

The approval authorities for setting the compensation policy and compensation for different groups of employees are defined in the Group's Organizational Guidelines and Regulations (OGR) and the Compensation Committee charter available at *credit-suisse.com/governance*.

Action	Compensation Committee	Board
Establish or change the Group's compensation policy	R	A
Establish or change compensation plans	R	A
Set variable incentive compensation pools for the Group and the divisions	R	A
Determine Executive Board compensation, including for the CEO	R	A[1]
Determine Board compensation, including for the Chairman	R	A[1]
Determine compensation for the Head of Internal Audit	A[2]	n/a
Determine compensation for MRTC and other selected members of management	A	n/a

R = recommendation; A = approval

1 Subject to shareholder approval requirement pursuant to the Compensation Ordinance and the AoA.

2 In consultation with the Audit Committee Chair.

Risk and control considerations

During its annual review of the Group's performance, the Compensation Committee considers input from the Risk Committee Chair with respect to risk considerations, and the Audit Committee Chair with respect to internal control considerations. The Compensation Committee also considers input from various corporate functions including Compliance and Regulatory Affairs, General Counsel, Human Resources, Internal Audit, Product Control and Risk Management, regarding control and compliance issues and any breaches of relevant rules and regulations or the Group's Code of Conduct.

To meet regulatory guidelines regarding employees engaged in risk-taking activities, the Compensation Committee reviews and approves the compensation for employees identified as Material Risk Takers and Controllers (MRTC). The Risk Committee is involved in the review process for MRTC compensation.

> Refer to "Focus on risk and control" in Group compensation for further information.

In order to ensure that the above functions can perform their oversight of risk and control activities effectively, the total amount of the variable incentive compensation pool for the corporate functions is not linked to the performance of the particular divisions that employees of the corporate functions support or oversee, but takes into account the

Group-wide financial performance, measured in the form of Group economic contribution and non-financial factors. Therefore, employees working in the corporate functions, including those performing control functions, are remunerated independently from the performance of the businesses they oversee and support. As with the business divisions, the assessment of the corporate functions takes into account risk, control, compliance and ethical considerations and relative performance compared to peers, as well as the market and regulatory environment.

> Refer to “Determination of the variable incentive compensation pools” in Group compensation for further information.

Performance criteria and target setting

At the beginning of the year, as part of the annual compensation review, the Compensation Committee defines the performance criteria and performance targets that will be applied to determine the Executive Board’s variable incentive compensation. For the STI awards, the performance criteria and performance levels are set on an annual basis, and are designed to reward progress towards the achievement of the Group’s annual objectives in the financial and strategic plan. For the LTI awards, the performance criteria and performance levels are set for a prospective three-year period, designed to reward achievement of the longer term business plan and the enhancement of shareholder returns. In setting the threshold, target and maximum performance levels, the Compensation Committee takes into account the Group’s ambitious financial plan, prior-year performance, analyst expectations and any publicly stated targets, in order to set performance levels which are challenging and motivating for the Executive Board. The performance criteria and performance levels are presented to the Board for approval before implementation.

Executive Board compensation for 2018

Compensation outcomes for 2018

2018 STI awards

The 2018 STI awards were designed to reward the achievement of annual objectives based on performance in 2018. The STI award payout amount is determined based on pre-defined financial criteria and performance levels which are linked to our strategic plan, as well as non-financial criteria related to topics such as delivery of strategic initiatives, leadership and culture and risk and compliance. Taking into account the quantitative achievements against the target performance levels, as well as the qualitative assessment outlined further in this section, the Compensation Committee recommended a total STI award amount of CHF 30.56 million for the Executive Board. This represents, on average, 87% of the STI maximum opportunity pre-defined for each Executive Board member. The 2018 STI compensation will be submitted for shareholder approval at the 2019 AGM.

Assessment of performance against financial criteria

The financial criteria and corresponding 2018 outcomes are shown in the following table and can be summarized as follows:

Adjusted income before taxes of CHF 4.2 billion was up 52% compared with the prior year, and between the target and maximum performance levels; and

Adjusted operating cost base of CHF 16.2 billion at average 2017 foreign exchange rates (as defined further in footnote 1 of the table below), surpassing the maximum performance level which had been set at CHF 16.9 billion.

STI awards: quantitative performance assessment

	Weighting	Performance levels			2018 actual	Payout
		Threshold	Target	Maximum		
Financial criteria (CHF billion)						
Adjusted income before taxes	331/3%	2.2	4.1	5.5	4.2	69%
Adjusted operating cost base	331/3%	18.0	17.4	16.9	16.2[1]	100%
Subtotal	**662/3%**					**85%**
Non-financial criteria (average)						
Non-financial metrics	331/3%			See separate description	–	91%
Total	**100%**					**87%**

Adjusted results are non-GAAP financial measures which exclude certain items included in our reported results. Refer to “Reconciliation of adjusted results” in I – Information on the company – Strategy and II – Operating and financial review – Credit Suisse for further information.

1 The performance levels relating to adjusted operating cost base were set on the basis of average 2017 foreign exchange rates rather than constant 2015 foreign exchange rates. Therefore, the adjusted operating cost base for 2018 before a foreign exchange adjustment of CHF 16,200 million was adjusted by a foreign exchange impact of CHF 35 million for a total of CHF 16,235 million.

Assessment of performance against non-financial criteria

The Compensation Committee considered a range of quantitative and qualitative metrics for each of the non-financial categories for assessing the Executive Board’s performance, and the key achievements against these metrics are summarized below. In particular, the Compensation Committee noted the profitable growth during 2018, as well as market-share gains, reflecting the successful execution of the Group’s strategy and collaboration amongst the divisions. The Executive Board also continued to drive the emphasis on conduct and ethics within their respective divisions and functions, as well as promote the recruitment, development and retention of talent through various Group-wide initiatives. As such, the Compensation Committee determined that, as a group, the Executive Board had achieved 91% of the maximum opportunity with respect to the non-financial assessment. The Executive Board’s non-financial performance evaluation was based on pre-defined criteria according to the following six categories.

Non-financial assessment for the Executive Board

Strategic Repositioning

Achieved net new assets from Wealth Management (relating to Swiss Universal Bank Private Clients, International Wealth Management Private Banking and Asia Pacific Private Banking within Wealth Management & Connected) of CHF 34.4 billion for 2018

Reduced adjusted operating expenses in the majority of business divisions and corporate functions compared with 2017 to meet their cost savings objectives, contributing to the successful achievement of the Group's adjusted operating cost base target of below CHF 17 billion, measured at constant 2015 foreign exchange rates

Achieved a return on regulatory capital from the Core businesses of 11.1% compared with 9.3% in 2017

Closed the Strategic Resolution Unit at the end of 2018, with a significantly reduced impact on profits, risk-weighted assets and leverage exposure

Client Focus/Quality of Business/Innovation

Received various industry awards that acknowledge excellence in client service, including Euromoney Awards for Best Bank in Switzerland, Best Investment Bank in Switzerland, Best Bank for Wealth Management in Western Europe, Central and Eastern Europe, the Middle East and Latin America, Best Investment Bank in Asia, and a Global Award for Best Emerging Markets Bank

Achieved high client satisfaction survey results, especially in International Wealth Management

Expanded client footprint, as well as maintained top two position in Global Leveraged Finance and top three in Global Financial Sponsors (Dealogic)

Maintained #1 position in US securitization (Thomson Reuters) and in European Prime Brokerage (EuroHedge) and various awards such as "Most Innovative Bank for Securitization" from The Banker and "Overall Best Securitization Bank" from GlobalCapital

Maintained #1 position in Swiss Investment Banking for Mergers & Acquisitions (Dealogic), Debt Capital Markets (Thomson Reuters) and Equity Capital Markets (Dealogic)

Improved optimization of IT resources, including decommissioning of approximately 1,300 applications since 2015 and approximately 33% fewer change-related incidents over the period 2016 to 2018

Talent Management

Implemented several programs for the development of talent and the next generation of leaders

Improved employee engagement scores, with 94% of respondents agreeing with the statement "I am proud to work at Credit Suisse" (based on an internal Conduct and Ethics Pulse Survey)

Increased the ratio of women promoted to the Assistant Vice President, Vice President and Director levels from 36% in 2017 to 38% in 2018

Risk and Regulatory

Actively supported and contributed to the building and improvement of relationships with key regulators

Continued to improve models and systems in our efforts to better assess and monitor risks

Actively managed operational and business risks

Conduct and Ethics

Strengthened the global conduct and ethics culture throughout the organization through the implementation of training programs, system and process control improvements, and through leading by example

Reduced the number of compliance incidents with a high severity rating

Implemented several Group-wide initiatives to ensure consistent emphasis and approach to conduct and ethics topics

Teamwork and Leadership

Continued progress to deepen the collaboration amongst the businesses, including a strong International Trading Solutions (ITS) business model

> Adjusted results are non-GAAP financial measures which exclude certain items included in our reported results. Refer to "Reconciliation of adjusted results" in I – Information on the company – Strategy and II – Operating and financial review – Credit Suisse for further information.

2018 LTI awards

The 2018 LTI awards approved by shareholders at the 2018 AGM have a total maximum opportunity of CHF 58.5 million. This represents the maximum amount payable, based on share price at grant, if all the maximum performance levels under the financial measures (33⅓% weighting each for three-year average reported RoTE and TBVPS) are

achieved, and if the Group's RTSR (33⅓% weighting) is ranked within the top five of the peer group at the end of the three-year average performance measurement period. Performance will be measured and disclosed at the end of the three-year performance period. The awards provide for a target payout of 67% of the maximum opportunity, which was reduced from the 2017 LTI award target payout of 80% of the maximum opportunity. The fair value of the 2018 LTI awards at the time of grant was CHF 33.73 million, as determined by one of the major international accounting firms.

> Refer to "Compensation design" and the 2017 Annual Report for further information on the 2018 LTI awards.

Compensation of the CEO and highest paid Executive Board member

As part of the review of Executive Board compensation conducted at the beginning of the year, the Board of Directors approved the Compensation Committee's recommendation to increase the CEO's 2018 STI maximum opportunity by CHF 1.0 million, to 1.83 times base salary, compared with 1.50 times base salary for 2017. This adjustment took into account the strong performance of Mr. Thiam over the course of his tenure to date, and represents the first change to Mr. Thiam's maximum opportunity levels since 2015.

The compensation awarded to the CEO and highest paid Executive Board member, Tidjane Thiam, comprised of CHF 3.00 million base salary, which remained unchanged compared with the prior year, a 2018 STI award of CHF 4.94 million representing 90% of the maximum opportunity and a 2018 LTI award with a maximum opportunity of CHF 7.50 million and a fair value of CHF 4.36 million at the time of grant. In terms of realized compensation for 2018, Mr. Thiam received a base salary of CHF 3.00 million, pension and other benefits of CHF 0.35 million, and a CHF 2.47 million 2018 STI award in non-deferred cash. No dividend equivalents were paid.

The assessment of Mr. Thiam's performance against the financial criteria is based on the same criteria and outcomes as described earlier for the Executive Board. In terms of the non-financial criteria, the same six broad categories as described earlier for the Executive Board also apply to the CEO.

Executive Board compensation (audited)

in	Base salaries and role-based allowances	Dividend equivalents[1]	Pension and other benefits[2]	Total fixed compen-sation	STI awards (Non-deferred)[3]	STI awards (Deferred)[4]	Total STI awards	LTI awards fair value (Deferred)[5]	Total variable compen-sation	Total compen-sation[6,7]
2018 (CHF million)										
12 members	26.35	0.77	2.08	**29.20**	15.10	15.46	**30.56**	**33.73**	**64.29**	**93.49**
% of total compensation				**32%**			**33%**	**35%**	**68%**	
of which CEO:										
Tidjane Thiam	3.00	0.00	0.35	**3.35**	2.47	2.47	**4.94**	**4.36**	**9.30**	**12.65**
% of total compensation				**26%**			**39%**	**35%**	**74%**	
2017 (CHF million)										
12 members	26.34	0.56	1.99	**28.89**	12.54	12.92	**25.46**	**15.55**	**41.01**	**69.90**
% of total compensation				**42%**			**36%**	**22%**	**58%**	
of which CEO:										
Tidjane Thiam	3.00	0.22	0.25	**3.47**	1.99	1.99	**3.98**	**2.25**	**6.23**	**9.70**
% of total compensation				**36%**			**41%**	**23%**	**64%**	

1
Dividend equivalents were paid in cash, consistent with dividends paid on actual shares.

2
Other benefits consist of housing allowances, expense allowances and relocation allowances.

3
STI non-deferred awards for 2018 comprised CHF 14.74 million (for 2017 CHF 12.16 million) cash, with a further CHF 0.36 million (for 2017 CHF 0.38 million) granted as blocked shares to Mr. Mathers, to comply with regulatory requirements given that he was categorized as UK PRA Code Staff during 2018 and 2017.

4
STI deferred awards for 2018 comprised CHF 14.93 million (for 2017 CHF 12.34 million) in deferred cash awards as well as CHF 0.53 million (for 2017 CHF 0.58 million) granted as share awards to Mr. Mathers, to comply with regulatory requirement

given that he was categorized as UK PRA Code Staff during 2018 and 2017.

5

The fair value of the LTI awards as of the date of grant is determined using a probabilistic valuation method applied by one of the major international accounting firms. The awards have a total maximum opportunity of CHF 58.50 million for 2018 and CHF 31.2 million (post the 40% voluntary reduction) for 2017, which were the amounts approved by shareholders at the 2018 AGM and 2017 AGM, respectively.

6

For the total compensation awarded to the members of the Executive Board, the Group made payments of CHF 3.2 million in 2018 and CHF 3.05 million in 2017 to cover the mandatory employer social security contributions as required under the social security laws applicable to the individual Executive Board members based on their domicile and employment status. These contributions do not form part of the Executive Board members' compensation.

7

No guaranteed bonuses, sign-on or replacement awards were paid to Executive Board members for 2018 and 2017.

STI awards: 2018 non-financial assessment for the CEO

In assessing Mr. Thiam's performance, the Compensation Committee considered a range of quantitative and qualitative metrics for each of the non-financial categories. In particular, the Compensation Committee noted his leadership in the restructuring of the Group, creating a client-focused and compliant culture and steering the Group towards a significant turnaround in performance. The Compensation Committee determined that Mr. Thiam had achieved the maximum performance level and his key achievements against the non-financial metrics are summarized below.

Non-financial assessment for the CEO

Strategic Repositioning

Mr. Thiam has led the rebalancing of the Group's activities, including the right-sizing of the Global Markets division and the shift of capital towards the higher growth and less volatile Wealth Management-related and Investment Banking & Capital Markets businesses

He has continued to oversee the maintenance of the Group's strong capital position, and has supervised the successful closure of the Strategic Resolution Unit

Client Focus/Quality of Business/Innovation

Mr. Thiam has continued to drive a culture of client focus, reflected by high client satisfaction results and positive net new assets in each quarter of 2018

He has overseen the growth of the investment banking businesses in key segments, with a top five market position in Initial Public Offerings and top two in Leveraged Finance (Dealogic)

Under his leadership, the Impact Advisory and Finance (IAF) department, which aims to facilitate initiatives for clients which have a positive economic and social impact, has reached USD 7.1 billion of assets under administration invested according to sustainability criteria and surpassed USD 1 billion in Asia in 2018

He has received industry recognition for his leadership and focus on excellence in client service, named as Banker of the Year 2018 by Euromoney

Talent management

Mr. Thiam has been instrumental in driving several people development and diversity initiatives

Since his appointment to the role of CEO, the female Managing Director promotion ratio has increased by 47%

Risk and Regulatory

Mr. Thiam has continued to strengthen the relationships with the Group's key regulators

Under his leadership, there have been steady reductions in the number of adverse risk, regulatory and sustainability risk events

Conduct and Ethics

Mr. Thiam has continued to strengthen the global conduct and ethics culture through a formalized conduct and ethics framework and Group-wide training programs

He has overseen the significant upgrade of the Group's compliance and control framework, with greater investment in compliance talent, implementation of new compliance tools such as Single Client View and trader/relationship manager surveillance tools, as well as more than 10,000 control issues and improvements closed across all Group-wide risks since his appointment

He has led by example in terms of personal commitment to the Group's conduct and ethics standards

Teamwork and Leadership

Mr. Thiam has fostered a spirit of teamwork and collaboration amongst the Executive Board members, which has filtered throughout the organization

He has continued to steer an integrated approach between the wealth management and investment banking businesses, as evidenced by the strong ITS business model

Utilization of Executive Board compensation approved at the 2018 AGM

At the 2018 AGM, shareholders approved a maximum aggregate amount of fixed compensation to be paid to members of the Executive Board for the period from the 2018 AGM to the 2019 AGM of CHF 31.0 million. By the time of the 2019 AGM, a total of approximately CHF 29.3 million will have been paid to Executive Board members with respect to fixed compensation. Fixed compensation includes base salaries, role-based allowances, dividend equivalents, pension and other benefits.

At the 2018 AGM, shareholders also approved an aggregate maximum amount of LTI compensation to be granted to members of the Executive Board for the 2018 financial year with a maximum amount of CHF 58.5 million, which was subsequently awarded to the Executive Board members. The amount of the 2018 LTI award earned by each of the Executive Board members can only be determined after the completion of the three-year performance period.

In line with the Compensation Ordinance and as specified in the AoA, if new members join the Executive Board or members of the Executive Board are promoted during a period for which compensation has already been approved by shareholders, a further 30% of the aggregate amounts already approved may be used for the compensation of such members. No such additional amount was required in 2018.

Supplementary information

Cash settlement of share awards

The Executive Board members are permitted to elect, subject to minimum shareholding requirements, at a predefined date in advance of settlement, to receive their vested share-based awards in the form of shares, cash or 50% in the form of shares and 50% in cash, in each case based on the Group share price at the time of settlement. An election to receive cash is subject to reversal if at the time of settlement the Group share price is less than 75% of the share price at the time of election. The timing and pricing of settlement will be the same as under the previous award plan and as under the plans of the non-Executive Board population.

Contract lengths, termination and change in control provisions

All members of the Executive Board have employment contracts with the Group which are valid until terminated. The notice period for termination of employment by either the Group or the respective Executive Board member is six months. Executive Board members may be held to a non-compete period of up to one year and may be compensated for this period of time by mutual agreement. In the event of termination, there are no contractual provisions that allow for the payment of severance awards to Executive Board members beyond the regular compensation awarded during the notice period. Pre-defined conditions for all employees, including Executive Board members, apply for the payment of outstanding deferred compensation awards, depending on whether the termination of employment was voluntary, involuntary or the result of a change in control. There are no other contracts, agreements or arrangements with the members of the Executive Board that provide for other types of payments or benefits in connection with termination of employment that are not generally available to other employees of the Group.

In the case of a change in control, the treatment of outstanding awards for all employees, including Executive Board members, will be determined by the Board upon recommendation of the Compensation Committee with the aim of maximizing shareholder value, subject to circumstances and prevailing market conditions. There are no provisions in the employment contracts of Executive Board members or any other pre-determined arrangements that require the payment of any type of extraordinary benefits, including special severance awards or transaction premia, in the case of a change in control.

Former Executive Board members (audited)

During 2018, no former Executive Board member received any compensation for services they continued to perform after they stepped down from the Executive Board, compared with CHF 1.4 million in 2017. Further, no payments were made to former Executive Board members pursuant to non-compete arrangements. Some former members of the Group's most senior executive body who no longer provide services to the Group are still eligible to receive office infrastructure and secretarial support. These services are based on existing resources and are not used on a regular basis.

Other outstanding awards

As of December 31, 2018, the outstanding cash-based deferred compensation awards granted to certain Executive Board members in prior years comprised of the Capital Opportunity Facility (COF), CCA, LTI plan (2013) and deferred STI cash awards. The cumulative value of such cash-based awards at their grant dates was CHF 28.9 million compared with CHF 29.3 million as of December 31, 2018. These amounts also include the cash value of dividend

equivalents related to unvested share awards at their respective grant dates and at December 31, 2018.

Minimum shareholding requirements

As of December 31, 2018, the CEO and all Executive Board members fulfilled the minimum shareholding requirements of 500,000 shares and 300,000 shares, respectively, as measured against the number of shares owned plus the number of unvested awards calculated on the basis of maximum opportunity.

Executive Board holdings and values of deferred share-based awards by individual

end of	Number of owned shares[1]	Number of unvested awards (at maximum opportunity)[2]	Number of owned shares and unvested awards (at maximum opportunity)	Value (CHF) of unvested awards at grant date (at maximum opportunity)	Value (CHF) of unvested awards at year end (at fair value)[3]
2018					
Tidjane Thiam	64,302	990,706	1,055,008	16,430,736	6,923,084
James L. Amine	426,726	1,046,190	1,472,916	17,300,812	7,049,362
Pierre-Olivier Bouée	74,079	512,085	586,164	8,287,028	4,019,900
Romeo Cerutti	269,373	389,685	659,058	6,423,655	2,734,410
Brian Chin	431,274	1,137,731	1,569,005	18,494,683	8,600,260
Peter Goerke	21,953	342,324	364,277	5,655,877	2,438,237
Thomas Gottstein	118,976	402,042	521,018	6,752,150	2,831,436
Iqbal Khan	70,060	519,389	589,449	8,757,970	3,530,037
David R. Mathers	84,360	793,632	877,992	13,180,647	5,973,132
Joachim Oechslin	61,092	406,852	467,944	6,771,566	2,779,441
Helman Sitohang	264,737	822,060	1,086,797	13,497,946	5,857,016
Lara Warner	2,036	469,641	471,677	7,989,249	3,102,330
Total	**1,888,968**	**7,832,337**	**9,721,305**	**129,542,319**	**55,838,645**
2017					
Tidjane Thiam	1,967	1,132,835	1,134,802	20,298,771	13,941,708
James L. Amine	382,106	1,098,488	1,480,594	18,110,327	11,694,777
Pierre-Olivier Bouée	38,204	439,832	478,036	7,200,011	5,345,214
Romeo Cerutti	199,630	410,871	610,501	6,945,908	4,389,711
Brian Chin	234,328	1,098,757	1,333,085	17,798,557	16,800,518
Peter Goerke	21,953	282,112	304,065	4,750,031	2,985,514
Thomas Gottstein	–	354,275	354,275	6,009,654	3,639,767
Iqbal Khan	25,135	379,846	404,981	6,412,346	4,016,413
David R. Mathers	52,672	704,359	757,031	11,723,886	7,726,820
Joachim Oechslin	–	386,390	386,390	6,627,551	4,027,112
Helman Sitohang	394,737	826,572	1,221,309	13,516,027	9,278,836
Lara Warner	2,036	325,449	327,485	5,501,327	3,445,577
Total	**1,352,768**	**7,439,786**	**8,792,554**	**124,894,396**	**87,291,967**

1
Includes shares that were initially granted as deferred compensation and have vested.

2
Includes unvested shares originating from LTI awards calculated on the basis of maximum opportunity for awards that have not reached the end of their three-year performance period, given that the actual achievement level and associated number of unvested shares cannot be determined until the end of the performance period.

3
Includes the value of unvested LTI awards, which was determined based on the number of shares at fair value at the time of grant, multiplied by the share price at the end of the year.

Executive Board outstanding deferred compensation awards

in / end		Total outstanding end of 2017	Granted in 2018	Paid out in 2018	Ex post explicit adjustments	Ex post implicit adjustments	Total outstanding end of 2018	% of which exposed to ex post explicit adjustments
Executive Board (CHF million)								
CCAs	Cash-based	7	–	(3)	–	(1)	3	100%
Other cash awards [1]	Cash-based	7	12	(3)	(1)	0	15	100%
Share awards [2]	Share-based	90	57	(10)	0	(51)	86	100%
Performance share awards	Share-based	16	–	(10)	–	(2)	3	100%
CCA share awards	Share-based	24	–	(6)	(1)	(6)	10	100%
Total		**143**	**69**	**(33)**	**(1)**	**(61)**	**117**	

1
Includes the deferred cash portion of STI awards.
2
Includes outstanding LTI awards at maximum opportunity.

Executive Board loans (audited)

The majority of loans outstanding to Executive Board members are mortgages or loans against securities. Such loans are made on the same terms available to employees under the Group's employee benefit plans. Pursuant to the AoA, each Executive Board member may be granted individual credit facilities or loans up to a maximum of CHF 20 million. As of December 31, 2018, 2017 and 2016, outstanding loans to Executive Board members amounted to CHF 33 million, CHF 26 million and CHF 25 million, respectively. The number of individuals with outstanding loans at the beginning and the end of 2018 was 8 and 9, respectively, and the highest loan outstanding was CHF 6 million to Mr. Sitohang.

All mortgage loans to Executive Board members are granted either with variable or fixed interest rates over a certain period. Typically, mortgages are granted for periods of up to ten years. Interest rates applied are based on refinancing costs plus a margin, and interest rates and other terms are consistent with those applicable to other employees. Loans against securities are granted at interest rates and on terms applicable to such loans granted to other employees. The same credit approval and risk assessment procedures apply to Executive Board members as for other employees. Unless otherwise noted, all loans to Executive Board members were made in the ordinary course of business and substantially on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons and in consideration of the terms which apply to all Group employees. These loans did not involve more than the normal risk of collectability or present other unfavorable features.

> Refer to "Banking relationships with Board and Executive Board members and related party transactions" in IV – Corporate Governance – Additional information for further information.

2016 LTI awards in the 2016-2018 performance cycle

As disclosed in the 2015 Compensation Report, we introduced a three-year performance-based LTI award in 2016 with a combination of Group and division-specific financial metrics, as well as an RTSR component (40% weighting). The initial number of shares granted was calculated by dividing the LTI maximum opportunity by the volume-weighted average share price for the 10 trading days following the release of the 2015 annual results, consistent with all other share awards granted to Group employees. Reflecting the share price under-performance over the 2016-2018 performance measurement period, the RTSR component resulted in zero payout, and taking into consideration the performance against the financial criteria, the number of shares earned based on performance conditions represents 41% of the maximum opportunity for the Executive Board, in aggregate. For the CEO, the number of shares earned based on performance conditions over the three-year period (payout level) represents 36% of his maximum opportunity, and for the divisional and function heads, the payout levels range from 36% to 62% of the individual maximum opportunities. The impact of share price movements since the grant date is illustrated in the diagram below, with the value of the 2016 LTI award based on the share price at the end of 2018 being 25% of the maximum opportunity. The LTI award vests in three equal tranches on the third, fourth and fifth anniversaries of the grant date. The final value of the awards at delivery may differ from the value at the end of 2018 due to subsequent share price movements.

2016 LTI awards: performance against targets

Executive Board compensation design for 2019

The overall compensation structure and design for the Executive Board in 2019 builds upon the existing framework. Aside from refinements to the STI award financial criteria, reflecting the end of the restructuring period and feedback from shareholders and other external stakeholders, all the design changes implemented in 2018 will remain in place for 2019, as summarized in the following table.

The threshold, target and maximum performance levels for the STI and LTI awards are pre-determined and set by the Compensation Committee, taking into account the Group's financial plan, prior year performance, analyst expectations and any publicly stated targets, in order to set performance levels which are challenging and motivating for the Executive Board. The financial plan is set at aspirational levels, and in combination with publicly disclosed targets, forms the basis for the maximum performance levels, with no additional upside payout beyond the maximum opportunities. The target performance levels are risk-adjusted, take into consideration analyst expectations and represent a significant increase compared with the prior year. The threshold performance levels are set taking into account prior year performance, as well as various internal scenarios.

Board of Directors compensation

Compensation structure

Board members receive fees which reflect their respective role, time commitment and scope of responsibility on the Board. The fee amounts are set at levels to attract and retain highly qualified and experienced individuals, taking into consideration levels at comparable leading Swiss companies. The base board and committee membership fees for the period from one AGM to the next are paid 50% in cash and 50% in Group shares in arrears in two equal installments, except for the Chairman and committee chairs as described below. The Group shares awarded are blocked and non-transferable for a period of four years. This ensures that the interests of Board members are closely aligned to the interests of shareholders. The fee amounts for the 2018 AGM to 2019 AGM Board period are shown in the table below, and are consistent with the prior year, except that the Risk Committee Chair fee has been reduced to CHF 400,000 (from CHF 420,000) as previously disclosed.

Membership fees: 2018 AGM – 2019 AGM

Role	Base fees	Chair fees[1]	Committee fees
CHF			
Chairman	3,000,000	1,500,000	–
Board member [2]	250,000	–	–
Audit Committee (AC)	–	480,000	150,000
Compensation Committee (CC)	–	300,000	100,000
Governance and Nominations Committee (GNC)	–	No additional fee	50,000
Risk Committee (RC)	–	400,000	100,000

1 Committee chairs do not receive committee fees in addition to their chair fees.

2 The Vice-Chair and Lead Independent Director does not receive additional compensation for these roles.

It is the intention of the Board to leave these fee amounts unchanged for the next Board compensation period, except that a new committee fee of CHF 75,000 will be introduced for membership of the newly established Conduct and Financial Crime Control Committee, which will be paid for the first time for the period from the 2019 AGM to the 2020 AGM.

Compensation of the Chairman

The Chairman's role is a full-time appointment. He is paid an annual base board fee of CHF 3.0 million in cash (divided into 12 monthly payments) plus a chair fee of CHF 1.5 million in Group shares delivered in one installment at the end of the current board period. In the past few years, the Chairman has voluntarily waived all or part of his chair fee. For the 2018 AGM to 2019 AGM period, the Chairman's compensation has returned to the previously approved level, in light of the successful completion of the Group's restructuring program. The Chairman may also receive benefits from and make contributions to the Group pension fund in line with local market practice for the Group. The total compensation paid to the Chairman reflects his full-time status and active role in shaping the Group's strategy, governing the Group's affairs, engaging and maintaining a close working relationship with the CEO and senior management, and providing counsel and support, where appropriate. The Chairman coordinates the Board's activities, works with the committee chairs to coordinate the tasks of the committees and ensures that Board members are provided with sufficient information to perform their duties. The Chairman drives the Board agenda on key topics such as the strategic development of the Group, corporate culture, succession planning and the structure and organization of the Group. The Chairman also steers the agenda on compensation and compensation structure, including the performance evaluation and compensation of the CEO and the Executive Board. He chairs the Board, the Governance and Nominations Committee and the shareholder meetings and takes an active role in representing the Group to regulators and supervisors, key shareholders, investors, and other external stakeholders. Moreover, he is a member of several Swiss and international industry associations on behalf of the Group, including the Swiss Bankers

Association, the Swiss Finance Council, the Institute of International Finance and the European Banking Group.
Compensation of the committee chairs
The committee chair fees are fixed in advance and are not linked to the Group's financial performance. The chair fees are paid 50% in cash and 50% in Group shares in one installment at the end of the current board period. In addition to the greater time commitment required to prepare and lead the committee work, the chair fees reflect the engagement of the three committee chairs throughout the year with regulators, shareholders, the business divisions and corporate functions and other stakeholders. Regulatory developments in the banking industry in recent years have put increasing demands on the Risk and Audit Committee Chairs, in particular, increasing the frequency of interaction with the Group's main regulators on internal control, risk, capital and other matters under the supervision of these committees. Similarly, the greater focus of shareholders and regulators on compensation has resulted in an increased number of engagements between the Compensation Committee Chair and key shareholders and shareholder proxy advisers, as well as with regulators. The Compensation Committee held 9 meetings and calls during 2018. The Audit Committee Chair fee also considers the greater number of meetings required of the Audit Committee for the review and approval of the quarterly financial results and related filings and the Audit Committee Chair's supervisory role over the Internal Audit function. The Audit Committee held 18 meetings and calls during 2018. The Risk Committee Chair fee considers the regular interaction required between the Risk Committee Chair and the Group chief risk officer and other senior managers in the risk management function, as well as the oversight role over the Credit Risk Review function, which reports directly to the Risk Committee Chair. The Risk Committee held 6 meetings during 2018, and in addition, the Risk Committee Chair held numerous meetings with regulators and other stakeholders.
> Refer to the table "Members of the Board and Board committees" in IV – Corporate Governance – Board of Directors for further information.
> Refer to "Credit risk governance" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Risk management – Risk coverage and management – Credit risk for further information on the Credit Risk Review function.

Utilization of Board compensation approved at the 2018 AGM

At the 2018 AGM, shareholders approved an aggregate amount of compensation to be paid to members of the Board for the period from the 2018 AGM to the 2019 AGM of CHF 12.0 million. Of this amount, a total of CHF 11.7 million will have been paid to Board members by the time of the 2019 AGM, of which CHF 10.4 million related to fees for Group Board memberships and CHF 1.3 million related to fees paid to certain Board members for subsidiary board membership. Total Group Board compensation is 6% higher compared with the prior period, and aggregate Board and subsidiary board compensation for Board members is 2% higher, primarily reflecting an additional Board member.

Board compensation from the 2018 AGM to the 2019 AGM (audited)

									Group		Subsidiari
	GNC	AC	CC	RC	Base board fee	Committee fee	Chair fee	Pension and other benefits	Total	Of which awarded in Group shares[1]	Subsidiary board fee[2]	Pensi a oth benef
CHF												
Urs Rohner, Chairman [4]	C				3,000,000		1,500,000	217,437	**4,717,437**	1,500,000		
Iris Bohnet			M		250,000	100,000			**350,000**	175,000		
Andreas Gottschling	M	M		C	250,000	200,000	400,000		**850,000**	425,000	100,000	
Alexander Gut		M			250,000	150,000			**400,000**	200,000	150,000	
Michael Klein				M	250,000	100,000			**350,000**	175,000		
Andreas N. Koopmann			M		250,000	100,000			**350,000**	175,000		
Seraina Macia				M	250,000	100,000			**350,000**	175,000		
Kai S. Nargolwala	M		C		250,000	50,000	300,000		**600,000**	300,000		
Ana Paula Pessoa		M			250,000	150,000			**400,000**	200,000		
Joaquin J. Ribeiro		M			250,000	150,000			**400,000**	200,000		
Severin Schwan	M			M	250,000	150,000			**400,000**	200,000		
John Tiner	M	C		M	250,000	150,000	480,000		**880,000**	440,000	220,500	
Alexandre Zeller [5]	M		M		208,333	125,000			**333,333**	166,667	666,667	180,9
Total					**5,958,333**	**1,525,000**	**2,680,000**	**217,437**	**10,380,770**	**4,331,667**	**1,137,167**	**180,9**

GNC = Governance and Nominations Committee; AC = Audit Committee; CC = Compensation Committee; RC = Risk Comm
M = Member

1

As of December 31, 2018, one-half of the Board member fees to be awarded in Group shares have been delivered to Board mer applicable Group share price was CHF 13.03. The remaining shares will be delivered to Board members at or around the date o and the share price for this second share delivery will be determined at that time. Group shares are subject to a four-year blocki

2

Subsidiary board fees were awarded for the following subsidiary board roles: i) Mr. Gottschling serves as non-executive directo of the risk commitee and advisory remuneration committee of the UK subsidiaries Credit Suisse International and Credit Suisse

(Europe) Limited; ii) Mr. Gut serves as non-executive director and audit committee chair of the Swiss subsidiary Credit Suisse
iii) Mr. Tiner serves as non-executive board member of the US subsidiares Credit Suisse Holdings (USA), Inc. and Credit Suiss
(USA) LLC; in the case of Mr. Tiner, these fees were agreed prior to the cap of CHF 100,000 being adopted for Group Board m
on subsidiary boards; and iv) Mr. Zeller served as non-executive board member and chairman of Credit Suisse (Schweiz) AG.

3

At the 2018 AGM, shareholders approved a maximum amount of total compensation to be awarded to Board members until the
CHF 12 million. For the total compensation awarded to members of the Board, the Group will make payments of CHF 0.6 mill
/ 2019 Board period to cover the mandatory employer social security contributions as required under the social security laws ap
individual Board members based on their domicile and employment status. These contributions do not form part of the Board m
compensation.

4

The Chair fee of the Chairman is set at CHF 1.5 million to be awarded as 100% Group shares. The total compensation of the C
benefits for the period from the 2018 AGM to the 2019 AGM of CHF 217,437, including pension and health insurance benefits

5

Mr. Zeller stepped down as Group board member and board member and chairman of the board of directors of the subsidiary C
(Schweiz) AG effective February 28, 2019. Accordingly, Mr. Zeller's Board compensation has been pro-rated for the period fro
AGM to February 28, 2019. During this period, Mr. Zeller was eligible for pension and health insurance benefits in connection
chairman and member of the board of Credit Suisse (Schweiz) AG, but not for his role as member of the Group Board.

Board compensation from the 2017 AGM to the 2018 AGM (audited)

									Group		Subsidiaries	
	GNC	AC	CC	RC	Base board fee	Committee fee	Chair fee	Pension and other benefits	Total	Of which awarded in Group shares[1]	Subsidiary board fee	Pension and other benefits
CHF												
Urs Rohner, Chairman [3]	C				3,000,000	–	1,050,000	216,823	**4,266,823**	1,050,000	–	
Iris Bohnet			M		250,000	100,000	–	–	**350,000**	175,000	–	
Andreas Gottschling				M	250,000	100,000	–	–	**350,000**	175,000	33,333	
Alexander Gut		M			250,000	150,000	–	–	**400,000**	200,000	150,000	
Andreas N. Koopmann			M	M	250,000	200,000	–	–	**450,000**	225,000	–	
Seraina Macia		M			250,000	150,000	–	–	**400,000**	200,000	–	
Kai S. Nargolwala	M		C		250,000	50,000	300,000	–	**600,000**	300,000	–	
Joaquin J. Ribeiro		M			250,000	150,000	–	–	**400,000**	200,000	–	
Severin Schwan	M			M	250,000	150,000	–	–	**400,000**	200,000	–	
Richard E. Thornburgh	M	M		C	250,000	200,000	420,000	–	**870,000**	435,000	271,600	
John Tiner	M	C		M	250,000	150,000	480,000	–	**880,000**	440,000	218,250	
Alexandre Zeller	M		M		250,000	150,000	–	–	**400,000**	200,000	800,000	216,823
Total					**5,750,000**	**1,550,000**	**2,250,000**	**216,823**	**9,766,823**	**3,800,000**	**1,473,183**	**216,823**

GNC = Governance and Nominations Committee; AC = Audit Committee; CC = Compensation Committee; RC = Risk Comm
Chair; M = Member

1
As of December 31, 2017, one-half of the Board member fees to be awarded in Group shares have been delivered to Board mer
applicable Group share price was CHF 16.11. The remaining shares will be delivered to Board members at or around the date o
AGM and the share price for this second share delivery will be determined at that time. Group shares are subject to a four-year
period.

2
At the 2017 AGM, shareholders approved a maximum amount of total compensation to be awarded to Board members until the
CHF 12 million. For the total compensation awarded to members of the Board, the Group will make payments of CHF 0.5 mill
2017/2018 Board period to cover the mandatory employer social security contributions as required under the social security lav
the individual Board members based on their domicile and employment status. These contributions do not form part of the Boa
compensation.

3
The Chair fee of the Chairman is set at CHF 1.5 million to be awarded as 100% Group shares. For the period from the 2017 AG
AGM, the Chairman proposed to voluntarily waive 30% or CHF 0.45 million of his Chair fee and this proposal was approved b
The total compensation of the Chairman includes benefits for the period from the 2017 AGM to the 2018 AGM of CHF 216,82
pension and health insurance benefits.

4

Mr. Zeller was eligible for pension and health insurance benefits in connection with his role as board member and chairman of directors of the subsidiary Credit Suisse (Schweiz) AG, but not for his role as a member of the Group Board.

Compensation of Board members serving on subsidiary boards

A number of Board members also serve as members on the boards of Group subsidiary companies. This practice is consistent with the Group's legal entity governance principles, which aim to foster a close alignment of the Group's governance practices and those of its significant subsidiary companies.

> Refer to the "Governance of Group subsidiaries" and "Biographies of the Board members" in IV – Corporate Governance – Board of Directors for further information.

With the exception of the Chairman, Board members may receive separate fees for serving on subsidiary boards, in addition to their Board fees, which are paid in cash. These fees are approved by the respective subsidiary boards and are subject to ratification by the Board. All subsidiary board fees are included in the total amount of compensation of the members of the Board proposed for approval by shareholders at the AGM. The Chairman does not receive separate fees for board memberships in other Group companies, as this is considered to be included as part of the Chairman's compensation.

The Board members newly appointed to serve on subsidiary boards receive a flat subsidiary board membership fee of CHF 100,000 (or higher amounts if a Board member serves as the chair of the subsidiary board or a committee). This amount is generally less than that received by other external subsidiary board members, given that Board members are already familiar with the Group's entities and activities. Serving on a subsidiary board is nevertheless a significant additional commitment for these Board members, reflected, for example, in the number of subsidiary board meetings held throughout the year as shown in the following table.

Number of subsidiary board meetings

	Board	Committee[1]	Total
Subsidiary			
Credit Suisse (Schweiz) AG	12	16	**28**
Credit Suisse International (CSI) / Credit Suisse Securities (Europe) Ltd. (CSSEL)	13	12	**25**
Credit Suisse Holdings (USA), Inc.	19	21	**40**

1 Includes meetings of the respective subsidiary board's audit and risk committees.

Supplementary information

Board shareholdings

The table below discloses the shareholdings of the Board members, their immediate family and companies in which they have a controlling interest. As of December 31, 2018 and 2017, there were no Board members with outstanding options.

Board shareholdings by individual

end of	2018	2017
December 31 (shares) [1]		
Urs Rohner	268,250	189,956
Iris Bohnet	61,311	49,451
Andreas Gottschling	19,210	5,432
Alexander Gut	37,707	24,152
Michael Klein [2]	6,713	–
Andreas N. Koopmann	131,231	117,900
Seraina Macia	49,827	37,231
Kai S. Nargolwala	299,872	280,883
Ana Paula Pessoa [2]	7,672	–
Joaquin J. Ribeiro	37,705	24,150
Severin Schwan	129,957	116,402
John Tiner	244,317	216,645
Alexandre Zeller	79,763	6,208
Total	**1,373,535**	**1,068,410**[3]

1 Includes Group shares that are subject to a blocking period of up to four years; includes shareholdings of immediate family members.

2 Michael Klein and Ana Paula Pessoa were newly elected at the 2018 AGM.

3 Excludes 196,766 shares held by Richard E. Thornburgh as of December 31, 2017, who did not stand for re-election to the Board as of April 27, 2018.

Board loans

The majority of loans outstanding to members of the Board are mortgages or loans against securities. Such loans are made to Board members on the same terms available to third-party clients. Pursuant to the AoA, each member of the Board may be granted individual credit facilities or loans up to a maximum of CHF 20 million at market conditions. As of December 31, 2018, 2017 and 2016, outstanding loans to Board members amounted to CHF 10 million, CHF 11 million, and CHF 10 million, respectively.

Board members with loans, including the Chairman, do not benefit from employee conditions, but are subject to conditions applied to clients with a comparable credit standing. Unless otherwise noted, all loans to Board members are made in the ordinary course of business and substantially on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons. Such loans do not involve more than the normal risk of collectability or present other unfavorable features. In addition to the loans listed below, the Group or any of its banking subsidiaries may enter into financing and other banking agreements with companies in which current Board members have a significant influence as defined by the SEC. Examples include holding executive and/or board level roles in these companies. Unless otherwise noted, loans extended by the Group to such companies are also made in the ordinary course of business and at prevailing market conditions. As of December 31, 2018, 2017 and 2016, there was no loan exposure to such related party companies that was not made in the ordinary course of business and at prevailing market conditions.

> Refer to “Banking relationships with Board and Executive Board members and related party transactions” in IV – Corporate Governance – Additional information for further information.

Board loans by individual (audited)

end of December 31 (CHF)	2018	2017
Urs Rohner	4,660,000	4,745,000
Alexander Gut	30,000	30,000
Andreas N. Koopmann	4,122,750	5,197,600
Seraina Macia	960,000	968,000
Total	**9,772,750**	**10,940,600**

Includes loans to immediate family members and companies, in which the respective Board member has an ownership stake of 50% or higher.

Former members of the Board

Two former members of the Board are eligible to receive office infrastructure and secretarial support. These services are based on existing resources and are not used on a regular basis. No additional fees, severance payments or other forms of compensation were paid to former members of the Board or related parties during 2018 and 2017.

Group compensation

Compensation framework

The key elements of our current Group employees' compensation framework and how they applied to various employee categories are shown below.

Base salaries

All employees are paid a base salary. Salary levels are based on the skills, qualifications and relevant experience of the individual, the responsibilities required by the role and external market factors.

Role-based allowances

Role-based allowances are a component of fixed compensation awarded to certain employees identified as Prudential Regulation Authority (PRA) Code Staff under UK regulatory requirements or material risk-takers under other EU regulatory requirements. These role-based allowances are determined based on the role and organizational responsibility of the individuals. Role-based allowances are deemed to be fixed compensation for the purposes of calculating the cap of variable incentive compensation as required by the Capital Requirements Directive IV (CRD IV) and Capital Requirements Regulation (CRR). Role-based allowances for 2018 were paid entirely in cash on a non-deferred basis.

Variable incentive compensation

For 2018, variable incentive compensation was paid in cash unless the total compensation awarded to an employee for 2018 was greater than or equal to CHF 250,000 or the local currency equivalent or USD 250,000 for employees whose total compensation is denominated in US dollars. In these cases a portion was paid in cash and the balance was deferred, vesting at a later date.

Generally, employees receive the cash portion of their variable incentive compensation at a regular payroll settlement date close to the grant date. To comply with CRD IV requirements, employees who hold material risk-taker roles in respect of certain Group subsidiaries in the EU receive shares for 50% of the non-deferred portion of variable incentive compensation that would have been paid to them as cash. These shares are vested at the time of grant but remain blocked, that is, subject to transfer restrictions, for a period of 12 months.

To enable closer alignment with market practice and local variations, two deferral tables have been applied since 2015: one for the Americas and another for the rest of the world. For 2018, the deferral rates ranged from 17.5% to 80% of variable incentive compensation for employees located in the Americas, and 17.5% to 85% of variable incentive compensation for employees located elsewhere. The amount of variable incentive compensation paid in cash for 2018 was capped at CHF 2 million or the local currency equivalent (or USD 2 million for employees whose total compensation is denominated in US dollars) per employee.

Compensation components by employee category

Deferred compensation: key features

Potential downward adjustments of performance share awards

As described in the above table, performance share awards may be subject to negative adjustments in the event of a divisional loss. The amount of potential negative adjustment is shown in the table below.

Downward adjustment if division incurs a loss

Division pre-tax loss (in CHF billion)	Downward adjustment on award balance (in %)
1.00	15
2.00	30
3.00	45
4.00	60
5.00	75
6.00	90
6.67	100

Determination of the variable incentive compensation pools

In determining the pools, the Compensation Committee aims to balance the distribution of the Group's profits between shareholders and employees. The primary driver of the pool amounts is the Group's financial performance in terms of economic contribution, measured as adjusted income before taxes excluding variable incentive compensation expenses, after deducting a capital usage charge. Non-financial factors are also considered in the determination of the pool amounts, including progress on the achievement of strategic objectives, market position and trend, risk-related issues, relative performance compared to peers, and any extraordinary events, such as, but not limited to, company reorganizations, major legacy settlements or any other exceptional circumstances. In this regard, the Compensation Committee can apply discretion to make positive and negative adjustments to the variable incentive compensation pools.

The variable incentive compensation pools are determined on an annual basis, with accruals made on a quarterly basis throughout the year. The Compensation Committee regularly reviews the accruals and related financial information and applies adjustments in exceptional circumstances to ensure that the overall size of the pools is consistent with the Group's compensation objectives. The total amount of the pool for the corporate functions is not linked to the performance of the particular divisions that employees of the corporate functions support or oversee, but takes into account the Group-wide financial performance, measured in the form of Group economic contribution and non-financial factors. Therefore, employees working in the corporate functions, including those performing control functions, are remunerated independently from the performance of the businesses they oversee and support. As with the business divisions, risk, control, compliance and ethical considerations and relative performance compared to peers, as well as the market and regulatory environment, are taken into account.
For 2018, the Compensation Committee noted the 52% increase in Group adjusted income before taxes, from CHF 2.8 billion in 2017 to CHF 4.2 billion in 2018, and acknowledged that the Group had successfully delivered against its strategic priorities, including a strengthened capital position since 2015, achievement of its target for adjusted operating cost base, closure of the Strategic Resolution Unit, de-risking of the Global Markets activities, and greater allocation of capital to the Wealth Management-related and Investment Banking & Capital Markets businesses, which typically generate higher returns and are less volatile. The Compensation Committee also considered a range of other factors such as relative performance versus peers, market position and market trends, as well as control, risk and ethical considerations. In terms of the market environment however, the Compensation Committee noted that conditions in the second half of 2018 became more challenging for the financial services industry, with a significant drop in client activity resulting from a combination of factors including increasing trade tensions, rising US interest rates and greater geopolitical uncertainty. Against the backdrop of these conditions, the Compensation Committee decided to keep the Group variable compensation pool stable to the previous year, notwithstanding an increase in adjusted income before taxes of 52% over the same period. As such, to protect returns and profitability in light of downward pressure on revenues during the second half of the year, the Compensation Committee proposed an overall Group pool of CHF 3,195 million, which was approved by the Board.
> Adjusted results are non-GAAP financial measures which exclude certain items included in our reported results. Refer to "Reconciliation of adjusted results" in I – Information on the company – Strategy and II – Operating and financial review – Credit Suisse for further information.
Competitive benchmarking
The assessment of the economic and competitive environment is an important element of the compensation process as the Group strives for market-informed, competitive compensation levels. Internal expertise and the services of compensation consulting firms are used to benchmark compensation levels against relevant peers, taking into account geographical variations. The Compensation Committee is provided with regular reports from an independent compensation adviser on industry and market trends, including competitor performance and pay trends. The peers considered for the purposes of Group peer benchmarking are Bank of America, Barclays, Citigroup, Deutsche Bank, Goldman Sachs, JPMorgan Chase, Morgan Stanley and UBS. Specific benchmarking may include other peers, depending on the business area or geographic location, as appropriate.
For consideration of European and local practices, the Compensation Committee also references a cross-industry peer group of Europe-headquartered multinational companies selected on the basis of comparability to Credit Suisse in size, scale, global scope of operations and economic influence. In addition to the companies already listed above and those included as part of the Executive Board LTI award RTSR peer group, peers considered for Executive Board compensation include: AstraZeneca, Commerzbank, HSBC, Investor AB, Merck KGaA, Novartis, Standard Life Aberdeen and UniCredit.
Focus on risk and control
Risk and control considerations are an integral part of the performance assessment and compensation processes. This ensures that the Group's approach to compensation includes a focus on risk and internal control matters and discourages excessive risk taking. Senior management from the Group's corporate functions, including Compliance and Regulatory Affairs, General Counsel, Human Resources, Internal Audit, Product Control and

Risk Management, provide the Compensation Committee with comprehensive feedback on regulatory, audit, disciplinary and risk-related issues or trends across the Group, relevant to the assessment of the Group's risk and control culture. Divisions are assessed against risk and conduct measures for the year, and the consolidated findings are presented to the Compensation Committee and the CEO. Based on these assessments, the Compensation Committee may approve adjustments to the divisional pool levels as proposed by the CEO.
Aside from risk considerations, disciplinary events may also impact compensation decisions. Conduct and Ethics Boards (CEBs) review all disciplinary events and decide on disciplinary sanctions proposed by the recommendation teams, which include representatives from the control functions. CEBs have been established at the Group-wide level, as well as for each business division and the corporate functions overall. The Group CEB meets on a quarterly basis to ensure that sanctions applied are in line with the Group's risk appetite, market practice and regulatory requirements.
Malus and clawback provisions
All deferred compensation awards granted contain malus provisions that enable the Group to reduce or cancel the awards prior to settlement if the participant engages in certain detrimental conduct. Malus provisions were enforced during the course of 2018. All variable incentive compensation granted to UK PRA Code Staff and employees regulated by the Bank of Italy are subject to clawback. Other EU-regulated employees are also subject to clawback provisions as required by applicable legal or regulatory requirements.
Covered Employees (including Material Risk Takers and Controllers)
Covered employees are subject to a heightened level of scrutiny over the alignment of their compensation with performance and risk considerations.

Compensation outcomes for 2018

Of the total variable incentive compensation awarded across the Group for 2018, 50% was deferred, compared with 45% in 2017, and subject to certain conditions including future service, performance, market and malus criteria.

Total compensation awarded

	2018			2017		
For	Unrestricted	Deferred	Total	Unrestricted	Deferred	Total
Fixed compensation (CHF million)						
Salaries	5,235	99	5,334	5,504	90	5,594
Social security	652	–	652	671	–	671
Other [1]	748	–	748	790[2]	–	790
Total fixed compensation	**6,635**	**99**	**6,734**	**6,965**	**90**	**7,055**
Variable incentive compensation (CHF million)						
Cash	1,555	–	1,555	1,708	–	1,708
Share awards	35	638	673	38	613	651
Performance share awards	–	532	532	–	478	478
Contingent Capital Awards	–	299	299	–	241	241
Other cash awards	–	136	136	–	112	112
Total variable incentive compensation	**1,590**	**1,605**	**3,195**	**1,746**	**1,444**	**3,190**
Other variable compensation (CHF million)						
Severance awards	34	0	34	1	–	1
Other [3]	23	99	122	26	244	270[4]
Total other variable compensation	**57**	**99**	**156**	**27**	**244**	**271**
Total compensation awarded (CHF million)						
Total compensation awarded	**8,282**	**1,803**	**10,085**	**8,738**	**1,778**	**10,516**
of which guaranteed bonuses	26	33	59	49	72	121

1 Includes pension and other post-retirement expense of CHF 411 million and CHF 432 million in 2018 and 2017, respectively.

2 In 2018, the Group adopted a new US GAAP accounting standard which resulted in a restatement that increased compensation and benefits and reduced general and administrative expenses by CHF 190 million.

3 Includes replacement awards to compensate employees for the equivalent fair value of deferred awards cancelled by previous employers, as well as retention awards and sign-on payments.

4 Includes CHF 65 million of cash retention awards in Asia Pacific.

Number of employees awarded variable incentive and other compensation

	2018			2017		
	MRTC[1]	Other employees	Total	MRTC[1]	Other employees	Total
Number of employees awarded variable incentive compensation						
Variable incentive compensation	**1,003**	**41,210**	**42,213**	**1,070**	**41,614**	**42,684**
of which cash	977	40,996	41,973	1,070	41,614	42,684
of which share awards	944	6,004	6,948	983	6,011	6,994
of which performance share awards	952	873	1,825	990	859	1,849
of which Contingent Capital Awards	933	4,843	5,776	963	4,833	5,796
of which other cash awards	69	431	500	41	240	281
Number of employees awarded other variable compensation						
Severance awards	1	217	218	2	181	183
Guaranteed bonuses	4	129	133	16	162	178
Other [2]	34[3]	590	624	44[3]	821	865

Excluding Executive Board members who were in office on December 31, 2018.

1

Excludes individuals who may have been classified as MRTC according to regulatory requirements of jurisdictions outside of Switzerland, particularly US-based revenue producers in Global Markets and Investment Banking & Capital Markets, who were classified as Covered Employees by the US Federal Reserve.

2

Includes replacement awards to compensate employees for the equivalent fair value of deferred awards cancelled by previous employers, as well as retention awards and sign-on payments.

3

For 2018 and 2017, sign-on payments were paid to 5 and 3 MRTC, respectively.

Compensation awarded to Material Risk Takers and Controllers

	2018			2017		
For	Unrestricted	Deferred	Total	Unrestricted	Deferred	Total
Fixed compensation (CHF million)						
Total fixed compensation [1]	**514**	**58**	**572**	**536**	**59**	**595**
Variable incentive compensation (CHF million)						
Cash	230	–	230	298	–	298
Share awards	35	192	227	38	177	215
Performance share awards	–	328	328	–	299	299
Contingent Capital Awards	–	128	128	–	116	116
Other cash awards	–	40	40	–	35	35
Total variable incentive compensation	**265**	**688**	**953**	**336**	**627**	**963**
Other variable compensation (CHF million)						
Severance awards	1	–	1	1	–	1
Other [2]	4[3]	22	26	8[3]	88	96
Total other variable compensation	**5**	**22**	**27**	**9**	**88**	**97**
Total compensation (CHF million)						

Total compensation	**784**	**768**	**1,552**	**881**	**774**	**1,655**
of which guaranteed bonuses	1	3	4	10	25	35

Excluding Executive Board members who were in office on December 31, 2018. Of the total compensation awarded to MRTC for 2018 and 2017, 49% and 47%, respectively, was deferred. Of the total variable incentive compensation awarded to MRTC for 2018 and 2017, 72% and 65%, respectively, was deferred.

1

The number of MRTCs receiving fixed compensation for 2018 and 2017 was 1,030 and 1,102, respectively.

2

Includes replacement awards to compensate employees for the equivalent fair value of deferred awards cancelled by previous employers, as well as retention awards and sign-on payments.

3

For 2018 and 2017, sign-on payments paid to MRTC amounted to CHF 1 million and CHF 5 million, respectively.

Group compensation and benefits expense

Compensation and benefits expenses recognized in the current year income statement include salaries, role-based allowances, variable compensation, benefits and employer taxes on compensation. Variable compensation expense generally reflects the variable incentive cash compensation for the current year, amortization of deferred compensation awards granted in prior years, as well as severance payments, commission payments, replacement awards, retention awards, and sign-on payments. Deferred variable incentive compensation granted for the current year is expensed in future periods during which it is subject to future service, performance and malus criteria and other restrictive covenants.

Group compensation and benefits expense

	2018			2017		
in	Current compen-sation	Deferred compen-sation	Total	Current compen-sation	Deferred compen-sation	Total
Fixed compensation expense (CHF million)						
Salaries	5,235	85[1]	5,320	5,504	52[1]	5,556
Social security [2]	652	–	652	671	–	671
Other [3]	748	–	748	790[4]	–	790
Total fixed compensation expense	**6,635**	**85**	**6,720**	**6,965**	**52**	**7,017**
Variable incentive compensation expense (CHF million)						
Cash	1,555	–	1,555	1,708	–	1,708
Share awards	35	526[5]	561	38	525[5]	563
Performance share awards	–	382	382	–	348	348
Contingent Capital Awards	–	154	154	–	280	280
Contingent Capital share awards	–	2	2	–	18	18
Capital Opportunity Facility awards	–	12	12	–	14	14
2008 Partner Asset Facility awards [6]	–	–	–	–	7	7
Other cash awards	–	178	178	–	392	392
Total variable incentive compensation expense	**1,590**	**1,254**	**2,844**	**1,746**	**1,584**	**3,330**
Other variable compensation expense (CHF million)						
Severance payments	34	–	34	1	–	1
Other [7]	22	–	22	19	–	19
Total other variable compensation expense	**56**	**–**	**56**	**20**	**–**	**20**
Total compensation expense (CHF million)						
Total compensation expense	**8,281**	**1,339**	**9,620**	**8,731**	**1,636**	**10,367**

Restructuring expenses in connection with the strategic review of the Group are disclosed separately and are not part of the total compensation expenses. These restructuring expenses included cash severance expenses of CHF 169 million and CHF 192 million relating to 1,647 and 1,774 employees in 2018 and 2017, respectively.

1 Includes fixed deferred expense of CHF 85 million for other cash awards for 2018; and CHF 4 million for share awards and CHF 48 million for other cash awards for 2017.

2 Represents the Group's portion of employees' mandatory social security.

3
Includes pension and other post-retirement expense of CHF 411 million and CHF 432 million in 2018 and 2017, respectively.
4
In 2018, the Group adopted a new US GAAP accounting standard which resulted in a restatement that increased compensation and benefits and reduced general and administrative expenses by CHF 190 million.
5
Includes CHF 22 million and CHF 34 million of compensation expense associated with replacement share awards granted in 2018 and 2017, respectively.
6
Includes the change in the underlying fair value of the indexed assets during the period.
7
Includes replacement awards to compensate employees for the equivalent fair value of deferred awards cancelled by previous employers, as well as retention awards and sign-on payments.

Supplementary information

Equal pay and the gender pay gap

Equal pay for equal work has always been and will continue to be an important focus for us. Our philosophy is to provide a discrimination-free compensation system for all employees based on their contribution and regardless of their background, including gender.

We design our compensation system to be compliant with applicable laws regarding equal and gender pay. In the UK, we publish the gender pay gap report in line with regulatory requirements and we are implementing measures to address this gap. We were one of the first banks signing up to HM Treasury's Women in Finance Charter, promising support for transitioning women into senior roles. We are also involved in numerous opportunities to promote gender diversity and talent including Women on Board, Women in Banking and Finance and Modern Muse and Tech She Can.

Equal pay for our employees is set forth in our Group Compensation policy which states that all employment-related decisions, including decisions on compensation are based on an individual's qualifications, performance and behavior, or other legitimate business considerations, such as the profitability of the Group or the division and department of the individual, and the strategic needs of the Group.

Group estimated unrecognized compensation expense

The following table shows the estimated compensation expense that has not yet been recognized through the income statement for deferred compensation awards granted for 2018 and prior years that were outstanding as of December 31, 2018, with comparative information for 2017. These estimates were based on the fair value of each award on the grant date, taking into account the current estimated outcome of relevant performance criteria and estimated future forfeitures. No estimate has been included for future mark-to-market adjustments.

Group estimated unrecognized compensation expense

	Deferred compensation		2018	Deferred compensation		2017
end of	For 2018	For prior-year awards	Total	For 2017	For prior-year awards	Total
Estimated unrecognized compensation expense (CHF million)						
Share awards	629	466[1]	1,095	569	472[1]	1,041
Performance share awards	521	167	688	445	158	603
Contingent Capital Awards	273	141	414	229	119	348
Contingent Capital share awards	–	0	0	–	3	3
Other cash awards	136	179	315	112	194	306
Total estimated unrecognized compensation expense	**1,559**	**953**	**2,512**	**1,355**	**946**	**2,301**

1 Includes CHF 38 million and CHF 71 million of estimated unrecognized compensation expense associated with replacement share awards granted to new employees in 2018 and 2017, respectively, not related to prior years.

Limitations on share-based awards

The Group prohibits employees from entering into transactions to hedge the value of outstanding share-based awards but allows employees to hedge awards that have already vested. Employee pledging of unvested, or vested and undistributed share-based awards is also prohibited, except with the approval of the Compensation Committee. These provisions also apply to Executive Board members.

Impact of share-based compensation on shareholders' equity

In general, the income statement expense recognition of share-based awards on a pre-tax basis has a neutral impact on shareholders' equity because the reduction to shareholders' equity from the expense recognition is offset by the obligation to deliver shares, which is recognized as an increase to equity by a corresponding amount. Shareholders' equity includes, as additional paid-in capital, the tax benefits associated with the expensing and subsequent settlement

of share-based awards.
In 2018, the Group's share delivery obligations were covered by shares purchased in the market. The Group intends to continue to cover its future share delivery obligations through market purchases.
Share-based awards outstanding
At the end of 2018, there were 138.3 million share-based awards outstanding, of which 83.2 million were share awards, 51.7 million were performance share awards and 3.4 million were CCA share awards.
> Refer to "Note 28 – Employee deferred compensation" in VI – Consolidated financial statements – Credit Suisse Group for further information.
Subsequent activity
In early 2019, the Group granted approximately 55.6 million new share awards and 46.1 million new performance share awards with respect to performance in 2018. Further, the Group awarded CHF 299 million of deferred variable incentive compensation in the form of CCA pursuant to the Group's compensation policy.
In the first half of 2019, the Group plans to settle 62.9 million deferred awards from prior years, including 36.3 million share awards and 23.2 million performance share awards. The Group plans to meet this delivery obligation through market purchases.

> Refer to “Capital management” in III – Treasury, Risk, Balance sheet and Off-balance sheet for more information.

Changes to the value of outstanding deferred awards

Employees experience changes to the value of their deferred compensation awards during the vesting period due to both implicit and explicit value changes. Implicit value changes primarily reflect market-driven effects, such as changes in the Group share price, changes in the value of the COF, CCA and foreign exchange rate movements. Explicit value changes reflect risk adjustments triggered by conditions related to negative performance in the performance share awards, forfeiture, or the malus provisions in all deferred awards. The final value of an award will only be determined at settlement.

> Refer to “Note 28 – Employee deferred compensation” in VI – Consolidated financial statements – Credit Suisse Group for further information.

The following table provides a comparison of the outstanding deferred compensation awards at the end of 2017 and 2018, indicating the value of changes due to ex post implicit and ex post explicit adjustments. For 2018, the change in value for the outstanding deferred compensation awards was mainly due to implicit adjustments driven primarily by changes in the Group share price, foreign exchange rate movements and changes in the value of CCA.

Outstanding deferred compensation awards

in / end		Total outstanding end of 2017	Granted in 2018	Paid out in 2018	Ex post explicit adjustments	Ex post implicit adjustments	Total outstanding end of 2018	% of which exposed to ex post explicit adjustments
Group (CHF million) [1]								
CCAs	Cash-based	745	241	(314)	(31)	(94)	547	100%
Other cash awards	Cash-based	402	125	(235)	(14)	(2)	276	100%
Share awards	Share-based	1,477	740	(665)	(65)	(589)	898	100%
Performance share awards	Share-based	943	450	(441)	(37)	(358)	557	100%
CCA share awards	Share-based	146	–	(81)	(1)	(28)	36	100%
Total		**3,713**	**1,556**	**(1,736)**	**(148)**	**(1,071)**	**2,314**	
Material Risk Takers and Controllers (CHF million) [2]								
CCAs	Cash-based	281	113	(106)	–	(44)	244	100%
Other cash awards	Cash-based	149	34	(90)	–	(3)	90	100%
Share awards	Share-based	425	216	(200)	–	(176)	265	100%
Performance share awards	Share-based	458	267	(201)	–	(199)	325	100%
CCA share awards	Share-based	38	–	(24)	–	(6)	8	100%
Total		**1,351**	**630**	**(621)**	**–**	**(428)**	**932**	

1 Includes MRTCs and Executive Board members who were in office on December 31, 2018.

2 Excludes Executive Board members who were in office on December 31, 2018.

Report of the Statutory Auditor

Report of the Statutory Auditor To the General Meeting of Shareholders of Credit Suisse Group AG, Zurich

_____We have audited the accompanying compensation report dated March 22, 2019 of Credit Suisse Group AG (the “Group”) for the year ended December 31, 2018. The audit was limited to the information according to articles 14-16 of the Ordinance against Excessive Compensation in Stock Exchange Listed Companies (the “Ordinance”) contained in the sections marked with (audited) on pages 243 to 254 of the compensation report.Responsibility of the Board of DirectorsThe Board of Directors is responsible for the preparation and overall fair presentation of the compensation report in accordance with Swiss law and the Ordinance. The Board of Directors is also responsible for designing the compensation system and defining individual compensation packages. Auditor's ResponsibilityOur responsibility is to express an opinion on the accompanying compensation report. We conducted our audit in accordance with Swiss Auditing Standards. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the compensation report complies with Swiss law and articles 14 16 of the Ordinance.An audit involves performing procedures to obtain audit evidence on the disclosures made in the compensation report with regard to compensation, loans and credits in accordance with articles 14 16 of the Ordinance. The procedures selected depend on the auditor’s judgment, including the assessment of the risks of material misstatements in the compensation report, whether due to fraud or error. This audit also includes evaluating the reasonableness of the methods applied to value components of compensation, as well as assessing the overall presentation of the compensation report.We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion. OpinionIn our opinion, the compensation report for the year ended December 31, 2018 of the Group complies with Swiss law and articles 14 16 of the Ordinance.KPMG AGNicholas EdmondsRalph DichtLicensed Audit ExpertLicensed Audit ExpertAuditor in ChargeZurich, SwitzerlandMarch 22, 2019

VI – Consolidated financial statements – Credit Suisse Group
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Report of the Independent Registered Public Accounting Firm

Report of the Independent Registered Public Accounting FirmTo the shareholders and Board of DirectorsCredit Suisse Group AG, Zurich_____Opinion on the Consolidated Financial StatementsWe have audited the accompanying consolidated balance sheets of Credit Suisse Group AG and subsidiaries (the "Group") as of December 31, 2018 and 2017, and the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows for each of the years in the three year period ended December 31, 2018, and the related notes (collectively, the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Group as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the Group's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 22, 2019 expressed an unqualified opinion on the effectiveness of the Group's internal control over financial reporting.Basis for OpinionThese consolidated financial statements are the responsibility of the Group's management and the Board of Directors. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.KPMG AGNicholas EdmondsAnthony AnzevinoLicensed Audit ExpertGlobal Lead PartnerAuditor in ChargeWe have served as the Group's auditor since 1989.Zurich, SwitzerlandMarch 22, 2019

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Consolidated financial statements

Consolidated statements of operations

in	Note	2018	2017	2016
Consolidated statements of operations (CHF million)				
Interest and dividend income	5	19,613	17,057	17,374
Interest expense	5	(12,604)	(10,500)	(9,812)
Net interest income	5	7,009	6,557	7,562
Commissions and fees	6	11,890	11,817	11,092
Trading revenues	7	624	1,317	313
Other revenues	8	1,397	1,209	1,356
Net revenues		**20,920**	**20,900**	**20,323**
Provision for credit losses	9	**245**	**210**	**252**
Compensation and benefits	10	9,620	10,367	10,652
General and administrative expenses	11	5,798	6,645	9,690
Commission expenses		1,259	1,430	1,455
Restructuring expenses	12	626	455	540
Total other operating expenses		7,683	8,530	11,685
Total operating expenses		**17,303**	**18,897**	**22,337**
Income/(loss) before taxes		**3,372**	**1,793**	**(2,266)**
Income tax expense	28	1,361	2,741	441
Net income/(loss)		**2,011**	**(948)**	**(2,707)**
Net income/(loss) attributable to noncontrolling interests		(13)	35	3
Net income/(loss) attributable to shareholders		**2,024**	**(983)**	**(2,710)**
Earnings/(loss) per share (CHF)				
Basic earnings/(loss) per share	13	0.79	(0.41)	(1.27)
Diluted earnings/(loss) per share	13	0.77	(0.41)	(1.27)

Consolidated statements of comprehensive income

in	2018	2017	2016
Comprehensive income/(loss) (CHF million)			
Net income/(loss)	2,011	(948)	(2,707)
Gains/(losses) on cash flow hedges	(10)	(27)	(20)
Foreign currency translation	(325)	(1,031)	515
Unrealized gains/(losses) on securities	(17)	(13)	1
Actuarial gains/(losses)	(391)	695	394
Net prior service credit/(cost)	(135)	(121)	36
Gains/(losses) on liabilities related to credit risk	1,654	(1,976)	(1,043)
Other comprehensive income/(loss), net of tax	776	(2,473)	(117)
Comprehensive income/(loss)	**2,787**	**(3,421)**	**(2,824)**
Comprehensive income/(loss) attributable to noncontrolling interests	(15)	28	(2)
Comprehensive income/(loss) attributable to shareholders	**2,802**	**(3,449)**	**(2,822)**

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated balance sheets end of	Note	2018	2017
Assets (CHF million)			
Cash and due from banks		100,047	109,815
of which reported at fair value		115	212
of which reported from consolidated VIEs		173	232
Interest-bearing deposits with banks		1,142	726
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	15	117,095	115,346
of which reported at fair value		81,818	77,498
Securities received as collateral, at fair value		41,696	38,074
of which encumbered		25,711	23,632
Trading assets, at fair value	16	132,203	156,334
of which encumbered		32,452	49,237
of which reported from consolidated VIEs		1,616	1,348
Investment securities	17	2,911	2,191
of which reported at fair value		2,911	2,191
of which reported from consolidated VIEs		1,432	381
Other investments	18	4,890	5,964
of which reported at fair value		2,434	3,506
of which reported from consolidated VIEs		1,505	1,833
Net loans	19	287,581	279,149
of which reported at fair value		14,873	15,307
of which encumbered		230	186
of which reported from consolidated VIEs		387	267
allowance for loan losses		(902)	(882)
Premises and equipment	20	4,838	4,686
of which reported from consolidated VIEs		39	151
Goodwill	21	4,766	4,742
Other intangible assets	22	219	223
of which reported at fair value		163	158
Brokerage receivables		38,907	46,968
Other assets	23	32,621	32,071
of which reported at fair value		7,263	9,018
of which encumbered		279	134
of which reported from consolidated VIEs		2,010	2,398
Total assets		**768,916**	**796,289**

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated balance sheets (continued)

end of	Note	2018	2017
Liabilities and equity (CHF million)			
Due to banks	24	15,220	15,413
of which reported at fair value		406	197
Customer deposits	24	363,925	361,162
of which reported at fair value		3,292	3,511
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	15	24,623	26,496
of which reported at fair value		14,828	15,262
Obligation to return securities received as collateral, at fair value		41,696	38,074
Trading liabilities, at fair value	16	42,169	39,119
of which reported from consolidated VIEs		3	3
Short-term borrowings		21,926	25,889
of which reported at fair value		8,068	11,019
of which reported from consolidated VIEs		5,465	6,672
Long-term debt	25	154,308	173,032
of which reported at fair value		63,935	63,628
of which reported from consolidated VIEs		1,764	863
Brokerage payables		30,923	43,303
Other liabilities	23	30,107	31,612
of which reported at fair value		9,001	8,624
of which reported from consolidated VIEs		277	441
Total liabilities		**724,897**	**754,100**
Common shares		102	102
Additional paid-in capital		34,889	35,668
Retained earnings		26,973	24,973
Treasury shares, at cost		(61)	(103)
Accumulated other comprehensive income/(loss)	26	(17,981)	(18,738)
Total shareholders' equity		**43,922**	**41,902**
Noncontrolling interests		97	287
Total equity		**44,019**	**42,189**
Total liabilities and equity		**768,916**	**796,289**

end of	Note	2018	2017
Additional share information			
Par value (CHF)		0.04	0.04
Authorized shares [1]		3,271,129,950	3,271,129,950
Common shares issued	26	2,556,011,720	2,556,011,720
Treasury shares	26	(5,427,691)	(5,757,666)
Shares outstanding	26	2,550,584,029	2,550,254,054

1 Includes issued shares and unissued shares (conditional, conversion and authorized capital).

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of changes in equity

	Attributable to shareholders							
	Common shares	Additional paid-in capital	Retained earnings	Treasury shares, at cost	AOCI	Total share-holders' equity	Non-controlling interests	Total equity
2018 (CHF million)								
Balance at beginning of period	**102**	**35,668**	**24,973**	**(103)**	**(18,738)**	**41,902**	**287**	**42,189**
Purchase of subsidiary shares from non- controlling interests, not changing ownership [1, 2]	–	–	–	–	–	–	(69)	(69)
Sale of subsidiary shares to noncontrolling interests, changing ownership	–	2	–	–	–	2	(2)	–
Sale of subsidiary shares to noncontrolling interests, not changing ownership [2]	–	–	–	–	–	–	30	30
Net income/(loss)	–	–	2,024	–	–	2,024	(13)	2,011
Cumulative effect of accounting changes, net of tax	–	–	(24)	–	(21)	(45)	–	(45)
Total other comprehensive income/(loss), net of tax	–	–	–	–	778	778	(2)	776
Sale of treasury shares	–	(28)	–	11,721	–	11,693	–	11,693
Repurchase of treasury shares	–	–	–	(12,441)	–	(12,441)	–	(12,441)
Share-based compensation, net of tax	–	(120)	–	762	–	642	–	642
Financial instruments indexed to own shares [3]	–	28	–	–	–	28	–	28
Dividends paid	–	(661)[4]	–	–	–	(661)	(5)	(666)
Changes in scope of consolidation, net	–	–	–	–	–	–	(129)	(129)
Balance at end of period	**102**	**34,889**	**26,973**	**(61)**	**(17,981)**	**43,922**	**97**	**44,019**
2017 (CHF million)								
Balance at beginning of period	**84**	**32,131**	**25,954**	**0**	**(16,272)**	**41,897**	**414**	**42,311**
	–	–	–	–	–	–	(163)	(163)

Purchase of subsidiary shares from non- controlling interests, not changing ownership								
Sale of subsidiary shares to noncontrolling interests, not changing ownership	–	–	–	–	–	–	65	65
Net income/(loss)	–	–	(983)	–	–	(983)	35	(948)
Cumulative effect of accounting changes, net of tax	–	–	2	–	–	2	–	2
Total other comprehensive income/(loss), net of tax	–	–	–	–	(2,466)	(2,466)	(7)	(2,473)
Issuance of common shares	18	5,195	–	–	–	5,213	–	5,213
Sale of treasury shares	–	1	–	12,033	–	12,034	–	12,034
Repurchase of treasury shares	–	–	–	(12,757)	–	(12,757)	–	(12,757)
Share-based compensation, net of tax	–	36	–	621	–	657	–	657
Financial instruments indexed to own shares	–	19	–	–	–	19	–	19
Dividends paid	–	(1,546)	–	–	–	(1,546)	(4)	(1,550)
Changes in scope of consolidation, net	–	–	–	–	–	–	(41)	(41)
Other	–	(168)	–	–	–	(168)	(12)	(180)
Balance at end of period	**102**	**35,668**	**24,973**	**(103)**	**(18,738)**	**41,902**	**287**	**42,189**

1
Distributions to owners in funds include the return of original capital invested and any related dividends.
2
Transactions with and without ownership changes related to fund activity are all displayed under "not changing ownership".
3
Includes certain call options the Group purchased on its own shares to economically hedge share-based compensation awards. In accordance with US GAAP, these call options were designated as equity instruments and, as such, were initially recognized in shareholders' equity at their fair values and not subsequently remeasured.
4
Paid out of capital contribution reserves.
The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of changes in equity (continued)

	Attributable to shareholders							
	Common shares	Additional paid-in capital	Retained earnings	Treasury shares, at cost	AOCI	Total share-holders' equity	Non-controlling interests	Total equity
2016 (CHF million)								
Balance at beginning of period	**78**	**31,925**	**29,139**	**(125)**	**(16,635)**	**44,382**	**636**	**45,018**
Purchase of subsidiary shares from non- controlling interests, changing ownership	–	(13)	–	–	–	(13)	(6)	(19)
Purchase of subsidiary shares from non- controlling interests, not changing ownership	–	–	–	–	–	–	(103)	(103)
Sale of subsidiary shares to noncontrolling interests, not changing ownership	–	–	–	–	–	–	112	112
Net income/(loss)	–	–	(2,710)	–	–	(2,710)	3	(2,707)
Cumulative effect of accounting changes, net of tax	–	–	(475)	–	475	–	–	–
Total other comprehensive income/(loss), net of tax	–	–	–	–	(112)	(112)	(5)	(117)
Issuance of common shares	6	1,661	–	–	–	1,667	–	1,667
Sale of treasury shares	–	7	–	16,160	–	16,167	–	16,167
Repurchase of treasury shares	–	–	–	(16,197)	–	(16,197)	–	(16,197)
Share-based compensation, net of tax	–	178	–	162	–	340	–	340
Financial instruments indexed to own shares	–	(164)	–	–	–	(164)	–	(164)
Dividends paid	–	(1,435)	–	–	–	(1,435)	–	(1,435)
Changes in scope of consolidation	–	–	–	–	–	–	(194)	(194)
Other	–	(28)	–	–	–	(28)	(29)	(57)
Balance at end of period	**84**	**32,131**	**25,954**	**0**	**(16,272)**	**41,897**	**414**	**42,311**

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of cash flows in	2018	2017	2016
Operating activities (CHF million)			
Net income/(loss)	**2,011**	**(948)**	**(2,707)**
Adjustments to reconcile net income/(loss) to net cash provided by/(used in) operating activities (CHF million)			
Impairment, depreciation and amortization	936	894	937
Provision for credit losses	245	210	252
Deferred tax provision/(benefit)	800	2,238	(193)
Share of net income/(loss) from equity method investments	(111)	(153)	(65)
Trading assets and liabilities, net	25,413	4,652	21,100
(Increase)/decrease in other assets	3,453	(15,597)	9,611
Increase/(decrease) in other liabilities	(14,294)	(1,931)	(1,255)
Other, net	(5,693)	2,093	(905)
Total adjustments	10,749	(7,594)	29,482
Net cash provided by/(used in) operating activities	**12,760**	**(8,542)**	**26,775**
Investing activities (CHF million)			
(Increase)/decrease in interest-bearing deposits with banks	(427)	40	117
(Increase)/decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	(1,372)	14,286	(7,056)
Purchase of investment securities	(683)	(86)	(88)
Proceeds from sale of investment securities	255	14	14
Maturities of investment securities	853	422	363
Investments in subsidiaries and other investments	(547)	(1,094)	(1,403)
Proceeds from sale of other investments	1,772	1,970	1,737
(Increase)/decrease in loans	(12,500)	(13,674)	(3,745)
Proceeds from sales of loans	5,980	9,938	2,468
Capital expenditures for premises and equipment and other intangible assets	(1,095)	(1,068)	(1,164)
Proceeds from sale of premises and equipment and other intangible assets	30	1	55
Other, net	342	65	749
Net cash provided by/(used in) investing activities	**(7,392)**	**10,814**	**(7,953)**

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of cash flows (continued)

in	2018	2017	2016
Financing activities (CHF million)			
Increase/(decrease) in due to banks and customer deposits	1,808	3,423	10,267
Increase/(decrease) in short-term borrowings	(2,990)	5,018	6,594
Increase/(decrease) in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(2,052)	(5,251)	(14,525)
Issuances of long-term debt	33,172	43,556	52,984
Repayments of long-term debt	(43,851)	(62,554)	(47,132)
Issuances of common shares	0	4,253	725
Sale of treasury shares	11,693	12,034	16,167
Repurchase of treasury shares	(12,441)	(12,757)	(16,197)
Dividends paid	(666)	(590)	(493)
Other, net	181	77	377
Net cash provided by/(used in) financing activities	**(15,146)**	**(12,791)**	**8,767**
Effect of exchange rate changes on cash and due from banks (CHF million)			
Effect of exchange rate changes on cash and due from banks	**10**	**(827)**	**1,244**
Net increase/(decrease) in cash and due from banks (CHF million)			
Net increase/(decrease) in cash and due from banks	**(9,768)**	**(11,346)**	**28,833**
Cash and due from banks at beginning of period [1]	109,815	121,161	92,328
Cash and due from banks at end of period [1]	**100,047**	**109,815**	**121,161**

1 Includes restricted cash.

Supplemental cash flow information

in	2018	2017	2016
Cash paid for income taxes and interest (CHF million)			
Cash paid for income taxes	678	540	662
Cash paid for interest	12,772	9,961	9,136
Assets and liabilities sold in business divestitures (CHF million)			
Assets sold	0	1,777	425
Liabilities sold	0	1,658	383

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Notes to the consolidated financial statements

1 Summary of significant accounting policies

The accompanying consolidated financial statements of Credit Suisse Group AG (the Group) are prepared in accordance with accounting principles generally accepted in the US (US GAAP) and are stated in Swiss francs (CHF). The financial year for the Group ends on December 31. Certain reclassifications have been made to the prior year's consolidated financial statements to conform to the current presentation which had no impact on net income/(loss) or total shareholders' equity.

In preparing the consolidated financial statements, management is required to make estimates and assumptions including, but not limited to, the fair value measurements of certain financial assets and liabilities, the allowance for loan losses, the evaluation of variable interest entities (VIEs), the impairment of assets other than loans, recognition of deferred tax assets, tax uncertainties, pension liabilities and various contingencies. These estimates and assumptions affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the dates of the consolidated balance sheets and the reported amounts of revenues and expenses during the reporting period. While management evaluates its estimates and assumptions on an ongoing basis, actual results could differ materially from management's estimates. Market conditions may increase the risk and complexity of the judgments applied in these estimates.

Principles of consolidation

The consolidated financial statements include the financial statements of the Group and its subsidiaries. The Group's subsidiaries are entities in which it holds, directly or indirectly, more than 50% of the voting rights or where it exercises control. The Group consolidates limited partnerships in cases where it is the general partner and the limited partners do not have either substantive kick out rights and/or substantive participating rights or is a limited partner with substantive rights to kick out the general partner or dissolve the partnership and participate in significant decisions made in the ordinary course of business. The Group also consolidates VIEs if the Group is the primary beneficiary in accordance with Accounting Standards Codification (ASC) Topic 810 – Consolidation. The effects of material intercompany transactions and balances have been eliminated.

Where a Group subsidiary is a separate legal entity and determined to be an investment company as defined by ASC Topic 946 – Financial Services – Investment Companies, interests in other entities held by this Group subsidiary are not consolidated and are carried at fair value.

Group entities that qualify as broker-dealer entities as defined by ASC Topic 940 – Financial Services – Brokers and Dealers do not consolidate investments in voting interest entities that would otherwise qualify for consolidation when the investment is held on a temporary basis for trading purposes. In addition, subsidiaries that are strategic components of a broker-dealer's operations are consolidated regardless of holding intent.

Foreign currency translation

Transactions denominated in currencies other than the functional currency of the related entity are recorded by remeasuring them in the functional currency of the related entity using the foreign exchange rate on the date of the transaction. As of the dates of the consolidated balance sheets, monetary assets and liabilities, such as receivables and payables, are reported using the year-end spot foreign exchange rates. Foreign exchange rate differences are recorded in the consolidated statements of operations. Non-monetary assets and liabilities are recorded using the historic exchange rate.

For the purpose of consolidation, the assets and liabilities of Group companies with functional currencies other than the Swiss franc are translated into Swiss franc equivalents using year-end spot foreign exchange rates, whereas revenues and expenses are translated at weighted average foreign exchange rates for the period. Translation adjustments arising from consolidation are included in accumulated other comprehensive income/(loss) (AOCI) within total shareholders' equity. Cumulative translation adjustments are released from AOCI and recorded in the consolidated statements of operations when the Group disposes and loses control of a consolidated foreign subsidiary.

Fair value measurement and option

The fair value measurement guidance establishes a single authoritative definition of fair value and sets out a framework for measuring fair value. The fair value option creates an alternative measurement treatment for certain financial assets and financial liabilities. The fair value option can be elected at initial recognition of the eligible item or at the date when the Group enters into an agreement which gives rise to an eligible item (e.g., a firm commitment or a written loan commitment). If not elected at initial recognition, the fair value option can be applied to an item upon

certain triggering events that give rise to a new basis of accounting for that item. The application of the fair value option to a financial asset or a financial liability does not change its classification on the face of the balance sheet and the election is irrevocable. Changes in fair value resulting from the election are recorded in trading revenues.
> Refer to “Fair value option” in Note 35 – Financial instruments for further information.
Cash and due from banks
Cash and due from banks consists of currency on hand, demand deposits with banks or other financial institutions and cash equivalents. Cash equivalents are defined as short-term, highly liquid instruments with original maturities of three months or less, which are held for cash management purposes.

Reverse repurchase and repurchase agreements

Purchases of securities under agreements to resell (reverse repurchase agreements) and securities sold under agreements to repurchase substantially identical securities (repurchase agreements) do not constitute economic sales and are therefore treated as collateralized financing transactions, which are carried in the consolidated balance sheet at the amount of cash disbursed or received, respectively. Reverse repurchase agreements are recorded as collateralized assets while repurchase agreements are recorded as liabilities, with the underlying securities sold continuing to be recognized in trading assets or investment securities. The fair value of securities to be repurchased and resold is monitored on a daily basis, and additional collateral is obtained as needed to protect against credit exposure.

Assets and liabilities recorded under these agreements are accounted for on one of two bases, the accrual basis or the fair value basis. Under the accrual basis, interest earned on reverse repurchase agreements and interest incurred on repurchase agreements are reported in interest and dividend income and interest expense, respectively. The fair value basis of accounting may be elected pursuant to ASC Topic 825 – Financial Instruments, and any resulting change in fair value is reported in trading revenues. Accrued interest income and expense are recorded in the same manner as under the accrual method. The Group has elected the fair value basis of accounting on selected agreements.

Reverse repurchase and repurchase agreements are netted if they are with the same counterparty, have the same maturity date, settle through the same clearing institution and are subject to the same enforceable master netting agreement.

Securities lending and borrowing transactions

Securities borrowed and securities loaned that are cash-collateralized are included in the consolidated balance sheets at amounts equal to the cash advanced or received. If securities received in a securities lending and borrowing transaction as collateral may be sold or repledged, they are recorded as securities received as collateral in the consolidated balance sheet and a corresponding liability to return the security is recorded. Securities lending transactions against non-cash collateral in which the Group has the right to resell or repledge the collateral received are recorded at the fair value of the collateral initially received. For securities lending transactions, the Group receives cash or securities collateral in an amount generally in excess of the market value of securities lent. The Group monitors the fair value of securities borrowed and loaned on a daily basis with additional collateral obtained as necessary.

Fees and interest received or paid are recorded in interest and dividend income and interest expense, respectively, on an accrual basis. If the fair value basis of accounting is elected, any resulting change in fair value is reported in trading revenues. Accrued interest income and expense are recorded in the same manner as under the accrual method.

Transfers of financial assets

The Group transfers various financial assets, which may result in the sale of these assets to special purpose entities (SPEs), which in turn issue securities to investors. The Group values its beneficial interests at fair value using quoted market prices, if such positions are traded on an active exchange or financial models that incorporate observable and unobservable inputs.

> Refer to “Note 34 – Transfers of financial assets and variable interest entities” for further information on the Group’s transfer activities.

Trading assets and liabilities

Trading assets and liabilities include debt securities, marketable equity instruments, derivative instruments, certain loans held in broker-dealer entities, commodities and precious metals. Items included in the trading portfolio are carried at fair value and classified as held for trading purposes based on management’s intent. Regular-way security transactions are recorded on a trade-date basis. Unrealized and realized gains and losses on trading positions are recorded in trading revenues.

Derivatives

Freestanding derivative contracts are carried at fair value in the consolidated balance sheets regardless of whether these instruments are held for trading or risk management purposes. Commitments to originate mortgage loans that will be held for sale are considered derivatives for accounting purposes. When derivative features embedded in certain contracts that meet the definition of a derivative are not considered clearly and closely related to the host contract, either the embedded feature is accounted for separately at fair value or the entire contract, including the embedded feature, is accounted for at fair value. In both cases, changes in fair value are recorded in the consolidated statements of operations. If separated for measurement purposes, the derivative is recorded in the same line item in the

consolidated balance sheets as the host contract.
Derivatives classified as trading assets and liabilities include those held for trading purposes and those used for risk management purposes that do not qualify for hedge accounting. Derivatives held for trading purposes arise from proprietary trading activity and from customer-based activity. Realized gains and losses, changes in unrealized gains and losses and interest flows are included in trading revenues. Derivative contracts designated and qualifying as fair value hedges, cash flow hedges or net investment hedges are reported as other assets or other liabilities.
The fair value of exchange-traded derivatives is typically derived from observable market prices and/or observable market parameters. Fair values for over-the-counter (OTC) derivatives are determined on the basis of proprietary models using various input

parameters. Derivative contracts are recorded on a net basis per counterparty, where an enforceable master netting agreement exists. Where no such agreement exists, fair values are recorded on a gross basis.
Where hedge accounting is applied, the Group formally documents all relationships between hedging instruments and hedged items, including the risk management objectives and strategy for undertaking hedge transactions. At inception of a hedge and on an ongoing basis, the hedge relationship is formally assessed to determine whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items attributable to the hedged risk. The Group discontinues hedge accounting prospectively in the following circumstances:
(i) the derivative is no longer effective in offsetting changes in the fair value or cash flows of a hedged item (including forecasted transactions);
(ii) the derivative expires or is sold, terminated or exercised;
(iii) the derivative is no longer designated as a hedging instrument because it is unlikely that the forecasted transaction will occur; or
(iv) the designation of the derivative as a hedging instrument is otherwise no longer appropriate.
For derivatives that are designated and qualify as fair value hedges, the carrying value of the underlying hedged items is adjusted to fair value for the risk being hedged. Changes in the fair value of these derivatives are recorded in the same line item of the consolidated statements of operations as the change in fair value of the risk being hedged for the hedged assets or liabilities to the extent the hedge is effective. The change in fair value representing hedge ineffectiveness is recorded separately in trading revenues.
When the Group discontinues fair value hedge accounting because it determines that the derivative no longer qualifies as an effective fair value hedge, the derivative will continue to be carried in the consolidated balance sheets at its fair value, and the hedged asset or liability will no longer be adjusted for changes in fair value attributable to the hedged risk. Interest-related fair value adjustments made to the underlying hedged items will be amortized to the consolidated statements of operations over the remaining life of the hedged item. Any unamortized interest-related fair value adjustment is recorded in the consolidated statements of operations upon sale or extinguishment of the hedged asset or liability, respectively. Any other fair value hedge adjustments remain part of the carrying amount of the hedged asset or liability and are recognized in the consolidated statements of operations upon disposition of the hedged item as part of the gain or loss on disposition.
For hedges of the variability of cash flows from forecasted transactions and floating rate assets or liabilities, the effective portion of the change in the fair value of a designated derivative is recorded in AOCI. These amounts are reclassified into the line item in the consolidated statements of operations in which the hedged item is recorded when the variable cash flow from the hedged item impacts earnings (for example, when periodic settlements on a variable rate asset or liability are recorded in the consolidated statements of operations or when the hedged item is disposed of). The change in fair value representing hedge ineffectiveness is recorded separately in trading revenues.
When hedge accounting is discontinued on a cash flow hedge, the net gain or loss will remain in AOCI and be reclassified into the consolidated statements of operations in the same period or periods during which the formerly hedged transaction is reported in the consolidated statements of operations. When the Group discontinues hedge accounting because it is probable that a forecasted transaction will not occur within the specified date or period plus two months, the derivative will continue to be carried in the consolidated balance sheets at its fair value, and gains and losses that were previously recorded in AOCI will be recognized immediately in the consolidated statements of operations.
For hedges of a net investment in a foreign operation, the change in the fair value of the hedging derivative is recorded in AOCI to the extent the hedge is effective. The change in fair value representing hedge ineffectiveness is recorded in trading revenues. The Group uses the forward method of determining effectiveness for net investment hedges, which results in the time value portion of a foreign currency forward being reported in AOCI to the extent the hedge is effective.
Investment securities
Investment securities include debt securities classified as held-to-maturity and debt securities classified as available-for-sale. Regular-way security transactions are recorded on a trade-date basis.
Debt securities where the Group has the positive intent and ability to hold such securities to maturity are classified as such and are carried at amortized cost, net of any unamortized premium or discount.

Debt securities classified as available-for-sale are carried at fair value. Unrealized gains and losses, which represent the difference between fair value and amortized cost, are recorded in AOCI. Amounts reported in AOCI are net of income taxes.

Amortization of premiums or discounts is recorded in interest and dividend income using the effective yield method through the maturity date of the security.

Recognition of an impairment on debt securities is recorded in the consolidated statements of operations if a decline in fair value below amortized cost is considered other-than-temporary, that is, amounts due according to the contractual terms of the security are not considered collectible, typically due to deterioration in the creditworthiness of the issuer. No impairment is recorded in connection with declines resulting from changes in interest rates to the extent the Group does not intend to sell the investments, nor is it more likely than not that the Group will be required to sell the

investments before the recovery of their amortized cost bases, which may be maturity.
Recognition of an impairment for debt securities establishes a new cost basis, which is not adjusted for subsequent recoveries.
Unrealized losses on available-for-sale securities are recognized in the consolidated statements of operations when a decision has been made to sell a security.
Other investments
Other investments include equity method investments, equity securities without a readily determinable fair value, such as hedge funds, private equity securities and certain investments in non-marketable mutual funds for which the Group has neither significant influence nor control over the investee, and real estate held-for-investment.
Equity method investments are investments for which the Group has the ability to significantly influence the operating and financial policies. Significant influence is typically characterized by ownership of 20% to 50% of the voting stock or in-substance common stock of a corporation or 5% or more of limited partnership interests. Equity method investments are accounted for under the equity method of accounting or the fair value option. Under the equity method of accounting, the Group's proportionate share of the profit or loss, and any impairment on the investee, if applicable, is reported in other revenues. Under the fair value option, changes in fair value are reported in other revenues. The Group has elected the fair value basis of accounting on some of its equity method investments.
Equity securities without a readily determinable fair value are carried at fair value, net asset value practical expedient to estimate fair value or at cost less impairment, adjusted for observable price changes (measurement alternative). Memberships in exchanges are reported at cost, less impairment. Equity securities without a readily determinable fair value held by the Group's subsidiaries that are determined to be investment companies as defined by ASC Topic 946 – Financial Services – Investment Companies are carried at fair value, with changes in fair value recorded in other revenues.
Equity method investments and equity securities without a readily determinable fair value held by subsidiaries that are within the scope of ASC Topic 940 – Financial Services – Brokers and Dealers are measured at fair value and reported in trading assets when the intent of the broker-dealer entity is to hold the asset temporarily for trading purposes. Changes in fair value are reported in trading revenues. Equity securities without a readily determinable fair value include investments in entities that regularly calculate net asset value per share or its equivalent, with changes in fair value recorded in other revenue.
Real estate held-for-investment purposes is carried at cost less accumulated depreciation and is depreciated over its estimated useful life, generally 40 to 67 years. Land that is classified as real estate held-for-investment purposes is carried at historical cost and is not depreciated. Real estate held-for-investment purposes is tested for impairment annually, or more frequently, if events or changes in circumstances indicate that the carrying amount may not be recoverable. For real estate held-for-investment purposes, the fair values were measured based on either discounted cash flow analyses or external market appraisals. Recognition of an impairment on such assets establishes a new cost base, which is not adjusted for subsequent recoveries in value.
Loans
Loans held-to-maturity
Loans which the Group intends to hold until maturity are carried at outstanding principal balances plus accrued interest, net of the following items: unamortized premiums, discounts on purchased loans, deferred loan origination fees and direct loan origination costs on originated loans. Interest income is accrued on the unpaid principal balance and net deferred premiums/discounts and fees/costs are amortized as an adjustment to the loan yield over the term of the related loans.
Lease financing transactions where the Group is the lessor are classified as loans. Unearned income is amortized to interest and dividend income over the lease term using the effective interest method.
In accordance with Group policies, impaired loans include non-performing loans, non-interest-earning loans, restructured loans and potential problem loans.
> Refer to "Note 19 – Loans, allowance for loan losses and credit quality" for further information.
Allowance for loan losses on loans held-to-maturity
The allowance for loan losses is composed of the following components: probable credit losses inherent in the portfolio and those losses specifically identified. Changes in the allowance for loan losses are recorded in the consolidated statements of operations in provision for credit losses and in interest income (for provisions on past due

interest).

The Group evaluates many factors when estimating the allowance for loan losses, including the volatility of default probabilities, rating changes, the magnitude of potential loss, internal risk ratings, and geographic, industry and other economic factors. The component of the allowance representing probable losses inherent in the portfolio is for loans not specifically identified as impaired and that, on a portfolio basis, are considered to contain probable inherent loss. The estimate of this component of the allowance for the consumer loans portfolio involves applying historical and current default probabilities, historical recovery experience and related current assumptions to homogenous loans based on internal risk rating and product type. To estimate this component of the allowance for the corporate & institutional loans portfolio, the Group segregates loans by risk, industry or country rating. Excluded from this estimate process are consumer and corporate

& institutional loans that have been specifically identified as impaired or are held at fair value. For lending-related commitments, a provision for losses is estimated based on historical loss and recovery experience and recorded in other liabilities. Changes in the estimate of losses for lending-related commitments are recorded in the consolidated statements of operations in provision for credit losses.
The estimate of the component of the allowance for specifically identified credit losses on impaired loans is based on a regular and detailed analysis of each loan in the portfolio considering collateral and counterparty risk. The Group considers a loan impaired when, based on current information and events, it is probable that the Group will be unable to collect the amounts due according to the contractual terms of the loan agreement. For non-collateral-dependent impaired loans, an impairment is measured using the present value of estimated future cash flows, except that as a practical expedient an impairment may be measured based on a loan's observable market price. For collateral-dependent impaired loans, an impairment is measured using the fair value of the collateral.
A loan is classified as non-performing no later than when the contractual payments of principal and/or interest are more than 90 days past due except for subprime residential loans which are classified as non-performing no later than when the contractual payments of principal and/or interest are more than 120 days past due. The additional 30 days ensure that these loans are not incorrectly assessed as non-performing during the time when servicing of them typically is being transferred. However, management may determine that a loan should be classified as non-performing notwithstanding that contractual payments of principal and/or interest are less than 90 days past due or, in the case of subprime residential loans, 120 days past due. For non-performing loans, a provision is recorded in an amount equal to any accrued but unpaid interest at the date the loan is classified as non-performing, resulting in a charge to the consolidated statements of operations. In addition, the Group continues to add accrued interest receivable to the loan's balance for collection purposes; however, a provision is recorded resulting in no interest income recognition. Thereafter, the outstanding principal balance is evaluated at least annually for collectability and a provision is established as necessary.
A loan can be further downgraded to non-interest-earning when the collection of interest is considered so doubtful that further accrual of interest is deemed inappropriate. At that time, and on at least a quarterly basis thereafter depending on various risk factors, the outstanding principal balance, net of provisions previously recorded, is evaluated for collectability and additional provisions are established as required.
Generally, non-performing loans and non-interest-earning loans may be restored to performing status only when delinquent principal and interest are brought up to date in accordance with the terms of the loan agreement and when certain performance criteria are met.
Interest collected on non-performing loans and non-interest-earning loans is accounted for using the cash basis or the cost recovery method or a combination of both.
Loans that were modified in a troubled debt restructuring are reported as restructured loans. Generally, a restructured loan would have been considered impaired and an associated allowance for loan losses would have been established prior to the restructuring. Loans modified in a troubled debt restructuring are reported as restructured loans to the end of the reporting year in which the loan was modified or for as long as an allowance for loan losses based on the terms specified by the restructuring agreement is associated with the restructured loan or an interest concession made at the time of the restructuring exists. In making the determination of whether an interest rate concession has been made, market interest rates for loans with comparable risk to borrowers of the same credit quality are considered. Loans that have been restructured in a troubled debt restructuring and are performing according to the new terms continue to accrue interest. Loan restructurings may include the receipt of assets in satisfaction of the loan, the modification of loan terms (e.g., reduction of interest rates, extension of maturity dates at a stated interest rate lower than the current market rate for new loans with similar risk, or reduction in principal amounts and/or accrued interest balances) or a combination of both.
Potential problem loans are impaired loans where contractual payments have been received according to schedule, but where doubt exists as to the collection of future contractual payments. Potential problem loans are evaluated for impairment on an individual basis and an allowance for loan losses is established as necessary. Potential problem loans continue to accrue interest.
The amortization of net loan fees or costs on impaired loans is generally discontinued during the periods in which matured and unpaid interest or principal is outstanding. On settlement of a loan, if the loan balance is not collected in full, an allowance is established for the uncollected amount, if necessary, and the loan is then written off, net of any

deferred loan fees and costs.
Write-off of a loan occurs when it is considered certain that there is no possibility of recovering the outstanding principal. Recoveries of loans previously written off are recorded based on the cash or estimated fair value of other assets received.
> Refer to “Impaired loans” in Note 19 – Loans, allowance for loan losses and credit quality for further information on the write-off of a loan and related accounting policies.
Loans held-for-sale
Loans, which the Group intends to sell in the foreseeable future, are considered held-for-sale and are carried at the lower of amortized cost or market value determined on either an individual method basis, or in the aggregate for pools of similar loans if sold or securitized as a pool. Loans held-for-sale are included in other assets. Revaluation losses incurred at the transfer into the held-for-sale category are generally recorded as credit losses. Gains

and losses on loans held-for-sale subsequent to the transfer into the held-for-sale category are recorded in other revenues.
Purchased impaired loans
Purchased loans for which it is probable at acquisition that all contractually required payments will not be received are recorded at their net purchase price and no allowances are carried over. The excess of the estimated cash flows to be collected over the amount paid is accreted into interest income over the estimated recovery period when reasonable estimates can be made about the timing and amount of recovery. The Group does not consider such loans to be impaired at the time of acquisition. Such loans are deemed impaired only if the Group's estimate of cash to be received decreases below the estimate at the time of acquisition. Increases in the estimated expected recovery are recorded as a reversal of allowances, if any, and then recognized as an adjustment of the effective yield of the loan.
Loans held at fair value under the fair value option
Loans and loan commitments for which the fair value option is elected are reported at fair value with changes in fair value reported in trading revenues. The application of the fair value option does not change the loan's classification. Loan commitments carried at fair value are recorded in other assets or other liabilities, respectively.
Premises and equipment
Premises and equipment (including equipment under operating leases where the Group is the lessor), with the exception of land, are carried at cost less accumulated depreciation.
Buildings are depreciated on a straight-line basis over their estimated useful lives, generally 40 to 67 years, and building improvements are depreciated on a straight-line basis over their estimated useful lives, generally not exceeding five to ten years. Land is carried at historical cost and is not depreciated. Leasehold improvements, such as alterations and improvements to rented premises, are depreciated on a straight-line basis over the shorter of the lease term or estimated useful life, which generally does not exceed ten years. Equipment, such as computers, machinery, furnishings, vehicles and other tangible non-financial assets, is depreciated using the straight-line method over its estimated useful lives, generally three to ten years. Certain leasehold improvements and equipment, such as data center power generators, may have estimated useful lives greater than ten years.
The Group capitalizes costs relating to the acquisition, installation and development of software with a measurable economic benefit, but only if such costs are identifiable and can be reliably measured. The Group depreciates capitalized software costs on a straight-line basis over the estimated useful life of the software, generally not exceeding seven years, taking into consideration the effects of obsolescence, technology, competition and other economic factors.
The Group reflects finance leasing activities for which it is the lessee by recording an asset in premises and equipment and a corresponding liability in other liabilities at an amount equal to the smaller of the present value of the minimum lease payments or fair value, and the leased asset is depreciated over the shorter of the asset's estimated useful life or the lease term.
Goodwill and other intangible assets
Goodwill arises on the acquisition of subsidiaries and equity method investments. It is measured as the excess of the fair value of the consideration transferred, the fair value of any noncontrolling interest in the acquiree and the fair value of any previously held equity interest in the acquired subsidiary, over the net of the acquisition-date fair values of the identifiable assets acquired and the liabilities assumed. Goodwill is not amortized; instead it is tested for impairment annually, or more frequently if events or changes in circumstances indicate that goodwill may be impaired. Goodwill is allocated to the Group's reporting units for the purposes of the impairment test.
Other intangible assets may be acquired individually or as part of a group of assets assumed in a business combination. Other intangible assets include but are not limited to: patents, licenses, copyrights, trademarks, branch networks, mortgage servicing rights, customer base and deposit relationships. Acquired intangible assets are initially measured at the amount of cash disbursed or the fair value of other assets distributed. Other intangible assets that have a finite useful life are amortized over that period. Other intangible assets acquired after January 1, 2002 that are determined to have an indefinite useful life are not amortized; instead they are tested for impairment annually, or more frequently if events or changes in circumstances indicate that the indefinite intangible asset may be impaired.
Mortgage servicing rights are included in non-amortizing other intangible assets and are carried at fair value, with changes in fair value recognized through earnings in the period in which they occur. Mortgage servicing rights represent the right to perform specified mortgage servicing activities on behalf of third parties. Mortgage servicing

rights are either purchased from third parties or retained upon sale of acquired or originated loans.
Recognition of an impairment on non-financial assets
The Group evaluates premises and equipment and finite intangible assets for impairment at least annually and whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. Where the carrying amount of an asset exceeds the recoverable amount, the asset is considered impaired and an impairment is recorded in general and administrative expenses. Recognition of an impairment on such assets establishes a new cost base, which is not adjusted for subsequent recoveries in value.

Income taxes

Deferred tax assets and liabilities are recorded for the expected future tax consequences of temporary differences between the carrying amounts of assets and liabilities at the dates of the consolidated balance sheets and their respective tax bases. Deferred tax assets and liabilities are computed using currently enacted tax rates and are recorded in other assets and other liabilities, respectively. Income tax expense or benefit is recorded in income tax expense/(benefit), except to the extent the tax effect relates to transactions recorded directly in total shareholders' equity. Deferred tax assets are reduced by a valuation allowance, if necessary, to the amount that management believes will more likely than not be realized. Deferred tax assets and liabilities are adjusted for the effect of changes in tax laws and rates in the period in which changes are approved by the relevant authority. Deferred tax assets and liabilities are presented on a net basis for the same tax-paying component within the same tax jurisdiction.

The Group follows the guidance in ASC Topic 740 – Income Taxes, which sets out a consistent framework to determine the appropriate level of tax reserves to maintain for uncertain tax positions. The Group determines whether it is more likely than not that an income tax position will be sustained upon examination based on the technical merits of the position. Sustainable income tax positions are then measured to determine the amount of benefit eligible for recognition in the consolidated financial statements. Each such sustainable income tax position is measured at the largest amount of benefit that is more likely than not to be realized upon ultimate settlement.

Brokerage receivables and brokerage payables

The Group recognizes receivables and payables from transactions in financial instruments purchased from and sold to customers, banks and broker-dealers. The Group is exposed to risk of loss resulting from the inability of counterparties to pay for or deliver financial instruments purchased or sold, in which case the Group would have to sell or purchase, respectively, these financial instruments at prevailing market prices. To the extent an exchange or clearing organization acts as counterparty to a transaction, credit risk is generally considered to be limited. The Group establishes credit limits for each customer and requires them to maintain margin collateral in compliance with applicable regulatory and internal guidelines. In order to conduct trades with an exchange or a third-party bank, the Group is required to maintain a margin. This is usually in the form of cash and deposited in a separate margin account with the exchange or broker. If available information indicates that it is probable that a brokerage receivable is impaired, an allowance is established. Write-offs of brokerage receivables occur if the outstanding amounts are considered uncollectible.

Other assets

Derivative instruments used for hedging

Derivative instruments are carried at fair value. The fair values of derivative instruments held for hedging are included as other assets or other liabilities in the consolidated balance sheets. The accounting treatment used for changes in fair value of hedging derivatives depends on the designation of the derivative as either a fair value hedge, cash flow hedge or hedge of a net investment in a foreign operation. Changes in fair value representing hedge ineffectiveness are reported in trading revenues.

Customer deposits

Customer deposits represent funds held from customers (both retail and commercial) and banks and consist of interest-bearing demand deposits, savings deposits and time deposits. Interest is accrued based on the contractual provisions of the deposit contract.

Long-term debt

Total long-term debt is composed of debt issuances which do not contain derivative features (vanilla debt), as well as hybrid debt instruments with embedded derivatives, which are issued as part of the Group's structured product activities. Long-term debt includes both Swiss franc and foreign currency denominated fixed and variable rate bonds. The Group actively manages interest rate risk and foreign currency risk on vanilla debt through the use of derivative contracts, primarily interest rate and currency swaps. In particular, fixed rate debt is hedged with receive-fixed, pay-floating interest rate swaps. The Group elected to fair value this fixed rate debt upon implementation of the fair value option on January 1, 2007, with changes in fair value recognized as a component of trading revenues, except for changes in fair value attributed to own credit risk, which, since 2016, are recorded in other comprehensive income, net of tax, and recycled to trading revenue when the debt is de-recognized. The Group did not elect to apply the fair value option to fixed-rate debt issued by the Group since January 1, 2008 and instead applies hedge accounting per the guidance of ASC Topic 815 – Derivatives and Hedging.

For capital management purposes, the Group issues hybrid capital instruments in the form of low- and high-trigger tier 1 and tier 2 capital notes, with a write-off or contingent share conversion feature. Typically, these instruments have an embedded derivative that is bifurcated for accounting purposes. The embedded derivative is measured separately and changes in fair value are recorded in trading revenue. The host contract is generally accounted for under the amortized cost method unless the fair value option has been elected and the entire instrument is carried at fair value.

The Group's long-term debt also includes various equity-linked and other indexed instruments with embedded derivative features, for which payments and redemption values are linked to commodities, stocks, indices, currencies or other assets. The Group elected to account for substantially all of these instruments at fair value. Changes in the fair value of these instruments

are recognized as a component of trading revenues, except for changes in fair value attributed to own credit risk, which is recorded in other comprehensive income (OCI), net of tax, and recycled to trading revenue when the debt is de-recognized.
Other liabilities
Guarantees
In cases where the Group acts as a guarantor, the Group recognizes in other liabilities, at the inception of a guarantee, a liability for the fair value of the obligations undertaken in issuing such a guarantee, including its ongoing obligation to perform over the term of the guarantee in the event that certain events or conditions occur.
Pension and other post-retirement benefits
Credit Suisse sponsors a number of post-employment benefit plans for its employees worldwide, which include defined benefit pension plans and other post-employment benefits. The major plans are located in Switzerland, the UK and the US.
The Group uses the projected unit credit actuarial method to determine the present value of its projected benefit obligations (PBO) and the current and past service costs or credits related to its defined benefit and other post-retirement benefit plans. The measurement date used to perform the actuarial valuation is December 31 and is performed by independent qualified actuaries.
Certain key assumptions are used in performing the actuarial valuations. These assumptions must be made concerning the future events that will determine the amount and timing of the benefit payments and thus require significant judgment and estimates by Group management. This includes making assumptions with regard to discount rates, salary increases, interest rate on savings balances, expected long-term rate of return on plan assets and mortality (future life expectancy).
The assumed discount rates reflect the rates at which the pension benefits could be effectively settled. These rates are determined based on yield curves, constructed from high-quality corporate bonds currently available and observable in the market and are expected to be available during the period to maturity of the pension benefits. In countries where there is no deep market in high-quality corporate bonds with longer durations, the best available market information, including governmental bond yields and risk premiums, is used to construct the yield curve.
Salary increases are determined by reviewing historical practice and external market data as well as considering internal projections.
The interest rate on savings balances is applicable only to the Credit Suisse Swiss pension plan (Swiss pension plan). The Board of Trustees of the Swiss pension plan sets the interest rate to be applied on the accumulated savings balance on an annual basis. Credit Suisse estimates the future interest rate on savings balances, taking into consideration actions and rates approved by the Board of Trustees of the Swiss pension plan and expected future changes in the interest rate environment based on the yield curve used for the discount rate.
The expected long-term rate of return on plan assets is determined on a plan-by-plan basis, taking into account asset allocation, historical rate of return, benchmark indices for similar-type pension plan assets, long-term expectations of future returns and investment strategy.
Mortality assumptions are based on standard mortality tables and standard models and methodologies for projecting future improvements to mortality as developed and published by external independent actuarial societies and actuarial organizations.
Health care cost trend rates are determined by reviewing external data and the Group’s own historical trends for health care costs.
The funded status of the Group’s defined benefit post-retirement and pension plans is recognized in the consolidated balance sheets.
Actuarial gains and losses in excess of 10% of the greater of the PBO or the market value of plan assets and unrecognized prior service costs or credits are amortized to net periodic pension and other post-retirement benefit costs on a straight-line basis over the average remaining service life of active employees expected to receive benefits.
The Group records pension expense for defined contribution plans when the employee renders service to the company, essentially coinciding with the cash contributions to the plans.
Share-based compensation
For all share-based awards granted to employees, compensation expense is measured at grant date or modification date based on the fair value of the number of awards for which the requisite service is expected to be rendered and is

recognized in the consolidated statements of operations over the required service period.
The incremental tax effects of the difference between the compensation expense recorded in the US GAAP accounts and the tax deduction received, are recorded in the income statement at the point in time the deduction for tax purposes is recorded.
Compensation expense for share-based awards that vest in their entirety at the end of the vesting period (cliff vesting) and awards that vest in annual installments (graded vesting), which only contain a service condition that affects vesting, is recognized on a straight-line basis over the service period for the entire award. However, if awards with graded vesting contain a performance condition, then each installment is expensed as if it were a separate award (“front-loaded” expense recognition). Furthermore, recognition of compensation expense is accelerated to the date an employee becomes eligible for retirement.
Performance share awards contain a performance condition. In the event of either a negative return on equity (ROE) of the Group

or a divisional loss, any outstanding performance share awards will be subject to a reduction. The amount of compensation expense recorded includes an estimate of any expected reductions. For each reporting period after the grant date, the expected number of shares to be ultimately delivered upon vesting is reassessed and reflected as an adjustment to the cumulative compensation expense recorded in the income statement. The basis for the ROE calculation may vary from year to year, depending on the Compensation Committee's determination for the year in which the performance shares are granted.
Certain employees own equity interests in the form of carried interests in certain funds managed by the Group. Expenses recognized under these ownership interests are reflected in the consolidated statements of operations in compensation and benefits.
Own shares, own bonds and financial instruments on own shares
The Group may buy and sell own shares, own bonds and financial instruments on own shares within its normal trading and market-making activities. In addition, the Group may hold its own shares to satisfy commitments arising from employee share-based compensation awards. Own shares are recorded at cost and reported as treasury shares, resulting in a reduction to total shareholders' equity. Financial instruments on own shares are recorded as assets or liabilities or as equity when the criteria for equity classification are met. Dividends received by subsidiaries on own shares and unrealized and realized gains and losses on own shares classified in total shareholders' equity are excluded from the consolidated statements of operations.
Any holdings of bonds issued by any Group entity are eliminated in the consolidated financial statements.
Net interest income
Interest income and interest expense arising from interest-bearing assets and liabilities other than those carried at fair value or the lower of cost or market are accrued, and any related net deferred premiums, discounts, origination fees or costs are amortized as an adjustment to the yield over the life of the related asset and liability. Interest from debt securities and dividends on equity securities carried as trading assets and trading liabilities are recorded in interest and dividend income.
> Refer to "Loans" for further information on interest on loans.
Commissions and fees
Commissions and fees include revenue from contracts with customers. The Group recognizes revenue when it satisfies a contractual performance obligation. The Group satisfies a performance obligation when control of the underlying good or services related to the performance obligation is transferred to the customer. Control is the ability to direct the use of, and obtain substantially all of the remaining benefits from, the good or service. The Group must determine whether control of a good or service is transferred over time. If so, the related revenue is recognized over time as the good or service is transferred to the customer. If not, control of the good or service is transferred at a point in time. The performance obligations are typically satisfied as the services in the contract are rendered. Revenue is measured based on the consideration specified in a contract with a customer, and excludes any amounts collected on behalf of third parties. The transaction price can be a fixed amount or can vary because of performance bonuses or other similar items. Variable consideration is only included in the transaction price once it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the amount of variable consideration is subsequently resolved. Generally, no significant judgement is required with respect to recording variable consideration.
When another party is involved in providing goods or services to a customer, the Group must determine whether the nature of its promise is a performance obligation to provide the specified goods or services itself (that is, the Group is a principal) or to arrange for those goods or services to be provided by the other party (that is, the Group is an agent). The Group determines whether it is a principal or an agent for each specified good or service promised to the customer. Gross presentation (revenue on the revenue line and expense on the expense line) is appropriate when the Group acts as principal in a transaction. Conversely, net presentation (revenue and expenses reported net) is appropriate when the Group acts as an agent in the transaction.
Transaction-related expenses are expensed as incurred. Industry specific guidance for the deferral of underwriting expenses allows the deferral and recognition of the underwriting expenses along with the underwriting revenue.
> Refer to "Note 14 – Revenue from contracts with customers" for further information.
2 Recently issued accounting standards
Recently adopted accounting standards

ASC Topic 230 – Statement of Cash Flows

In November 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-18, “Restricted Cash (a consensus of the FASB Emerging Issues Task Force)” (ASU 2016-18), an update to Accounting Standards Codification (ASC) Topic 230 – Statement of Cash Flows. ASU 2016-18 required that cash amounts described as restricted cash and cash equivalents be included in cash and cash

equivalents when reconciling total amounts in the statements of cash flows. ASU 2016-18 was required to be applied retrospectively to all periods presented beginning in the year of adoption. The adoption of ASU 2016-18 on January 1, 2018 did not have an impact on the Group's financial position, results of operations and cash flows.
In August 2016, the FASB issued ASU 2016-15, "Classification of Certain Cash Receipts and Cash Payments (a consensus of the Emerging Issues Task Force)" (ASU 2016-15), an update to ASC Topic 230 – Statement of Cash Flows. The amendments in ASU 2016-15 provided guidance regarding classification of certain cash receipts and payments where diversity in practice was observed. ASU 2016-15 was required to be applied retrospectively to all periods presented beginning in the year of adoption. The adoption of ASU 2016-15 on January 1, 2018 did not have a material impact on the Group's financial position, results of operations and cash flows and, as such, prior periods were not restated.
ASC Topic 606 – Revenue from Contracts with Customers
In May 2014, the FASB issued ASU 2014-09, "Revenue from Contracts with Customers" (ASU 2014-09), creating ASC Topic 606 – Revenue from Contracts with Customers and superseding ASC Topic 605 – Revenue Recognition. The core principle of the guidance was that an entity recognizes revenue to depict the transfer of promised goods or services to customers in an amount that reflected the consideration to which the entity expected to be entitled in exchange for those goods or services. ASU 2014-09 outlined key steps that an entity should follow to achieve the core principle. ASU 2014-09 also included disclosure requirements that enabled users of the financial statements to understand the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers.
ASU 2014-09 and its subsequent amendments were effective for the annual reporting period beginning after December 15, 2017, including interim reporting periods within that reporting period. Early adoption was permitted for annual reporting periods beginning after December 15, 2016, including interim reporting periods within that reporting period.
The Group established a cross-functional implementation team and governance structure for the project. The Group's implementation efforts included the identification of revenue and costs within the scope of the guidance, as well as the evaluation of revenue contracts under the new guidance and related accounting policies. The guidance did not apply to revenue associated with financial instruments, including loans and securities that are accounted for under other US GAAP guidance.
The Group adopted ASU 2014-09 on January 1, 2018 using the modified retrospective approach with a transition adjustment recognized in retained earnings without restating comparatives. As a result of adoption, there was a decrease in retained earnings, net of tax, of CHF 45 million due to a change in timing of the recognition of certain fees in investment banking and private banking.
Additionally, the new revenue recognition criteria required the Group to present underwriting revenue, reimbursed expenses in fund management and in investment banking advisory, gross of offsetting expenses in contrast to prior periods in which the financial statements presented these amounts net of offsetting expenses. Furthermore, with the adoption of ASU 2014-09, the brokerage, clearing and exchange expenses, which are incurred when acting as an agent on behalf of clients buying or selling exchange-traded cash securities, exchange-traded derivatives or centrally cleared OTC derivatives, are offset against the commission income.
> Refer to "Note 14 – Revenue from contracts with customers" for further information.
ASC Topic 715 – Compensation – Retirement Benefits
In March 2017, the FASB issued ASU 2017-07, "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost" (ASU 2017-07), an update to ASC Topic 715 – Compensation – Retirement Benefits. The amendments in ASU 2017-07 required that the service cost component of the net periodic benefit cost be presented in the same income statement line item(s) as other employee compensation costs arising from services rendered during the period. Other components of the net periodic benefit cost should be reported separately from the line item(s) that included the service cost and outside of any subtotal of operating income. ASU 2017-07 was required to be applied retrospectively to all periods presented beginning in the year of adoption. The adoption of ASU 2017-07 on January 1, 2018 resulted in a restatement that, upon adoption, increased compensation and benefits expenses and decreased general and administrative expenses by CHF 190 million and CHF 80 million as of December 31, 2017 and 2016, respectively.
ASC Topic 820 – Fair Value Measurement

In August 2018, the FASB issued ASU 2018-13, “Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement” (ASU 2018-13), an update to ASC Topic 820 – Fair Value Measurement. The amendments in ASU 2018-13 remove, modify and add certain disclosure requirements in ASC Topic 820, Fair Value Measurement. ASU 2018-13 is effective for annual reporting periods beginning after December 15, 2019 and for the interim periods within those annual reporting periods. Early adoption is permitted, including in an interim period, for any eliminated or modified disclosure requirements. The Group early adopted the provisions for removing and modifying certain disclosures upon issuance of ASU 2018-13. As these amendments relate to disclosures, the adoption did not have an impact on the Group’s financial position, results of operations or cash flows. The Group is currently evaluating the impact of the adoption of the remaining amendments in ASU 2018-13.

ASC Topic 825 – Financial Instruments – Overall

In January 2016, the FASB issued ASU 2016-01, “Recognition and Measurement of Financial Assets and Financial Liabilities” (ASU 2016-01), an update to ASC Topic 825 – Financial Instruments – Overall. The amendments in ASU 2016-01 addressed certain aspects of recognition, measurement, presentation and

disclosure of financial instruments. The amendments primarily affected the accounting for equity investments, financial liabilities under the fair value option and the presentation and disclosure requirements for financial instruments. Early adoption of the full standard was not permitted; however, certain sections of ASU 2016-01 relating to fair value option-elected financial liabilities could be early adopted in isolation. The amendments to ASU 2016-01 required the changes in fair value relating to instrument-specific credit risk of fair value option elected financial liabilities to be presented separately in AOCI. The Group early adopted these sections of the update on January 1, 2016. As a result of the adoption, the Group reclassified CHF 475 million, net of tax, from retained earnings to AOCI. The adoption of the remaining amendments to ASU 2016-01 on January 1, 2018 resulted in a reclassification of unrealized gains and losses previously reported in AOCI for available-for-sale equity securities to retained earnings of CHF 21 million, net of tax. ASU 2016-01 also required that certain equity instruments without readily determinable fair value be measured at fair value, excluding instances in which measurement alternative is applied; however, this requirement did not have a material impact on the Group's financial position, results of operations or cash flows.

Standards to be adopted in future periods

ASC Topic 220 – Income Statements – Reporting Comprehensive Income

In January 2018, the FASB issued ASU 2018-02, "Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income" (ASU 2018-02), an update to ASC Topic 220 – Income Statement – Reporting Comprehensive Income. The amendments in ASU 2018-02 allow a reclassification from AOCI to retained earnings for the stranded tax effects resulting from the US Tax Cuts and Jobs Act. ASU 2018-02 is effective for annual reporting periods and interim periods within those periods beginning after December 15, 2018. Early adoption was permitted. The adoption of ASU 2018-02 on January 1, 2019 resulted in a net increase in retained earnings of CHF 64 million as a result of the reclassification from AOCI to retained earnings, which was the result of the re-measurement of deferred tax assets and liabilities associated with the change in tax rates.

ASC Topic 326 – Financial Instruments – Credit Losses

In June 2016, the FASB issued ASU 2016-13, "Measurement of Credit Losses on Financial Instruments" (ASU 2016-13), creating ASC Topic 326 – Financial Instruments – Credit Losses. ASU 2016-13 is intended to improve financial reporting by requiring timelier recording of credit losses on financial assets measured at amortized cost basis including, but not limited to loans, net investments in leases recognized as lessor and off-balance sheet credit exposures. ASU 2016-13 eliminates the probable initial recognition threshold under the current incurred loss methodology for recognizing credit losses. Instead, ASU 2016-13 requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions and reasonable and supportable forecasts. The Group will incorporate forward-looking information and macroeconomic factors into its credit loss estimates. ASU 2016-13 requires enhanced disclosures to help investors and other financial statement users to better understand significant estimates and judgments used in estimating credit losses, as well as the credit quality and underwriting standards of an organization's portfolio. As the Group is a US Securities and Exchange Commission (SEC) filer, ASU 2016-13 and its subsequent amendment are effective for annual reporting periods beginning after December 15, 2019, including interim periods within those annual reporting periods. Early adoption is permitted for annual reporting periods, including interim periods within those annual reporting periods, beginning after December 15, 2018; however, the Group does not intend to early adopt ASU 2016-13.

The Group has established a cross-functional implementation team and governance structure for the project. The Group has decided on a current expected credit loss (CECL) methodology and continues to adjust for key interpretive issues while monitoring the FASB's ongoing accounting standards development. Furthermore, the Group will continue to monitor the scope assessment, as a basis to determine the requirements and data sourcing of the CECL models, and to design, build and test the models until the effective date.

The Group expects that the new CECL methodology would generally result in increased and more volatile allowance for loan losses. The main impact drivers include:

- the remaining life of the loans measured at amortized cost and the off-balance sheet credit exposures at the adoption date and subsequent reporting dates because of the new requirement to measure lifetime expected credit losses;
- the state of the economy at the adoption date and subsequent reporting dates because of the new requirement to incorporate reasonable and supportable forward looking information and macroeconomic factors; and
- the credit quality of the loans measured at amortized cost and the off-balance sheet credit exposures at the adoption date and subsequent reporting dates.

Upon adoption of the standard, the Group expects a cumulative adjustment to be posted to retained earnings for any changes in credit loss allowances. As the implementation progresses, the Group will continue to evaluate the extent of the impact of the adoption of ASU 2016-13 and its subsequent amendment on the Group's financial position, results of operations, cash flows and related disclosures.

ASC Topic 350 – Intangibles – Goodwill and Other

In August 2018, the FASB issued ASU 2018-15, "Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract" (ASU 2018-15), an update to ASC Subtopic 350-40 – Intangibles – Goodwill and Other – Internal-Use Software. The amendments in ASU 2018-15 align the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. ASU 2018-15 is effective for annual reporting periods beginning after December 15, 2019,

including interim periods within those annual reporting periods and can be applied either retrospectively or prospectively. Early adoption, including adoption in an interim period, is permitted. The Group elected to early adopt ASU 2018-15 prospectively on January 1, 2019. The adoption of ASU 2018-15 did not have a material impact on the Group's financial position, results of operations or cash flows.

ASC Topic 715 – Compensation – Retirement Benefits

In August 2018, the FASB issued ASU 2018-14, "Changes to the Disclosure Requirements for Defined Benefit Plans" (ASU 2018-14), an update to ASC Topic 715 – Compensation—Retirement Benefits—Defined Benefit Plans—General (Subtopic 715-20): Disclosure Framework. ASU 2018-14 modifies the disclosure framework to improve disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans. ASU 2018-14 is effective for annual reporting periods ending after December 15, 2020, with early adoption permitted. ASU 2018-14 should be applied on a retrospective approach for all periods presented. As these amendments relate only to disclosures, there will be no impact from the adoption of ASU 2018-14 on the Group's financial position, results of operations or cash flows.

ASC Topic 810 – Consolidation

In October 2018, the FASB issued ASU 2018-17, "Targeted Improvements to Related Party guidance for Variable Interest Entities" (ASU 2018-17), an update to ASC Topic 810 – Consolidation. ASU 2018-17 amended the variable interest entity guidance to require an entity to consider a decision maker's indirect interests held through related parties under common control on a proportional basis when determining whether decision-making fees are variable interests. ASU 2018-17 is effective for annual reporting periods beginning after December 15, 2019 and for the interim periods within those annual reporting periods. Early adoption is permitted. ASU 2018-17 should be applied retrospectively with a cumulative effect adjustment to retained earnings at the beginning of the earliest period presented. The Group is currently evaluating the impact of the adoption of ASU 2018-17 on the Group's financial position, results of operations and cash flows.

ASC Topic 815 – Derivatives and Hedging

In August 2017, the FASB issued ASU 2017-12, "Targeted Improvements to Accounting for Hedging Activities" (ASU 2017-12), an update to ASC Topic 815 – Derivatives and Hedging. ASU 2017-12 makes changes to the hedge accounting model intended to facilitate financial reporting that more closely reflects an entity's risk management activities and to simplify application of hedge accounting. The amendments in ASU 2017-12 provide more hedging strategies that will be eligible for hedge accounting, ease the documentation and effectiveness assessment requirements and result in changes to the presentation and disclosure requirements of hedge accounting activities. ASU 2017-12 is effective for annual reporting periods beginning after December 15, 2018, and for the interim periods within those annual reporting periods. Early adoption, including adoption in an interim period, was permitted. The adoption of ASU 2017-12 on January 1, 2019 did not have a material impact on the Group's financial position, results of operations and cash flows.

In October 2018, the FASB issued ASU 2018-16, "Inclusion of the Secured Overnight Financing Rate (SOFR) Overnight Index Swap (OIS) Rate as a Benchmark Interest Rate for Hedge Accounting Purposes" (ASU 2018-16), an update to ASC Topic 815 – Derivatives and Hedging. ASU 2018-16 permits the use of the OIS rate based on the SOFR as a US benchmark interest rate for hedge accounting purposes and was effective for the Group on January 1, 2019. The adoption of ASU 2018-16 on January 1, 2019 did not impact the Group's existing hedges.

ASC Topic 842 – Leases

In February 2016, the FASB issued ASU 2016-02, "Leases" (ASU 2016-02), creating ASC Topic 842 – Leases and superseding ASC Topic 840 – Leases. ASU 2016-02 sets out the principles for the recognition, measurement, presentation and disclosure of leases for both lessees and lessors. ASU 2016-02 also includes disclosure requirements to provide more information about the amount, timing and uncertainty of cash flows arising from leases. Lessor accounting is substantially unchanged compared to the current accounting guidance. Under the current lessee accounting model the Group is required to distinguish between finance leases, which are recognized on the balance sheet, and operating leases, which are not. ASU 2016-02 requires lessees to present a right-of-use asset and a corresponding lease liability on the balance sheet irrespective of the lease classification. ASU 2016-02 and its subsequent amendments are effective for annual reporting periods beginning after December 15, 2018, and for the interim periods within those annual reporting periods. Early adoption was permitted.

The Group adopted ASU 2016-02 on January 1, 2019 using the modified retrospective approach, with a transition adjustment recognized in retained earnings without restating comparatives. The Group elected the use of the package of practical expedients and the practical expedient to use hindsight.

As a result of adoption, the Group recognized lease liabilities and related right-of-use assets of approximately CHF 3.5 billion and CHF 3.3 billion, respectively. In addition, the Group recognized an increase in retained earnings of approximately CHF 0.2 billion, net of tax, which included both the release of previously deferred gains on sale lease-back transactions and previously unrecognized impairment losses.

3 Business developments, significant shareholders and subsequent events

The Group's significant business developments for 2018 as well as the Group's significant shareholders are discussed below.

Business developments

There were no significant business developments for the Group in 2018.

Significant shareholders

Significant shareholders registered in the share register

The following table includes significant shareholders (including nominees) with holdings in Group shares of at least 5% of the voting rights, which were registered in the share register as of December 31, 2018 and 2017, respectively.

Significant shareholders registered in the share register

end of	2018			2017		
	Number of shares (million)	Total nominal value (CHF million)	Share-holding (%)	Number of shares (million)	Total nominal value (CHF million)	Share-holding (%)
Direct shareholders [1]						
Chase Nominees Ltd. [2]	388	16	15.19	329	13	12.88
Nortrust Nominees Ltd. [2]	149	6	5.84	140	6	5.49

1 As registered in the share register of the Group on December 31 of the reporting period; includes shareholders registered as nominees.

2 Nominee holdings exceeding 2% are registered with a right to vote only if the nominee confirms that no individual shareholder holds more than 0.5% of the outstanding share capital or if the nominee discloses the identity of any beneficial owner holding more than 0.5% of the outstanding capital.

Information received from shareholders not registered in the share register

In addition to the shareholdings registered in the share register of the Group, the Group has obtained and reported to the SIX Swiss Exchange (SIX) information from its shareholders in accordance with the notification requirements of the Swiss Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading. These shareholders may hold their shareholdings in Group shares through a nominee. The following shareholder notifications relate to registered voting rights exceeding 5% of all voting rights, which are subject to disclosure in the notes to the financial statements in accordance with the Swiss Code of Obligations.

In a disclosure notification that the Group published on November 9, 2013, the Group was notified that as of November 4, 2013, Harris Associates L.P. held 81.5 million shares, or 5.17% of the voting rights, of the registered Group shares issued as of the date of the notified transaction. No further disclosure notification has been received from Harris Associates L.P. relating to holdings of registered Group shares since 2013. This position includes the reportable position of Harris Associates Investment Trust (4.97% of the voting rights), as published by the SIX on August 1, 2018.

In a disclosure notification that the Group published on September 6, 2018, the Group was notified that as of August 24, 2018, Qatar Holding LLC held 133.2 million shares, or 5.21% of the voting rights, of the registered Group shares issued as of the date of the notified transaction.

In 2018, the Group received disclosure notifications from Norges Bank that their holdings of registered Group shares and voting rights had fallen below the 5% threshold. The Olayan Group and BlackRock, Inc.'s holdings of registered Group shares and voting rights remained below the 5% threshold both as of December 31, 2018 and as of December 31, 2017.

Subsequent event

In March 2019, the Group reached a tentative settlement related to an existing dispute. As a result, the Group increased its 2018 litigation provision by CHF 33 million in the Corporate & Institutional Banking business within the

Swiss Universal Bank division and decreased its estimate of the aggregate range of reasonably possible losses not covered by existing provisions from zero to CHF 1.5 billion to zero to CHF 1.4 billion.

4 Segment information

The Group is a global financial services company domiciled in Switzerland and serves its clients through three regionally focused divisions: Swiss Universal Bank, International Wealth Management and Asia Pacific. These regional businesses are supported by two other divisions specialized in investment banking capabilities: Global Markets and Investment Banking & Capital Markets. As of December 31, 2018, Strategic Resolution Unit consolidates the remaining portfolios from the former non-strategic units plus additional businesses and positions that do not fit with the strategic direction.

The segment information reflects the Group's six reportable segments, which are managed and reported on a pre-tax basis, as follows:

The **Swiss Universal Bank** division offers comprehensive advice and a wide range of financial solutions to private, corporate and institutional clients primarily domiciled in the Group's home market Switzerland. The Private Clients business has a leading franchise in the Group's home market and serves ultra-high-net-worth individual, high-net-worth individual, affluent and retail clients. The Corporate & Institutional Clients business serves large corporate clients, small and medium-sized enterprises, institutional clients, external asset managers, financial institutions and commodity traders.

The **International Wealth Management** division through its Private Banking business offers comprehensive advisory services and tailored investment and financing solutions to wealthy private clients and external asset managers in Europe, the Middle East, Africa and Latin America. The Asset Management business offers investment solutions and services globally to a broad range of clients, including pension funds, governments, foundations and endowments, corporations and individuals.

In the **Asia Pacific** division, the wealth management, financing and underwriting and advisory teams work closely together to deliver integrated advisory services and solutions to target ultra-high-net-worth, entrepreneur and corporate clients. The Wealth Management & Connected business combines activities in wealth management with the financing, underwriting and advisory activities. The Markets business represents the Group's equities and fixed income sales and trading businesses, which support the wealth management activities, but also deals extensively with a broader range of institutional clients.

The **Global Markets** division offers a broad range of financial products and services to client-driven businesses and also supports the Group's global wealth management businesses and their clients. The suite of products and services includes global securities sales, trading and execution, prime brokerage and comprehensive investment research. Clients include financial institutions, corporations, governments, institutional investors, such as pension funds and hedge funds, and private individuals around the world.

The **Investment Banking & Capital Markets** division offers a broad range of investment banking services to corporations, financial institutions, financial sponsors and ultra-high-net-worth individuals and sovereign clients. The range of products and services includes advisory services related to mergers and acquisitions, divestitures, takeover defense mandates, business restructurings and spin-offs. The division also engages in debt and equity underwriting of public securities offerings and private placements.

The **Strategic Resolution Unit** was created to facilitate the immediate right-sizing of the business divisions from a capital perspective and included remaining portfolios from the former non-strategic units plus transfers of additional exposures from the business divisions. The Strategic Resolution Unit also included noncontrolling interest-related revenues and expenses resulting from the consolidation of certain private equity funds and other entities in which the Group did not have a significant economic interest (SEI) in such revenues and expenses. The consolidation of these entities did not affect net income attributable to shareholders as the amounts recorded in net revenues and total operating expenses were offset by corresponding amounts reported as noncontrolling interests. Beginning in 2019, the Strategic Resolution Unit has ceased to exist as a separate division of the Group.

Corporate Center includes parent company operations such as Group financing, expenses for projects sponsored by the Group and certain expenses that have not been allocated to the segments. In addition, the Corporate Center includes consolidation and elimination adjustments required to eliminate intercompany revenues and expenses.

Revenue sharing and cost allocation

Responsibility for each product is allocated to a specific segment, which records all related revenues and expenses. Revenue-sharing and service level agreements govern the compensation received by one segment for generating revenue or providing services on behalf of another. These agreements are negotiated periodically by the relevant

segments on a product-by-product basis. The aim of revenue-sharing and service level agreements is to reflect the pricing structure of unrelated third-party transactions.

Corporate services and business support in finance, operations, human resources, legal, compliance, risk management and IT are provided by corporate functions, and the related costs are allocated to the segments and Corporate Center based on their requirements and other relevant measures.

Funding

The Group centrally manages its funding activities. New securities for funding and capital purposes are issued primarily by Credit Suisse AG, the direct bank subsidiary of the Group (the Bank). The Bank lends funds to its operating subsidiaries and affiliates on both a senior and subordinated basis, as needed,

the latter typically to meet capital requirements, or as desired by management to capitalize on opportunities. Capital is distributed to the segments considering factors such as regulatory capital requirements, utilized economic capital and the historic and future potential return on capital.

Transfer pricing, using market rates, is used to record net revenues and expenses in each of the segments for this capital and funding. The Group's funds transfer pricing system is designed to allocate funding costs to its businesses in a way that incentivizes their efficient use of funding. The Group's funds transfer pricing system is an essential tool that allocates to the businesses the short-term and long-term costs of funding their balance sheet usages and off-balance sheet contingencies. The funds transfer pricing framework ensures the full funding costs allocation under normal business conditions, but it is of even greater importance in a stressed capital markets environment where raising funds is more challenging and expensive. Under this framework, the Group's businesses are also credited to the extent they provide long-term stable funding.

Net revenues and income/(loss) before taxes

in	2018	2017	2016
Net revenues (CHF million)			
Swiss Universal Bank	5,564	5,396	5,759
International Wealth Management	5,414	5,111	4,698
Asia Pacific	3,393	3,504	3,597
Global Markets	4,980	5,551	5,497
Investment Banking & Capital Markets	2,177	2,139	1,972
Strategic Resolution Unit	(708)	(886)	(1,271)
Corporate Center	100	85	71
Net revenues	**20,920**	**20,900**	**20,323**
Income/(loss) before taxes (CHF million)			
Swiss Universal Bank	2,125	1,765	2,025
International Wealth Management	1,705	1,351	1,121
Asia Pacific	664	729	725
Global Markets	154	450	48
Investment Banking & Capital Markets	344	369	261
Strategic Resolution Unit	(1,381)	(2,135)	(5,759)
Corporate Center	(239)	(736)	(687)
Income/(loss) before taxes	**3,372**	**1,793**	**(2,266)**

Total assets

end of	2018	2017
Total assets (CHF million)		
Swiss Universal Bank	224,301	228,857
International Wealth Management	91,835	94,753
Asia Pacific	99,809	96,497
Global Markets	211,530	242,159
Investment Banking & Capital Markets	16,156	20,803
Strategic Resolution Unit	20,874	45,629
Corporate Center	104,411	67,591
Total assets	**768,916**	**796,289**

Net revenues and income/(loss) before taxes by geographical location

in	2018	2017	2016
Net revenues (CHF million)			
Switzerland	7,646	7,775	8,426
EMEA	1,686	1,231	2,064
Americas	8,731	8,928	7,217
Asia Pacific	2,857	2,966	2,616

Net revenues	**20,920**	**20,900**	**20,323**
Income/(loss) before taxes (CHF million)			
Switzerland	1,924	1,736	2,111
EMEA	(2,082)	(2,769)	(2,460)
Americas	3,452	2,746	(1,573)
Asia Pacific	78	80	(344)
Income/(loss) before taxes	**3,372**	**1,793**	**(2,266)**

The designation of net revenues and income/(loss) before taxes is based on the location of the office recording the transactions. This presentation does not reflect the way the Group is managed.

Total assets by geographical location

end of	2018	2017
Total assets (CHF million)		
Switzerland	234,291	241,757
EMEA	149,400	154,023
Americas	309,616	318,405
Asia Pacific	75,609	82,104
Total assets	**768,916**	**796,289**

The designation of total assets by region is based upon customer domicile.

5 Net interest income

in	2018	2017	2016
Net interest income (CHF million)			
Loans	6,770	5,979	5,628
Investment securities	80	47	60
Trading assets	7,131	6,697	7,483
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	2,856	2,515	2,767
Other	2,776	1,819	1,436
Interest and dividend income	19,613	17,057	17,374
Deposits	(2,287)	(1,354)	(1,043)
Short-term borrowings	(359)	(166)	(84)
Trading liabilities	(3,453)	(3,542)	(3,602)
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(1,877)	(1,284)	(1,387)
Long-term debt	(3,816)	(3,722)	(3,494)
Other	(812)	(432)	(202)
Interest expense	(12,604)	(10,500)	(9,812)
Net interest income	**7,009**	**6,557**	**7,562**

6 Commissions and fees

in	2018	2017	2016
Commissions and fees (CHF million)			
Lending business	1,931	1,839	1,818
Investment and portfolio management	3,582	3,494	3,209
Other securities business	48	46	46
Fiduciary business	3,630	3,540	3,255
Underwriting	1,718	1,806	1,364
Brokerage	2,813	3,004	3,028
Underwriting and brokerage	4,531	4,810	4,392
Other services	1,798	1,628	1,627
Commissions and fees	**11,890**	**11,817**	**11,092**

7 Trading revenues

in	2018	2017	2016
Trading revenues (CHF million)			
Interest rate products	757	3,228	6,231
Foreign exchange products	367	1,989	(2,529)
Equity/index-related products	(307)	(2,888)	(1,796)
Credit products	(97)	(1,096)	(2,124)
Commodity and energy products	102	86	177
Other products	(198)	(2)	354
Trading revenues	**624**	**1,317**	**313**

Represents revenues on a product basis which are not representative of business results within segments, as segment results utilize financial instruments across various product types.

Trading revenues include revenues from trading financial assets and liabilities as follows:

- Equities;
- Commodities;

- Listed and OTC derivatives;
- Derivatives linked to funds of hedge funds and providing financing facilities to funds of hedge funds;
- Market making in the government bond and associated OTC derivative swap markets;
- Domestic, corporate and sovereign debt, convertible and non-convertible preferred stock and short-term securities such as floating rate notes and commercial paper (CP);
- Market making and positioning in foreign exchange products;
- Credit derivatives on investment grade and high yield credits;
- Trading and securitizing all forms of securities that are based on underlying pools of assets; and
- Life settlement contracts.

Trading revenues also include changes in the fair value of financial assets and liabilities elected to fair value under US GAAP. The main components include certain instruments from the following categories:

- Central bank funds purchased/sold;
- Securities purchased/sold under resale/repurchase agreements;
- Securities borrowing/lending transactions;
- Loans and loan commitments; and
- Customer deposits, short-term borrowings and long-term debt.

Managing the risks

As a result of the Group's broad involvement in financial products and markets, its trading strategies are correspondingly diverse and exposures are generally spread across a diversified range of risk factors and locations. The Group uses an economic capital limit structure to limit overall risk taking. The level of risk incurred by its divisions is further managed by a variety of factors and specific risk constraints, including consolidated controls over trading exposures. Also, as part of its overall risk management, the Group holds a portfolio of economic hedges. Hedges are impacted by market movements, similar to trading securities, and may result in gains or losses on the hedges which offset losses or gains on the portfolios they were designed to economically hedge. The Group manages its trading risk with regard to both market and credit risk. The Group uses market risk measurement and management methods capable of calculating comparable exposures across its many activities and employs focused tools that can model unique characteristics of certain instruments or portfolios.

The principal risk measurement methodology for trading book exposures is value-at-risk. Macroeconomic and specific hedging strategies are in place to manage and mitigate the market and credit risk in the trading book.

8 Other revenues

in	2018	2017	2016
Other revenues (CHF million)			
Noncontrolling interests without SEI	(2)	3	4
Loans held-for-sale	(4)	3	(51)
Long-lived assets held-for-sale	39	(18)	437
Equity method investments	228	233	208
Other investments	337	80	0
Other	799	908	758
Other revenues	**1,397**	**1,209**	**1,356**

9 Provision for credit losses

in	2018	2017	2016
Provision for credit losses (CHF million)			
Provision for loan losses	201	190	249
Provision for lending-related and other exposures	44	20	3
Provision for credit losses	**245**	**210**	**252**

10 Compensation and benefits

in	2018	2017	2016
Compensation and benefits (CHF million)			
Salaries and variable compensation	8,220	8,906	9,165
Social security	652	671	697
Other [1]	748	790	790
Compensation and benefits	**9,620**	**10,367**	**10,652**

1 Includes pension-related expenses of CHF 411 million, CHF 432 million and CHF 464 million in 2018, 2017 and 2016, respectively, relating to service costs for defined benefit pension plans and employer contributions for defined contribution plans.

11 General and administrative expenses

in	2018	2017	2016
General and administrative expenses (CHF million)			
Occupancy expenses	964	1,000	1,004
IT, machinery, etc.	1,174	1,156	1,166
Provisions and losses	425	698	3,009
Travel and entertainment	338	321	328
Professional services	1,803	2,446	2,984
Amortization and impairment of other intangible assets	9	9	8
Other [1]	1,085	1,015	1,191
General and administrative expenses	**5,798**	**6,645**	**9,690**

1 Includes pension-related expenses/(credits) of CHF (208) million, CHF (190) million and CHF (80) million in 2018, 2017 and 2016, respectively, relating to certain components of net periodic benefit costs for defined benefit plans.

12 Restructuring expenses

In connection with the ongoing implementation of the revised Group strategy, restructuring expenses of CHF 626 million, CHF 455 million and CHF 540 million were recognized in 2018, 2017 and 2016, respectively. Restructuring expenses primarily include termination costs, expenses in connection with the acceleration of certain deferred

compensation awards and real estate contract termination costs.

Restructuring expenses by segment

in	2018	2017	2016
Restructuring expenses by segment (CHF million)			
Swiss Universal Bank	101	59	60
International Wealth Management	115	70	54
Asia Pacific	61	63	53
Global Markets	242	150	217
Investment Banking & Capital Markets	84	42	28
Strategic Resolution Unit	21	57	121
Corporate Center	2	14	7
Total restructuring expenses	**626**	**455**	**540**

Restructuring expenses by type

in	2018	2017	2016
Restructuring expenses by type (CHF million)			
Compensation and benefits-related expenses	246	294	358
of which severance expenses	169	192	218
of which accelerated deferred compensation	77	102	140
General and administrative-related expenses	380	161	182
of which pension expenses	74	49	27
Total restructuring expenses	**626**	**455**	**540**

Restructuring provision

in	2018 Compen-sation and benefits	2018 General and administrative expenses	2018 Total	2017 Compen-sation and benefits	2017 General and administrative expenses	2017 Total	2016 Compen-sation and benefits	2016 General and administrative expenses	2016 Total
Restructuring provision (CHF million)									
Balance at beginning of period	**196**	**110**	**306**	**217**	**94**	**311**	**187**	**12**	**199**
Net additional charges [1]	169	219	388	192	88	280	218	137	355
Utilization	(209)	(139)	(348)	(213)	(72)	(285)	(188)	(55)	(243)
Balance at end of period	**156**	**190**	**346**	**196**	**110**	**306**	**217**	**94**	**311**

1 The following items for which expense accretion was accelerated in 2018, 2017 and 2016 due to the restructuring of the Group are not included in the restructuring provision: unsettled share-based compensation of CHF 56 million, CHF 71 million and CHF 34 million, respectively, which remain classified as a component of total shareholders' equity; unsettled pension obligations of CHF 74 million, CHF 49 million and CHF 27 million, respectively, which remain classified as pension liabilities; unsettled cash-based deferred compensation of CHF 21 million, CHF 31 million and CHF 106 million, respectively, which remain classified as compensation liabilities; and accelerated accumulated depreciation and impairment of CHF 87 million, CHF 24 million and CHF 18 million, respectively, which remain classified as premises and equipment. The settlement date for the unsettled share-based compensation remains unchanged at three years.

13 Earnings per share

in	2018	2017	2016
Basic net income/(loss) attributable to shareholders (CHF million)			
Net income/(loss) attributable to shareholders for basic earnings per share	2,024	(983)	(2,710)
Net income/(loss) attributable to shareholders for diluted earnings per share	2,024	(983)	(2,710)
Weighted-average shares outstanding (million)			
For basic earnings per share available for common shares	2,574.2	2,413.8	2,136.8
Dilutive share options and warrants	3.0	0.0	0.0
Dilutive share awards	53.8	0.0	0.0
For diluted earnings per share available for common shares [1]	2,631.0	2,413.8[2]	2,136.8[2]
Earnings/(loss) per share available for common shares (CHF)			
Basic earnings/(loss) per share available for common shares	**0.79**	**(0.41)**	**(1.27)**
Diluted earnings/(loss) per share available for common shares	**0.77**	**(0.41)**	**(1.27)**

1 Weighted-average potential common shares relating to instruments that were not dilutive for the respective periods (and therefore not included in the diluted earnings per share calculation above) but could potentially dilute earnings per share in the future were 8.7 million, 9.8 million

and 11.3 million for 2018, 2017 and 2016, respectively.

2

Due to the net losses in 2017 and 2016, 2.9 million and 3.2 million, respectively, of weighted-average share options and warrants outstanding and 57.7 million and 54.6 million, respectively, of weighted-average share awards outstanding were excluded from the diluted earnings per share calculation, as the effect would be antidilutive.

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14 Revenue from contracts with customers

Revenue is measured based on the consideration specified in a contract with a customer, and excludes any amounts collected on behalf of third parties. Taxes assessed by a governmental authority that are collected by the Group from a customer and both imposed on and concurrent with a specific revenue-producing transaction are excluded from revenue. The Group recognizes revenue when it satisfies a contractual performance obligation. Variable consideration is only included in the transaction price once it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the amount of variable consideration is subsequently resolved. Generally no significant judgement is required with respect to recording variable consideration.

If a fee is a fixed percentage of a variable account value at contract inception, recognition of the fee revenue is constrained as the contractual consideration is highly susceptible to change due to factors outside of the Group's influence. However, at each performance measurement period end (e.g., end-of-day, end-of-month, end-of-quarter), recognition of the cumulative amount of the consideration to which the Group is entitled is no longer constrained because it is calculated based on a known account value and the fee revenue is no longer variable.

Nature of services

The following is a description of the principal activities from which the Group generates its revenues from contracts with customers.

The performance obligations are typically satisfied as the services in the contract are rendered. The contract terms are generally such that they do not result in any contract assets. The contracts generally do not include a significant financing component or obligations for refunds or other similar obligations. Any variable consideration included in the transaction price is only recognized when the uncertainty of the amount is resolved and it is probable that a significant reversal of cumulative revenue recognized will not occur.

Credit Suisse's wealth management businesses provide investment services and solutions for clients, including asset management, investment advisory and investment management, wealth planning, and origination and structuring of sophisticated financing transactions. The Group receives for these services investment advisory and investment management fees which are generally reflected in the line item 'Investment and portfolio management' in the table "Contracts with customers and disaggregation of revenues" below. Generally, the fee for the service provided is recognized over the period of time the service is provided.

The wealth management businesses also provide comprehensive advisory services and tailored investment and financing solutions to private, corporate and institutional clients. The nature of the services range from investment and wealth management activities, which are services rendered over a period of time according to the contract with the customer, to more transaction-specific services such as brokerage and sales and trading services and the offer of client-tailored financing products. The services are provided as requested by Credit Suisse's clients, and the fee for the service requested is recognized once the service is provided.

The Group's asset management businesses offer investment solutions and services globally to a broad range of clients, including pension funds, governments, foundations and endowments, corporations and individuals. Fund managers typically enter into a variety of contracts to provide investment management and other services. A fund manager may satisfy its performance obligation independently or may engage a third party to satisfy some or all of a performance obligation on the fund manager's behalf. Although the fund manager may have engaged a third party to provide inputs to the overall investment management services, the contractual obligation to provide investment management services to a customer remains the primary responsibility of the fund manager. As such, the fund manager is acting as a principal in the transaction. As a fund manager, the Group typically receives base management fees and may additionally receive performance-based management fees which are both recognized as "Investment and portfolio management" revenues in the table "Contracts with customers and disaggregation of revenues" below. Base management fees are generally calculated based on the net asset value (NAV) of the customer's investment, which can change during the performance period. Performance-based management fees are variable consideration received by the Group depending on the financial performance of the underlying fund. As both the base management fees and performance-based management fees are variable, the Group recognizes the fees once it is probable that a significant reversal of the revenue recognized will not occur and when the uncertainty of the amount is resolved. The estimate of these variable fees is constrained until the end of the performance measurement period. Generally, the uncertainty is resolved at the end of the performance measurement period and therefore no significant judgement is necessary when

recording variable consideration. Under a clawback obligation provision, a fund manager may be required to return certain distributions received from a fund if a specific performance threshold, i.e., benchmark, is not achieved at the end of the lifetime of the fund. The contractual clawback obligation is an additional factor of uncertainty which is considered in the constraint assessment. If the performance-based management fee is earned but the clawback provision has not lapsed, the clawback obligation is accounted for as a refund liability.
The Group's capital markets businesses underwrite and sell securities on behalf of customers. Typically, the fees in these businesses are recognized at a single point in time once the transaction is complete, i.e., when the securities have been placed with investors, and recognized as underwriting revenue. All expenses incurred in satisfying the performance obligation are deferred and recognized once the transaction is complete. Generally Credit Suisse and other banks form a syndicate group to underwrite and place the securities for a customer. The Group may act as the lead or a participating member in the syndicate group. Each

member of the syndicate group, including the lead and participating underwriters, is acting as principal for their proportionate share of the syndication. As a result, the individual underwriters reflect their proportionate share of underwriting revenue and underwriting costs on a gross basis.
The Group also offers brokerage services in its investment banking businesses, including global securities sales, trading and execution, prime brokerage and investment research. For the services provided, such as the execution of client trades in securities or derivatives, the Group typically earns a brokerage commission when the trade is executed. The Group generally acts as an agent when buying or selling exchange-traded cash securities, exchange-traded derivatives or centrally cleared OTC derivatives on behalf of clients.
Credit Suisse's investment banking businesses provide services that include advisory services to clients in connection with corporate finance activities. The term "advisory" includes any type of service the Group provides in an advisory capacity. For these types of services, the Group typically receives a non-refundable retainer fee and/or a success fee which usually represents a percentage of the transaction proceeds if and when the corporate finance activity is completed. Additionally, the contract may contain a milestone fee such as an "announcement fee" that is payable upon the public announcement of the corporate finance activity. Typically the fees in the investment banking business are recognized at a specific point in time once it is determined that the performance obligation related to the transaction has been completed. A contract liability will be recorded if the Group receives a payment such as a retainer fee or announcement fee for an advisory service prior to satisfying the performance obligation. Advisory fees are recognized ratably over time in scenarios where the contracted service of the Group is to act as an advisor over a specified period not related to or dependent on the successful completion of a transaction. Revenues recognized from these services are reflected in the line item "Other Services" in the table below.
Contracts with customers and disaggregation of revenues

in	4Q18	3Q18	2Q18	1Q18
Contracts with customers (CHF million)				
Investment and portfolio management	898	896	896	892
Other securities business	13	12	11	12
Underwriting	330	405	513	470
Brokerage	647	623	749	810
Other services	492	452	471	487
Total revenues from contracts with customers	**2,380**	**2,388**	**2,640**	**2,671**

The table above differs from "Note 6 – Commissions and fees" as it includes only those contracts with customers that are in scope of ASC Topic 606 – Revenue from Contracts with Customers.
Contract balances

end of / in	4Q18	3Q18	2Q18	1Q18
Contract balances (CHF million)				
Contract receivables	791	845	838	758
Contract liabilities	56	66	63	67
Revenue recognized in the reporting period included in the contract liabilities balance at the beginning of period	16	7	13	13

The Group did not recognize any revenues in the reporting period from performance obligations satisfied in previous periods.
In 2018, we recognized a net impairment loss on contract receivables of CHF 2 million in the fourth quarter, CHF 6 million in the third quarter and CHF 3 million in the second quarter of 2018. No impairment losses were recognized on contract receivables in the first quarter of 2018. The Group did not recognize any contract assets during the fourth quarter, the third quarter, the second quarter and the first quarter of 2018.
Capitalized costs
The Group has not incurred costs to obtain a contract nor costs to fulfill a contract that are eligible for capitalization.
Remaining performance obligations

ASC Topic 606's practical expedient allows the Group to exclude from its remaining performance obligations disclosure any performance obligations which are part of a contract with an original expected duration of one year or less. Additionally any variable consideration, for which it is probable that a significant reversal

in the amount of cumulative revenue recognized will occur when the uncertainty associated with the variable consideration is subsequently resolved, is not subject to the remaining performance obligations disclosure because such variable consideration is not included in the transaction price (e.g., investment management fees). Upon review, the Group determined that no material remaining performance obligations are in scope of the remaining performance obligations disclosure.

Impact of the adoption of ASC Topic 606

The impact of adoption of ASC Topic 606 on the Group's consolidated statement of operations resulted in increases in commissions and fees revenues of CHF 12 million, CHF 19 million, CHF 23 million and CHF 20 million, increases in general and administrative expenses of CHF 26 million, CHF 45 million, CHF 48 million and CHF 40 million and decreases in commission expenses of CHF 12 million, CHF 25 million, CHF 29 million and CHF 22 million for the fourth quarter, the third quarter, the second quarter, and the first quarter of 2018, respectively. The impact of the adoption did not have a material impact on the Group's consolidated balance sheet or the Group's consolidated statement of cash flows in the fourth quarter, the third quarter, the second quarter and the first quarter of 2018.

15 Securities borrowed, lent and subject to repurchase agreements

end of	2018	2017
Securities borrowed or purchased under agreements to resell (CHF million)		
Central bank funds sold and securities purchased under resale agreements	77,770	70,009
Deposits paid for securities borrowed	39,325	45,337
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	**117,095**	**115,346**
Securities lent or sold under agreements to repurchase (CHF million)		
Central bank funds purchased and securities sold under repurchase agreements	20,305	20,606
Deposits received for securities lent	4,318	5,890
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	**24,623**	**26,496**

Repurchase and reverse repurchase agreements represent collateralized financing transactions used to earn net interest income, increase liquidity or facilitate trading activity. These instruments are collateralized principally by government securities, money market instruments and corporate bonds and have terms ranging from overnight to a longer or unspecified period of time.

In the event of counterparty default, the reverse repurchase agreement or securities lending agreement provides the Group with the right to liquidate the collateral held. In the Group's normal course of business, a significant portion of the collateral received that may be sold or repledged has been sold or repledged as of December 31, 2018 and 2017.

16 Trading assets and liabilities

end of	2018	2017
Trading assets (CHF million)		
Debt securities	62,135	72,765
Equity securities	46,463	55,722
Derivative instruments [1]	18,312	19,621
Other	5,293	8,226
Trading assets	**132,203**	**156,334**
Trading liabilities (CHF million)		
Short positions	26,946	24,465
Derivative instruments [1]	15,223	14,654
Trading liabilities	**42,169**	**39,119**

1 Amounts shown after counterparty and cash collateral netting.

end of	2018	2017

Cash collateral on derivatives instruments – netted (CHF million)[1]		
Cash collateral paid	20,216	23,288
Cash collateral received	13,213	14,996
Cash collateral on derivatives instruments – not netted (CHF million)[2]		
Cash collateral paid	7,057	5,141
Cash collateral received	6,903	8,644

1
Recorded as cash collateral netting on derivative instruments in Note 27 – Offsetting of financial assets and financial liabilities.

2
Recorded as cash collateral on derivative instruments in Note 23 – Other assets and other liabilities.

17 Investment securities

end of	2018	2017
Investment securities (CHF million)		
Securities available-for-sale	2,911	2,191
Total investment securities	**2,911**	**2,191**

Investment securities by type

	2018				2017			
end of	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Investment securities by type (CHF million)								
Debt securities issued by Swiss federal, cantonal or local governmental entities	2	0	0	2	199	13	0	212
Debt securities issued by foreign governments	821	7	0	828	1,215	21	0	1,236
Corporate debt securities	649	0	0	649	238	0	0	238
Residential mortgage-backed securities [1]	1,430	0	0	1,430	207	0	0	207
Commercial mortgage-backed securities	2	0	0	2	173	0	0	173
Debt securities available-for-sale	2,904	7	0	2,911	2,032	34	0	2,066
Banks, trust and insurance companies [2]	–	–	–	–	95	30	0	125
Equity securities available-for-sale [2]	–	–	–	–	95	30	0	125
Securities available-for-sale	**2,904**	**7**	**0**	**2,911**	**2,127**	**64**	**0**	**2,191**

1
Relate to the consolidation of RMBS securitization VIEs where the assets are carried at fair value under the fair value option as are the VIEs' liabilities recorded in long-term debt.

2
As a result of the adoption of ASU 2016-01, equity securities available-for-sale are now recognized in trading assets and no longer in investment securities. Refer to "Note 2 – Recently issued accounting standards" for further information.

Proceeds from sales, realized gains and realized losses from available-for-sale securities

	2018		2017		2016	
in	Debt securities	Equity securities[1]	Debt securities	Equity securities	Debt securities	Equity securities
Additional information (CHF million)						
Proceeds from sales	255	–	7	7	9	4
Realized gains	8	–	0	0	0	0

1

As a result of the adoption of ASU 2016-01 equity securities available-for-sale are now recognized in trading assets and no longer in investment securities. Refer to "Note 2 – Recently issued accounting standards" for further information.

Amortized cost, fair value and average yield of debt securities

	Debt securities available-for-sale		
end of	Amortized cost	Fair value	Average yield (in %)
2018 (CHF million, except where indicated)			
Due within 1 year	844	850	0.72
Due from 1 to 5 years	8	8	4.30
Due from 5 to 10 years	620	621	0.83
Due after 10 years	1,432	1,432	2.45
Total debt securities	**2,904**	**2,911**	**1.61**

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18 Other investments

end of	2018	2017
Other investments (CHF million)		
Equity method investments	2,467	3,066
Equity securities (without a readily determinable fair value) [1]	1,207	1,292
of which at net asset value	530	742
of which at measurement alternative	227	175
of which at fair value	208	161
of which at cost less impairment	242	214
Real estate held-for-investment [2]	79	232
Life finance instruments [3]	1,137	1,374
Total other investments	**4,890**	**5,964**

1
Includes private equity, hedge funds and restricted stock investments as well as certain investments in non-marketable mutual funds for which the Group has neither significant influence nor control over the investee.

2
As of the end of 2018 and 2017, real estate held for investment included foreclosed or repossessed real estate of CHF 3 million and CHF 41 million, respectively, all related to residential real estate.

3
Includes life settlement contracts at investment method and SPIA contracts.

Equity securities at measurement alternative – impairments and adjustments

in / end of	2018	Cumulative
Impairments and adjustments (CHF million)		
Impairments and downward adjustments	(4)	(7)

> Refer to “Note 35 – Financial instruments” for further information on such investments.

No impairments were recorded on real estate held-for-investments in 2018, while in 2017 and 2016, impairments of CHF 16 million and CHF 31 million, respectively, were recorded.

Accumulated depreciation related to real estate held-for-investment amounted to CHF 31 million, CHF 140 million and CHF 137 million for 2018, 2017 and 2016, respectively. Prior periods have been corrected.

19 Loans, allowance for loan losses and credit quality

Loans are divided in two portfolio segments, “consumer” and “corporate & institutional”. Consumer loans are disaggregated into the classes of mortgages, loans collateralized by securities and consumer finance. Corporate and institutional loans are disaggregated into the classes of real estate, commercial and industrial loans, financial institutions, and governments and public institutions.

For financial reporting purposes, the carrying values of loans and related allowance for loan losses are presented in accordance with US GAAP and are not comparable with the regulatory credit risk exposures presented in our disclosures required under Pillar 3 of the Basel framework.

Loans end of	2018	2017
Loans (CHF million)		
Mortgages	107,845	106,039
Loans collateralized by securities	42,034	42,016
Consumer finance	3,905	4,242
Consumer	153,784	152,297
Real estate	26,727	26,599
Commercial and industrial loans	85,698	81,670
Financial institutions	18,494	15,697
Governments and public institutions	3,893	3,874
Corporate & institutional	134,812	127,840
Gross loans	**288,596**	**280,137**
of which held at amortized cost	273,723	264,830
of which held at fair value	14,873	15,307
Net (unearned income)/deferred expenses	(113)	(106)
Allowance for loan losses	(902)	(882)
Net loans	**287,581**	**279,149**
Gross loans by location		
Switzerland	160,444	157,696
Foreign	128,152	122,441
Gross loans	**288,596**	**280,137**
Impaired loans		
Non-performing loans	1,203	1,048
Non-interest-earning loans	300	223
Non-performing and non-interest-earning loans	1,503	1,271
Restructured loans	299	290
Potential problem loans	390	549
Other impaired loans	689	839
Gross impaired loans	**2,192**	**2,110**

Allowance for loan losses

	2018			2017			2016		
	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total
Allowance for loan losses (CHF million)									
Balance at beginning of period	**220**	**662**	**882**	**216**	**722**	**938**	**216**	**650**	**866**
Net movements recognized in statements of operations	19	182	201	54	136	190	63	186	249
Gross write-offs	(85)	(184)	(269)	(60)	(242)	(302)	(86)	(192)	(278)
Recoveries	21	37	58	12	41	53	13	53	66
Net write-offs	(64)	(147)	(211)	(48)	(201)	(249)	(73)	(139)	(212)

Provisions for interest	11	19	30	(1)	14	13	10	8	18
Foreign currency translation impact and other adjustments, net	1	(1)	0	(1)	(9)	(10)	0	17	17
Balance at end of period	**187**	**715**	**902**	**220**	**662**	**882**	**216**	**722**	**938**
of which individually evaluated for impairment	146	462	608	179	475	654	172	528	700
of which collectively evaluated for impairment	41	253	294	41	187	228	44	194	238
Gross loans held at amortized cost (CHF million)									
Balance at end of period	**153,761**	**119,962**	**273,723**	**152,277**	**112,553**	**264,830**	**145,070**	**112,445**	**257,515**
of which individually evaluated for impairment [1]	677	1,515	2,192	632	1,478	2,110	662	1,810	2,472
of which collectively evaluated for impairment	153,084	118,447	271,531	151,645	111,075	262,720	144,408	110,635	255,043

1 Represents gross impaired loans both with and without a specific allowance.

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Purchases, reclassifications and sales

in	2018			2017			2016		
	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total
Loans held at amortized cost (CHF million)									
Purchases [1]	0	2,163	**2,163**	0	3,381	**3,381**	30	3,405	**3,435**
Reclassifications from loans held-for-sale [2]	0	1	**1**	0	63	**63**	0	125	**125**
Reclassifications to loans held-for-sale [3]	1	2,351	**2,352**	0	7,407	**7,407**	1,632	2,768	**4,400**
Sales [3]	1	2,267	**2,268**	0	7,051	**7,051**	72	2,087	**2,159**

1
Includes drawdowns under purchased loan commitments.
2
Includes loans previously reclassified to held-for-sale that were not sold and were reclassified back to loans held-to-maturity.
3
All loans held at amortized cost which are sold are reclassified to loans held-for-sale on or prior to the date of the sale.

Credit quality of loans held at amortized cost

Management monitors the credit quality of loans through its credit risk management processes, which are structured to assess, measure, monitor and manage risk on a consistent basis. This process requires careful consideration of proposed extensions of credit, the setting of specific limits, monitoring during the life of the exposure, active use of credit mitigation tools and a disciplined approach to recognizing credit impairment.

Management evaluates many factors when assessing the credit quality of loans. These factors include the volatility of default probabilities, rating changes, the magnitude of potential loss, internal risk ratings, and geographic, industry and other economic factors. For the purpose of credit quality disclosures, the Group uses detailed internal risk ratings which are aggregated to the credit quality indicators investment grade and non-investment grade.

The Group employs a set of credit ratings for the purpose of internally rating counterparties. Credit ratings are intended to reflect the risk of default of each counterparty. Ratings are assigned based on internally developed rating models and processes, which are subject to governance and internally independent validation procedures.

Internal ratings are assigned to all loans reflecting the Group's internal view of the credit quality of the counterparty. Internal ratings may differ from a counterparty's external ratings, if such ratings are available. Internal ratings are regularly reviewed depending on exposure type, client segment, collateral or event-driven developments. For the calculation of internal risk estimates (e.g., an estimate of expected loss in the event of a counterparty default) and risk-weighted assets, a probability of default (PD), loss given default (LGD) and exposure at default are assigned to each facility. These three parameters are primarily derived from internally developed statistical models that have been backtested against internal experience, validated by a function independent of the model owners on a regular basis and approved by the Group's main regulators for application in the regulatory capital calculation in the advanced internal ratings-based approach (A-IRB) under the Basel framework. For the majority of clients and counterparties, internal ratings or PDs are calculated directly by proprietary statistical rating models. These models are based on internally compiled data comprising both quantitative factors (e.g., primarily balance sheet information for corporates and loan-to-value ratio and the borrower's income level for mortgage lending) and qualitative factors (e.g., credit histories from credit reporting bureaus) concentrating on economic trends and financial fundamentals. For statistical rating models calculating a PD, an equivalent rating based on the Standard & Poor's rating scale is assigned based on the PD band associated with each rating, which is used for disclosure purposes. For the remaining facilities where statistical rating models are not used, a PD is determined through an internal rating assigned on the basis of a structured expert approach. Credit officers make use of peer analyses, industry comparisons, external ratings and research as well as the

judgment of credit experts for the purpose of their analysis. The PD for each internal rating is calibrated to historical default experience using internal data and external data from Standard & Poor's.
Reverse repurchase agreements are fully collateralized and in the event of counterparty default the reverse repurchase agreement provides the Group the right to liquidate the collateral held. Group risk management manages these instruments on the basis of the value of the underlying collateral, as opposed to loans, which are risk-managed on the ability of the counterparty to repay. Therefore the underlying collateral coverage is the most appropriate credit quality indicator for reverse repurchase agreements. As such, reverse repurchase agreements have not been included in the tables of this note.
The following tables present the Group's recorded investment in loans held at amortized cost by aggregated internal counterparty credit ratings investment grade and non-investment grade that are used as credit quality indicators for the purpose of this disclosure, and a related aging analysis.

Gross loans held at amortized cost by internal counterparty rating

end of	Investment grade AAA to BBB	Non-investment grade BB to C	D	Total
2018 (CHF million)				
Mortgages	97,404	10,046	395	107,845
Loans collateralized by securities	39,281	2,676	77	42,034
Consumer finance	1,465	2,247	170	3,882
Consumer	138,150	14,969	642	153,761
Real estate	19,461	6,494	110	26,065
Commercial and industrial loans	40,872	37,633	1,268	79,773
Financial institutions	10,715	2,138	86	12,939
Governments and public institutions	1,132	53	0	1,185
Corporate & institutional	72,180	46,318	1,464	119,962
Gross loans held at amortized cost	**210,330**	**61,287**	**2,106**	**273,723**
Value of collateral [1]	192,579	47,999	1,456	242,034
2017 (CHF million)				
Mortgages	94,553	11,214	272	106,039
Loans collateralized by securities	38,387	3,530	99	42,016
Consumer finance	1,801	2,241	180	4,222
Consumer	134,741	16,985	551	152,277
Real estate	20,278	5,640	85	26,003
Commercial and industrial loans	39,475	35,250	1,300	76,025
Financial institutions	7,258	2,022	46	9,326
Governments and public institutions	1,124	74	1	1,199
Corporate & institutional	68,135	42,986	1,432	112,553
Gross loans held at amortized cost	**202,876**	**59,971**	**1,983**	**264,830**
Value of collateral [1]	189,048	49,271	1,422	239,741

1
Includes the value of collateral up to the amount of the outstanding related loans. For mortgages, the value of collateral is determined at the time of granting the loan and thereafter regularly reviewed according to the Group's risk management policies and directives, with maximum review periods determined by property type, market liquidity and market transparency.

Value of collateral

In the Group’s private banking, corporate and institutional businesses, all collateral values for loans are regularly reviewed according to the Group’s risk management policies and directives, with maximum review periods determined by collateral type, market liquidity and market transparency. For example, traded securities are revalued on a daily basis and property values are appraised over a period of more than one year considering the characteristics of the property, current developments in the relevant real estate market and the current level of credit exposure to the borrower. If the credit exposure to a borrower has changed significantly, in volatile markets or in times of increasing general market risk, collateral values may be appraised more frequently. Management judgment is applied in assessing whether markets are volatile or general market risk has increased to a degree that warrants a more frequent update of collateral values. Movements in monitored risk metrics that are statistically different compared to historical experience are considered in addition to analysis of externally-provided forecasts, scenario techniques and macro-economic research. For impaired loans, the fair value of collateral is determined within 90 days of the date the impairment was identified and thereafter regularly revalued by Group credit risk management within the impairment review process.

In the Group's investment banking businesses, collateral-dependent loans are appraised on at least an annual basis, or when a loan-relevant event occurs.

Gross loans held at amortized cost – aging analysis

	Current	Past due					
end of		Up to 30 days	31–60 days	61–90 days	More than 90 days	Total	Total
2018 (CHF million)							
Mortgages	107,364	155	23	10	293	481	107,845
Loans collateralized by securities	41,936	21	0	0	77	98	42,034
Consumer finance	3,383	286	35	32	146	499	3,882
Consumer	152,683	462	58	42	516	1,078	153,761
Real estate	25,914	63	4	0	84	151	26,065
Commercial and industrial loans	78,439	378	96	82	778	1,334	79,773
Financial institutions	12,768	104	19	3	45	171	12,939
Governments and public institutions	1,172	13	0	0	0	13	1,185
Corporate & institutional	118,293	558	119	85	907	1,669	119,962
Gross loans held at amortized cost	**270,976**	**1,020**	**177**	**127**	**1,423**	**2,747**	**273,723**
2017 (CHF million)							
Mortgages	105,689	102	27	14	207	350	106,039
Loans collateralized by securities	41,867	37	0	0	112	149	42,016
Consumer finance	3,701	297	39	40	145	521	4,222
Consumer	151,257	436	66	54	464	1,020	152,277
Real estate	25,871	37	12	15	68	132	26,003
Commercial and industrial loans	74,831	429	40	201	524	1,194	76,025
Financial institutions	8,947	333	1	2	43	379	9,326
Governments and public institutions	1,197	1	0	0	1	2	1,199
Corporate & institutional	110,846	800	53	218	636	1,707	112,553
Gross loans held at amortized cost	**262,103**	**1,236**	**119**	**272**	**1,100**	**2,727**	**264,830**

Impaired loans

Categories of impaired loans

In accordance with Group policies, impaired loans include non-performing loans, non-interest-earning loans, restructured loans and potential problem loans.

> Refer to “Loans” in Note 1 – Summary of significant accounting policies for further information on categories of impaired loans.

As of December 31, 2018 and 2017, the Group did not have any material commitments to lend additional funds to debtors whose loan terms had been modified in troubled debt restructurings.

Gross impaired loans by category

	Non-performing and non-interest-earning loans			Other impaired loans			
end of	Non-performing	Non-interest-earning	Total	Re-structured	Potential problem	Total	Total
2018 (CHF million)							
Mortgages	304	12	316	34	72	106	422[1]
Loans collateralized by securities	62	13	75	0	3	3	78
Consumer finance	170	6	176	0	1	1	177
Consumer	536	31	567	34	76	110	677
Real estate	80	4	84	0	38	38	122
Commercial and industrial loans	547	223	770	265	272	537	1,307
Financial institutions	40	42	82	0	4	4	86
Corporate & institutional	667	269	936	265	314	579	1,515
Gross impaired loans	**1,203**	**300**	**1,503**	**299**	**390**	**689**	**2,192**
2017 (CHF million)							
Mortgages	236	17	253	13	66	79	332[1]
Loans collateralized by securities	96	16	112	0	2	2	114
Consumer finance	176	9	185	0	1	1	186
Consumer	508	42	550	13	69	82	632
Real estate	73	4	77	0	19	19	96
Commercial and industrial loans	465	134	599	277	458	735	1,334
Financial institutions	1	43	44	0	3	3	47
Governments and public institutions	1	0	1	0	0	0	1
Corporate & institutional	540	181	721	277	480	757	1,478
Gross impaired loans	**1,048**	**223**	**1,271**	**290**	**549**	**839**	**2,110**

1 As of December 31, 2018 and 2017, CHF 123 million and CHF 90 million, respectively, were related to consumer mortgages secured by residential real estate for which formal foreclosure proceedings according to local requirements of the applicable jurisdiction were in process.

Write-off and recovery of loans

Write-off of a loan occurs when it is considered certain that there is no possibility of recovering the outstanding principal. In the Group's investment banking businesses, a loan is written down to its net book value once the loan provision is greater than 80% of the loan notional amount, unless repayment of the loan is anticipated to occur within the next two quarters. In the Group's private banking, corporate and institutional businesses, write-offs are made, based on an individual counterparty assessment performed by Group credit risk management, if it is certain that parts of a loan or the entire loan will not be recoverable. For collateralized loans, the collateral is assessed and the unsecured exposure is written off. Write-offs on uncollateralized loans are based on the borrower's ability to pay back the outstanding loan out of free cash flow. The Group evaluates the recoverability of the loans granted, if a borrower is expected to default wholly or partly on its contractual payment obligations or to meet these only with third-party support. Adjustments are made to reflect the estimated realizable value of the loan or any collateral. Triggers to assess the creditworthiness of a borrower to absorb the adverse developments include i) a default on interest or principal payments by more than 90 days, ii) a waiver of interest or principal by the Group, iii) a downgrade of the loan to non-interest-earning, iv) the collection of the debt through seizure order, bankruptcy proceedings or realization of

collateral, or v) the insolvency of the borrower. Based on such assessment, Group credit risk management evaluates the need for write-offs individually and on an ongoing basis.

Recoveries of loans previously written off are recorded based on the cash or estimated fair value of other assets received.

Gross impaired loan details

	2018			2017		
end of	Recorded investment	Unpaid principal balance	Associated specific allowance	Recorded investment	Unpaid principal balance	Associated specific allowance
CHF million						
Mortgages	278	262	21	254	239	36
Loans collateralized by securities	77	63	35	111	97	49
Consumer finance	174	154	90	180	160	94
Consumer	529	479	146	545	496	179
Real estate	82	73	10	86	79	11
Commercial and industrial loans	773	742	401	997	959	427
Financial institutions	86	84	51	47	46	37
Governments and public institutions	0	0	0	1	1	0
Corporate & institutional	941	899	462	1,131	1,085	475
Gross impaired loans with a specific allowance	**1,470**	**1,378**	**608**	**1,676**	**1,581**	**654**
Mortgages	144	144	–	78	78	–
Loans collateralized by securities	1	1	–	3	3	–
Consumer finance	3	3	–	6	6	–
Consumer	148	148	–	87	87	–
Real estate	40	40	–	10	10	–
Commercial and industrial loans	534	534	–	337	337	–
Corporate & institutional	574	574	–	347	347	–
Gross impaired loans without specific allowance	**722**	**722**	**–**	**434**	**434**	**–**
Gross impaired loans	**2,192**	**2,100**	**608**	**2,110**	**2,015**	**654**
of which consumer	677	627	146	632	583	179
of which corporate & institutional	1,515	1,473	462	1,478	1,432	475

Gross impaired loan details (continued)

	2018			2017			2016		
in	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)
CHF million									
Mortgages	261	2	1	229	2	1	195	2	1
Loans collateralized by securities	92	1	1	116	1	1	153	1	1
Consumer finance	176	2	2	167	5	5	205	1	1
Consumer	529	5	4	512	8	7	553	4	3
Real estate	90	0	0	78	1	0	72	1	0
Commercial and industrial loans	917	14	5	1,163	17	5	1,039	10	4
Financial institutions	58	1	0	76	1	1	154	1	0
Governments and public institutions	0	0	0	5	0	0	5	0	0
Corporate & institutional	1,065	15	5	1,322	19	6	1,270	12	4
Gross impaired loans with a specific allowance	**1,594**	**20**	**9**	**1,834**	**27**	**13**	**1,823**	**16**	**7**
Mortgages	91	3	0	83	3	0	83	3	0
Loans collateralized by securities	1	0	0	7	0	0	24	0	0
Consumer finance	3	0	0	3	0	0	11	0	0
Consumer	95	3	0	93	3	0	118	3	0
Real estate	14	1	0	27	1	0	31	1	0
Commercial and industrial loans	292	16	1	271	11	1	307	7	1
Financial institutions	0	0	0	0	0	0	5	0	0
Governments and public institutions	0	0	0	0	0	0	5	0	0
Corporate & institutional	306	17	1	298	12	1	348	8	1
	401	**20**	**1**	**391**	**15**	**1**	**466**	**11**	**1**

Gross impaired loans without specific allowance									
Gross impaired loans	**1,995**	**40**	**10**	**2,225**	**42**	**14**	**2,289**	**27**	**8**
of which consumer	624	8	4	605	11	7	671	7	3
of which corporate & institutional	1,371	32	6	1,620	31	7	1,618	20	5

Allowance for specifically identified credit losses on impaired loans

The Group considers a loan impaired when, based on current information and events, it is probable that the Group will be unable to collect the amounts due according to the contractual terms of the loan agreement. The Group performs an in-depth review and analysis of impaired loans considering factors such as recovery and exit options as well as collateral and counterparty risk. In general, all impaired loans are individually assessed. The trigger to detect an impaired loan is non-payment of interest, principal amounts or other contractual payment obligations. In addition, loans to corporates and institutions managed on the Swiss platform are regularly reviewed depending on exposure type, client segment, collateral or event-driven developments. All other corporate and institutional loans are reviewed at least annually based on the borrower's financial statements and any indications of difficulties they may experience. Loans that are not impaired, but which are of special concern due to changes in covenants, downgrades, negative financial news and other adverse developments, are either transferred to recovery management or included on a watch list. All loans on the watch list are reviewed at least quarterly to determine whether they should be released, remain on the watch list or be moved to recovery management. For loans in recovery management from the Swiss platform, larger positions are reviewed on a quarterly basis for any event-driven changes. Otherwise, these loans are reviewed at least annually. All other loans in recovery management are reviewed on at least a quarterly basis. If an individual loan specifically identified for evaluation is considered impaired, the allowance is determined as a reasonable estimate of credit losses existing as of the end of the reporting period. Thereafter, the allowance is revalued by credit risk management at least annually or more frequently depending on the risk profile of the borrower or credit relevant events. For non-collateral-dependent impaired loans, an impairment is measured using the present value of estimated future cash flows, except that as a practical expedient an impairment may be measured based on a loan's observable market price. If the present value of estimated future cash flows is used, the impaired loan and related allowance are revalued to reflect the passage of time. For collateral-dependent impaired loans, an impairment is measured using the fair value of the collateral.

Restructured loans held at amortized cost

	2018			2017			20		
in	Number of contracts	Recorded investment – pre-modification	Recorded investment – post-modification	Number of contracts	Recorded investment – pre-modification	Recorded investment – post-modification	Number of contracts	Recorded investment – pre-modification	Recorde investmen pos modificati
CHF million, except where indicated									
Mortgages	5	29	29	0	0	0	0	0	
Commercial and industrial loans	13	182	160	15	123	119	16	201	20
Total	**18**	**211**	**189**	**15**	**123**	**119**	**16**	**201**	**20**

Restructured loans held at amortized cost that defaulted within 12 months from restructuring

	2018		2017		2016	
in	Number of contracts	Recorded investment	Number of contracts	Recorded investment	Number of contracts	Recorded investment
CHF million, except where indicated						
Mortgages	1	8	0	0	0	0
Commercial and industrial loans	8	76	1	48	0	0
Total	**9**	**84**	**1**	**48**	**0**	**0**

In 2018, the loan modifications of the Group included extended loan repayment terms, including suspensions of loan amortizations, deferral of lease installments or pay-as-you-earn arrangements, the waiver of claims, interest rate concessions and the subordination of a loan.

20 Premises and equipment

end of	2018	2017
Premises and equipment (CHF million)		
Buildings and improvements	1,617	1,648
Land	347	346
Leasehold improvements	1,880	1,812
Software	5,909	5,709
Equipment	1,805	1,828
Premises and equipment	**11,558**	**11,343**[1]
Accumulated depreciation	(6,720)	(6,657)[1]
Total premises and equipment, net	**4,838**	**4,686**

1 Prior period has been corrected.

in	2018	2017	2016
Depreciation and impairment (CHF million)			
Depreciation	830	826	887
Impairment	8	33	25

21 Goodwill

2018	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit	Credit Suisse Group
Gross amount of goodwill (CHF million)							
Balance at beginning of period	**610**	**1,544**	**2,268**	**3,178**	**1,021**	**12**	**8,633**
Foreign currency translation impact	2	8	10	4	5	0	**29**
Other	3	(8)	0	0	0	0	**(5)**
Balance at end of period	**615**	**1,544**	**2,278**	**3,182**	**1,026**	**12**	**8,657**
Accumulated impairment (CHF million)							
Balance at beginning of period	**0**	**0**	**772**	**2,719**	**388**	**12**	**3,891**
Balance at end of period	**0**	**0**	**772**	**2,719**	**388**	**12**	**3,891**
Net book value (CHF million)							
Net book value	**615**	**1,544**	**1,506**	**463**	**638**	**0**	**4,766**
2017							
Gross amount of goodwill (CHF million)							
Balance at beginning of period	**623**	**1,612**	**2,318**	**3,195**	**1,044**	**12**	**8,804**
Foreign currency translation impact	(13)	(55)	(50)	(17)	(23)	0	**(158)**
Other	0	(13)	0	0	0	0	**(13)**
Balance at end of period	**610**	**1,544**	**2,268**	**3,178**	**1,021**	**12**	**8,633**
Accumulated impairment (CHF million)							
Balance at beginning of period	**0**	**0**	**772**	**2,719**	**388**	**12**	**3,891**
Balance at end of period	**0**	**0**	**772**	**2,719**	**388**	**12**	**3,891**
Net book value (CHF million)							
Net book value	**610**	**1,544**	**1,496**	**459**	**633**	**0**	**4,742**

In accordance with US GAAP, the Group continually assesses whether or not there has been a triggering event requiring a review of goodwill. The Group determined in 2018 that a goodwill triggering event occurred for the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units.

Based on its goodwill impairment analysis performed as of December 31, 2018, the Group concluded that the estimated fair value for all of the reporting units with goodwill substantially exceeded their related carrying values and no impairment was necessary as of December 31, 2018.

The carrying value of each reporting unit for the purpose of the goodwill impairment test is determined by considering the reporting units' risk-weighted assets usage, leverage ratio exposure, deferred tax assets, goodwill and intangible assets. Any residual equity, after considering the total of these elements, is allocated to the reporting units on a pro-rata basis.

In estimating the fair value of its reporting units, the Group applied a combination of the market approach and the income approach. Under the market approach, consideration was given to price to projected earnings multiples or price to book value multiples for similarly traded companies and prices paid in recent transactions that have occurred in its industry or in related industries. Under the income approach, a discount rate was applied that reflects the risk and uncertainty related to the reporting unit's projected cash flows, which were determined from the Group's financial plan.

In determining the estimated fair value, the Group relied upon its latest five-year strategic business plan which included significant management assumptions and estimates based on its view of current and future economic conditions and regulatory changes, and as approved by the Board of Directors.

The Group engaged the services of an independent valuation specialist to assist in the valuation of the Asia Pacific – Markets, Global Markets and Investment Banking & Capital Markets reporting units as of December 31, 2018. The valuations were performed using a combination of the market approach and income approach.

The results of the impairment evaluation of each reporting unit's goodwill would be significantly impacted by adverse changes in the underlying parameters used in the valuation process. If actual outcomes adversely differ by a significant margin from its best estimates of the key economic assumptions and associated cash flows applied in the valuation of the reporting unit, the Group could potentially incur material impairment charges in the future.

As a result of acquisitions, the Group has recorded goodwill as an asset in its consolidated balance sheets, the most significant component of which arose from the acquisition of Donaldson, Lufkin & Jenrette Inc. in 2000.

22 Other intangible assets

	2018			2017		
end of	Gross carrying amount	Accumu-lated amorti-zation	Net carrying amount	Gross carrying amount	Accumu-lated amorti-zation	Net carrying amount
Other intangible assets (CHF million)						
Trade names/trademarks	27	(26)	1	27	(26)	1
Client relationships	43	(20)	23	47	(18)	29
Other	(2)	2	0	5	(3)	2
Total amortizing other intangible assets	**68**	**(44)**	**24**	**79**	**(47)**	**32**
Non-amortizing other intangible assets	195	–	195	191	–	191
of which mortgage servicing rights, at fair value	163	–	163	158	–	158
Total other intangible assets	**263**	**(44)**	**219**	**270**	**(47)**	**223**

Additional information

in	2018	2017	2016
Aggregate amortization and impairment (CHF million)			
Aggregate amortization	8	7	8
Impairment	1	2	0

Estimated amortization

Estimated amortization (CHF million)	
2019	4
2020	3
2021	2
2022	2
2023	2

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23 Other assets and other liabilities

end of	2018	2017
Other assets (CHF million)		
Cash collateral on derivative instruments	7,057	5,141
Cash collateral on non-derivative transactions	465	490
Derivative instruments used for hedging	33	50
Assets held-for-sale	6,744	8,300
of which loans [1]	6,630	8,130
of which real estate [2]	54	141
of which long-lived assets	60	29
Assets held for separate accounts	125	190
Interest and fees receivable	5,055	4,669
Deferred tax assets	4,943	5,522
Prepaid expenses	613	379
Failed purchases	1,283	1,327
Defined benefit pension and post-retirement plan assets	1,794	2,170
Other	4,509	3,833
Other assets	**32,621**	**32,071**

1
Included as of December 31, 2018 and 2017 were CHF 687 million and CHF 534 million, respectively, in restricted loans, which represented collateral on secured borrowings.

2
As of December 31, 2018 and 2017, real estate held-for-sale included foreclosed or repossessed real estate of CHF 13 million and CHF 8 million, respectively, of which CHF 10 million and CHF 5 million, respectively were related to residential real estate.

end of	2018	2017
Other liabilities (CHF million)		
Cash collateral on derivative instruments	6,903	8,644
Cash collateral on non-derivative transactions	514	473
Derivative instruments used for hedging	8	99
Provisions	928	1,007
of which off-balance sheet risk	151	106
Restructuring liabilities	346	306
Liabilities held for separate accounts	125	190
Interest and fees payable	5,159	5,591
Current tax liabilities	927	700
Deferred tax liabilities	438	394
Failed sales	2,187	720
Defined benefit pension and post-retirement plan liabilities	518	541
Other	12,054	12,947
Other liabilities	**30,107**	**31,612**

24 Deposits

	2018			2017		
end of	Switzer-land	Foreign	Total	Switzer-land	Foreign	Total
Deposits (CHF million)						
Non-interest-bearing demand deposits	2,713	1,979	4,692	2,593	2,058	4,651
Interest-bearing demand	125,985	27,794	153,779	125,323	32,732	158,055

deposits						
Savings deposits	63,924	48	63,972	64,068	18	64,086
Time deposits	31,681	125,021	156,702[1]	32,531	117,252	149,783[1]
Total deposits	**224,303**	**154,842**	**379,145**[2]	**224,515**	**152,060**	**376,575**[2]
of which due to banks	–	–	15,220	–	–	15,413
of which customer deposits	–	–	363,925	–	–	361,162

The designation of deposits in Switzerland versus foreign deposits is based upon the location of the office where the deposit is recorded.

1 Included CHF 156,562 million and CHF 149,659 million as of December 31, 2018 and 2017, respectively, of the Swiss franc equivalent of individual time deposits greater than USD 100,000 in Switzerland and foreign offices.

2 Not included as of December 31, 2018 and 2017 were CHF 137 million and CHF 135 million, respectively, of overdrawn deposits reclassified as loans.

25 Long-term debt

end of	2018	2017
Long-term debt (CHF million)		
Senior	136,392	148,542
Subordinated	16,152	23,627
Non-recourse liabilities from consolidated VIEs	1,764	863
Long-term debt	**154,308**	**173,032**
of which reported at fair value	63,935	63,628
of which structured notes	48,064	51,465

end of	2018	2017
Structured notes by product (CHF million)		
Equity	30,698	32,059
Fixed income	13,128	14,471
Credit	3,898	4,678
Other	340	257
Total structured notes	**48,064**	**51,465**

Total long-term debt includes debt issuances managed by Treasury that do not contain derivative features (vanilla debt), as well as hybrid debt instruments with embedded derivatives, which are issued as part of the Group's structured product activities. Long-term debt includes both Swiss franc and foreign exchange denominated fixed and variable rate bonds.

The interest rate ranges presented in the table below are based on the contractual terms of the Group's vanilla debt. Interest rate ranges for future coupon payments on structured products for which fair value has been elected are not included in the table below as these coupons are dependent upon the embedded derivative and prevailing market conditions at the time each coupon is paid. In addition, the effects of derivatives used for hedging are not included in the interest rate ranges on the associated debt.

Long-term debt by maturities

end of	2019	2020	2021	2022	2023	Thereafter	Total
Group parent company (CHF million)							
Senior debt							
Fixed rate	0	0	0	0	2,706	9,044	11,750
Variable rate	0	0	0	965	837	1,022	2,824
Interest rate (range in %) [1]	–	–	–	3.0	0.6 – 4.0	0.9 – 5.4	–
Subordinated debt							
Fixed rate	0	0	0	1,462	4,366	4,010	9,838
Interest rates (range in %) [1]	–	–	–	7.1	3.9 – 7.5	3.5 – 7.3	–
Subtotal – Group parent company	**0**	**0**	**0**	**2,427**	**7,909**	**14,076**	**24,412**
Subsidiaries (CHF million)							
Senior debt							
Fixed rate	15,799	9,358	7,758	8,269	4,706	21,977	67,867
Variable rate	10,001	9,953	8,142	4,232	2,746	18,877	53,951

Interest rates (range in %) [1]	0.0 – 8.8	0.1 – 22.5	0.1 – 6.7	0.1 – 8.2	0.1 – 4.2	0.2 – 7.1	–
Subordinated debt							
Fixed rate	0	1,797	19	90	2,543	1,648	6,097
Variable rate	211	0	0	0	6	0	217
Interest rates (range in %) [1]	2.7	3.3 – 7.0	3.3	7.5	6.5	5.7 – 8.0	–
Non-recourse liabilities from consolidated VIEs							
Fixed rate	346	235	23	0	0	0	604
Variable rate	114	2	4	6[2]	21[2]	1,013	1,160
Interest rates (range in %) [1]	2.9 – 7.2	3.8	9.3 – 10.3	–	–	1.2 – 10.7	–
Subtotal – Subsidiaries	**26,471**	**21,345**	**15,946**	**12,597**	**10,022**	**43,515**	**129,896**
Total long-term debt	**26,471**	**21,345**	**15,946**	**15,024**	**17,931**	**57,591**	**154,308**
of which structured notes	8,268	9,260	5,779	3,787	2,726	18,244	48,064

The maturity of perpetual debt is based on the earliest callable date. The maturity of all other debt is based on contractual maturity and includes certain structured notes that have mandatory early redemption features based on stipulated movements in markets or the occurrence of a market event. Within this population there are approximately CHF 0.5 billion of such notes with a contractual maturity of greater than one year that have an observable likelihood of redemption occurring within one year based on a modelling assessment.

1 Excludes structured notes for which fair value has been elected as the related coupons are dependent upon the embedded derivatives and prevailing market conditions at the time each coupon is paid.

2 Reflects equity linked notes, where the payout is not fixed.

The Group and the Bank maintain a shelf registration statement with the SEC, which allows each entity to issue, from time to time, senior and subordinated debt securities, warrants and guarantees.

> Refer to “Note 41 – Subsidiary guarantee information” for further information on subsidiary guarantees.

The Group maintains a euro medium-term note program that allows the Bank to issue senior debt securities and that allows Credit Suisse Group AG to issue securities, which contain certain features that are designed to allow for statutory bail-in by the Swiss Financial Market Supervisory Authority FINMA (FINMA) under Swiss banking laws and regulations.

The Group maintains two senior debt programs that allow the Group to issue senior debt securities with certain features that are designed to allow for statutory bail-in by FINMA.

The Bank maintains a JPY 500 billion Samurai shelf registration statement that allows it to issue, from time to time, senior and subordinated debt securities.

26 Accumulated other comprehensive income and additional share information

Accumulated other comprehensive income

	Gains/ (losses) on cash flow hedges	Cumulative translation adjustments	Unrealized gains/ (losses) on securities	Actuarial gains/ (losses)	Net prior service credit/ (cost)	Gains/ (losses) on liabilities relating to credit risk	AOCI
2018 (CHF million)							
Balance at beginning of period	**(62)**	**(13,119)**	**48**	**(3,583)**	**522**	**(2,544)**	**(18,738)**
Increase/(decrease)	(114)	(342)	(10)	(710)	(26)	1,605	403
Increase/(decrease) due to equity method investments	(10)	0	0	0	0	0	(10)
Reclassification adjustments, included in net income/(loss)	114	19	(7)	319	(109)	49	385
Cumulative effect of accounting changes, net of tax	0	0	(21)	0	0	0	(21)
Total increase/(decrease)	(10)	(323)	(38)	(391)	(135)	1,654	757
Balance at end of period	**(72)**	**(13,442)**	**10**	**(3,974)**	**387**	**(890)**	**(17,981)**
2017 (CHF million)							
Balance at beginning of period	**(35)**	**(12,095)**	**61**	**(4,278)**	**643**	**(568)**	**(16,272)**
Increase/(decrease)	(61)	(1,054)	(13)	337	0	(2,008)	(2,799)
Increase/(decrease) due to equity method investments	1	0	0	0	0	0	1
Reclassification adjustments, included in net income/(loss)	33	30	0	358	(121)	32	332
Total increase/(decrease)	(27)	(1,024)	(13)	695	(121)	(1,976)	(2,466)
Balance at end of period	**(62)**	**(13,119)**	**48**	**(3,583)**	**522**	**(2,544)**	**(18,738)**
2016 (CHF million)							
Balance at beginning of period	**(15)**	**(12,615)**	**60**	**(4,672)**	**607**	**–**	**(16,635)**
Increase/(decrease)	(6)	441	1	7	142	(1,043)	(458)
Increase/(decrease) due to equity method investments	(6)	0	0	0	0	0	(6)

Reclassification adjustments, included in net income/(loss)	(8)	79	0	387	(106)	0	352
Cumulative effect of accounting changes, net of tax	0	0	0	0	0	475	475
Total increase/(decrease)	(20)	520	1	394	36	(568)	363
Balance at end of period	**(35)**	**(12,095)**	**61**	**(4,278)**	**643**	**(568)**	**(16,272)**

> Refer to “Note 28 – Tax” and “Note 31 – Pension and other post-retirement benefits” for income tax expense/(benefit) on the movements of accumulated other comprehensive income/(loss).

Details of significant reclassification adjustments

in	2018	2017	2016
Reclassification adjustments, included in net income/(loss) (CHF million)			
Cumulative translation adjustments			
Reclassification adjustments [1]	**19**	**30**	**79**
Actuarial gains/(losses)			
Amortization of recognized actuarial losses [2]	396	444	513
Tax expense/(benefit)	(77)	(86)	(126)
Net of tax	**319**	**358**	**387**
Net prior service credit/(cost)			
Amortization of recognized prior service credit/(cost) [2]	(138)	(153)	(134)
Tax expense/(benefit)	29	32	28
Net of tax	**(109)**	**(121)**	**(106)**

1
Includes net releases of CHF 21 million on the liquidation of Credit Suisse Securities (Johannesburg) Proprietary Limited in 2018 and net releases of CHF 17 million on the liquidation of Credit Suisse Principal Investments Limited and AJP Cayman Ltd. in 2016. In addition, it includes net releases of CHF 23 million on the sale of Credit Suisse (Monaco) S.A.M. in 2017 and net releases of CHF 59 million on the sale of Credit Suisse (Gibraltar) Limited in 2016. These were reclassified from cumulative translation adjustments and included in net income in other revenues.

2
These components are included in the computation of total benefit costs. Refer to "Note 31 – Pension and other post-retirement benefits" for further information.

Additional share information

	2018	2017	2016
Common shares issued			
Balance at beginning of period	**2,556,011,720**	**2,089,897,378**	**1,957,379,244**
Issuance of common shares	0	466,114,342	132,518,134
of which share-based compensation	0	0	30,000,000
Balance at end of period	**2,556,011,720**	**2,556,011,720**	**2,089,897,378**
Treasury shares			
Balance at beginning of period	**(5,757,666)**	**0**	**(5,910,224)**
Sale of treasury shares	770,559,108	809,307,879	1,218,245,936
Repurchase of treasury shares	(816,841,331)	(857,049,873)	(1,224,501,214)
Share-based compensation	46,612,198	41,984,328	12,165,502
Balance at end of period	**(5,427,691)**	**(5,757,666)**	**0**
Common shares outstanding			
Balance at end of period	**2,550,584,029** [1]	**2,550,254,054** [2]	**2,089,897,378**

1
At par value CHF 0.04 each, fully paid. In addition to the treasury shares, a maximum of 653,000,000 unissued shares (conditional, conversion and authorized capital) were available for issuance without further approval of the shareholders. 111,193,477 of these shares were reserved for capital instruments.

2
At par value CHF 0.04 each, fully paid. In addition to the treasury shares, a maximum of 653,000,000 unissued shares (conditional, conversion and authorized capital) were available for issuance without further approval of the shareholders. 505,062,294 of these shares were reserved for capital instruments.

27 Offsetting of financial assets and financial liabilities

The disclosures set out in the tables below include derivatives, reverse repurchase and repurchase agreements, and securities lending and borrowing transactions that:

- are offset in the Group's consolidated balance sheets; or
- are subject to an enforceable master netting agreement or similar agreement (enforceable master netting agreements), irrespective of whether they are offset in the Group's consolidated balance sheets.

Similar agreements include derivative clearing agreements, global master repurchase agreements and global master securities lending agreements.

Derivatives

The Group transacts bilateral OTC derivatives (OTC derivatives) mainly under International Swaps and Derivatives Association (ISDA) Master Agreements and Swiss Master Agreements for OTC derivative instruments. These agreements provide for the net settlement of all transactions under the agreement through a single payment in the event of default or termination under the agreement. They allow the Group to offset balances from derivative assets and liabilities as well as the receivables and payables to related cash collateral transacted with the same counterparty. Collateral for OTC derivatives is received and provided in the form of cash and marketable securities. Such collateral may be subject to the standard industry terms of an ISDA Credit Support Annex. The terms of an ISDA Credit Support Annex provide that securities received or provided as collateral may be pledged or sold during the term of the transactions and must be returned upon maturity of the transaction. These terms also give each counterparty the right to terminate the related transactions upon the other counterparty's failure to post collateral. Financial collateral received or pledged for OTC derivatives may also be subject to collateral agreements which restrict the use of financial collateral.

For derivatives transacted with exchanges (exchange-traded derivatives) and central clearing counterparties (OTC-cleared derivatives), positive and negative replacement values (PRV/NRV) and related cash collateral may be offset if the terms of the rules and regulations governing these exchanges and central clearing counterparties permit such netting and offset.

Where no such agreements or terms exist, fair values are recorded on a gross basis.

Exchange-traded derivatives or OTC-cleared derivatives, which are fully margined and for which the daily margin payments constitute settlement of the outstanding exposure, are not included in the offsetting disclosures because they are not subject to offsetting due to the daily settlement. The daily margin payments, which are not settled until the next settlement cycle is conducted, are presented in brokerage receivables or brokerage payables. The notional amount for these daily settled derivatives is included in the fair value of derivative instruments table in "Note 32 – Derivatives and hedging activities".

Under US GAAP, the Group elected to account for substantially all financial instruments with an embedded derivative that is not considered clearly and closely related to the host contract at fair value. There is an exception for certain bifurcatable hybrid debt instruments which the Group did not elect to account for at fair value. However, these bifurcated embedded derivatives are generally not subject to enforceable master netting agreements and are not recorded as derivative instruments under trading assets and liabilities or other assets and other liabilities. Information on bifurcated embedded derivatives has therefore not been included in the offsetting disclosures.

The following table presents the gross amount of derivatives subject to enforceable master netting agreements by contract and transaction type, the amount of offsetting, the amount of derivatives not subject to enforceable master netting agreements and the net amount presented in the consolidated balance sheets.

Offsetting of derivatives

	2018		2017	
end of	Derivative assets	Derivative liabilities	Derivative assets	Derivative liabilities
Gross derivatives subject to enforceable master netting agreements (CHF billion)				
OTC-cleared	5.5	4.8	2.5	1.8
OTC	63.4	60.6	83.3	79.0
Exchange-traded	0.2	0.3	0.1	0.2
Interest rate products	**69.1**	**65.7**	**85.9**	**81.0**
OTC-cleared	0.1	0.2	0.2	0.2
OTC	26.9	31.1	29.1	34.6
Foreign exchange products	**27.0**	**31.3**	**29.3**	**34.8**
OTC	10.2	10.2	11.7	11.7
Exchange-traded	11.8	14.2	9.2	9.8
Equity/index-related products	**22.0**	**24.4**	**20.9**	**21.5**
OTC-cleared	1.5	1.6	3.6	3.8
OTC	3.8	4.9	3.9	4.7
Credit derivatives	**5.3**	**6.5**	**7.5**	**8.5**
OTC	1.2	0.4	1.4	0.9
Exchange-traded	0.1	0.3	0.0	0.0
Other products [1]	**1.3**	**0.7**	**1.4**	**0.9**
OTC-cleared	7.1	6.6	6.3	5.8
OTC	105.5	107.2	129.4	130.9
Exchange-traded	12.1	14.8	9.3	10.0
Total gross derivatives subject to enforceable master netting agreements	**124.7**	**128.6**	**145.0**	**146.7**
Offsetting (CHF billion)				
OTC-cleared	(5.9)	(5.8)	(5.7)	(5.4)
OTC	(92.6)	(99.0)	(114.5)	(122.1)
Exchange-traded	(11.6)	(12.5)	(8.6)	(9.6)
Offsetting	**(110.1)**	**(117.3)**	**(128.8)**	**(137.1)**
of which counterparty netting	(96.9)	(96.9)	(113.8)	(113.8)
of which cash collateral netting	(13.2)	(20.4)	(15.0)	(23.3)
Net derivatives presented in the consolidated balance sheets (CHF billion)				
OTC-cleared	1.2	0.8	0.6	0.4
OTC	12.9	8.2	14.9	8.8
Exchange-traded	0.5	2.3	0.7	0.4
Total net derivatives subject to enforceable master netting agreements	**14.6**	**11.3**	**16.2**	**9.6**
Total derivatives not subject to enforceable master netting agreements [2]	**3.7**	**3.9**	**3.4**	**5.2**
Total net derivatives presented in the consolidated balance sheets	**18.3**	**15.2**	**19.6**	**14.8**

of which recorded in trading assets and trading liabilities	18.3	15.2	19.6	14.7
of which recorded in other assets and other liabilities	0.0	0.0	0.0	0.1

1
Primarily precious metals, commodity and energy products.
2
Represents derivatives where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

Reverse repurchase and repurchase agreements and securities lending and borrowing transactions

Reverse repurchase and repurchase agreements are generally covered by global master repurchase agreements. In certain situations, for example, in the event of default, all contracts under the agreements are terminated and are settled net in one single payment. Global master repurchase agreements also include payment or settlement netting provisions in the normal course of business that state that all amounts in the same currency payable by each party to the other under any transaction or otherwise under the global master repurchase agreement on the same date shall be set off.

Transactions under such agreements are netted in the consolidated balance sheets if they are with the same counterparty, have the same maturity date, settle through the same clearing institution and are subject to the same enforceable master netting agreement. The amounts offset are measured on the same basis as the underlying transaction (i.e., on an accrual basis or fair value basis).

Securities lending and borrowing transactions are generally executed under global master securities lending agreements with netting terms similar to ISDA Master Agreements. In certain situations, for example in the event of default, all contracts under the agreement are terminated and are settled net in one single payment. Transactions under these agreements are netted in the consolidated balance sheets if they meet the same right of offset criteria as for reverse repurchase and repurchase agreements. In general, most securities lending and borrowing transactions do not meet the criterion of having the same settlement date specified at inception of the transaction, and therefore they are not eligible for netting in the consolidated balance sheets. However, securities lending and borrowing transactions with explicit maturity dates may be eligible for netting in the consolidated balance sheets.

Reverse repurchase and repurchase agreements are collateralized principally by government securities, money market instruments and corporate bonds and have terms ranging from overnight to a longer or unspecified period of time. In the event of counterparty default, the reverse repurchase agreement or securities lending agreement provides the Group with the right to liquidate the collateral held. As is the case in the Group's normal course of business, a significant portion of the collateral received that may be sold or repledged was sold or repledged as of December 31, 2018 and December 31, 2017. In certain circumstances, financial collateral received may be restricted during the term of the agreement (e.g., in tri-party arrangements).

The following table presents the gross amount of securities purchased under resale agreements and securities borrowing transactions subject to enforceable master netting agreements, the amount of offsetting, the amount of securities purchased under resale agreements and securities borrowing transactions not subject to enforceable master netting agreements and the net amount presented in the consolidated balance sheets.

Offsetting of securities purchased under resale agreements and securities borrowing transactions

	2018			2017		
end of	Gross	Offsetting	Net book value	Gross	Offsetting	Net book value
Securities purchased under resale agreements and securities borrowing transactions (CHF billion)						
Securities purchased under resale agreements	86.6	(20.9)	65.7	89.4	(28.8)	60.6
Securities borrowing transactions	12.6	(2.2)	10.4	18.7	(5.0)	13.7
Total subject to enforceable master netting agreements	**99.2**	**(23.1)**	**76.1**	**108.1**	**(33.8)**	**74.3**
Total not subject to enforceable master netting agreements [1]	**41.0**	**–**	**41.0**	**41.0**	**–**	**41.0**
Total	**140.2**	**(23.1)**	**117.1**[2]	**149.1**	**(33.8)**	**115.3**[2]

1 Represents securities purchased under resale agreements and securities borrowing transactions where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

2

CHF 81,818 million and CHF 77,498 million of the total net amount as of the end of 2018 and 2017, respectively, are reported at fair value.

The following table presents the gross amount of securities sold under repurchase agreements and securities lending transactions subject to enforceable master netting agreements, the amount of offsetting, the amount of securities sold under repurchase agreements and securities lending transactions not subject to enforceable master netting agreements and the net amount presented in the consolidated balance sheets.

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Offsetting of securities sold under repurchase agreements and securities lending transactions

	2018			2017		
end of	Gross	Offsetting	Net book value	Gross	Offsetting	Net book value
Securities sold under repurchase agreements and securities lending transactions (CHF billion)						
Securities sold under repurchase agreements	42.3	(22.5)	19.8	49.4	(31.5)	17.9
Securities lending transactions	4.2	(0.6)	3.6	7.1	(2.3)	4.8
Obligation to return securities received as collateral, at fair value	39.4	0.0	39.4	37.0	0.0	37.0
Total subject to enforceable master netting agreements	**85.9**	**(23.1)**	**62.8**	**93.5**	**(33.8)**	**59.7**
Total not subject to enforceable master netting agreements [1]	**3.5**	**–**	**3.5**	**4.9**	**–**	**4.9**
Total	**89.4**	**(23.1)**	**66.3**	**98.4**	**(33.8)**	**64.6**
of which securities sold under repurchase agreements and securities lending transactions	47.7	(23.1)	24.6[2]	60.3	(33.8)	26.5[2]
of which obligation to return securities received as collateral, at fair value	41.7	0.0	41.7	38.1	0.0	38.1

1 Represents securities sold under repurchase agreements and securities lending transactions where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

2 CHF 14,828 million and CHF 15,262 million of the total net amount as of the end of 2018 and 2017, respectively, are reported at fair value.

The following table presents the net amount presented in the consolidated balance sheets of financial assets and liabilities subject to enforceable master netting agreements and the gross amount of financial instruments and cash collateral not offset in the consolidated balance sheets. The table excludes derivatives, reverse repurchase and repurchase agreements and securities lending and borrowing transactions not subject to enforceable master netting agreements where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place. Net exposure reflects risk mitigation in the form of collateral.

Amounts not offset in the consolidated balance sheets

	2018				2017			
end of	Net book value	Financial instruments[1]	Cash collateral received/ pledged[1]	Net exposure	Net book value	Financial instruments[1]	Cash collateral received/ pledged[1]	Net exposure
Financial assets subject to enforceable master netting agreements (CHF billion)								
Derivatives	14.6	4.5	0.1	10.0	16.2	5.2	0.0	11.0
Securities purchased under resale agreements	65.7	65.7	0.0	0.0	60.6	60.6	0.0	0.0
	10.4	10.0	0.0	0.4	13.7	13.2	0.0	0.5

Securities borrowing transactions								
Total financial assets subject to enforceable master netting agreements	**90.7**	**80.2**	**0.1**	**10.4**	**90.5**	**79.0**	**0.0**	**11.5**
Financial liabilities subject to enforceable master netting agreements (CHF billion)								
Derivatives	11.3	1.4	0.0	9.9	9.6	2.1	0.0	7.5
Securities sold under repurchase agreements	19.8	19.7	0.1	0.0	17.9	17.9	0.0	0.0
Securities lending transactions	3.6	3.2	0.0	0.4	4.8	4.4	0.0	0.4
Obligation to return securities received as collateral, at fair value	39.4	34.3	0.0	5.1	37.0	32.7	0.0	4.3
Total financial liabilities subject to enforceable master netting agreements	**74.1**	**58.6**	**0.1**	**15.4**	**69.3**	**57.1**	**0.0**	**12.2**

1 The total amount reported in financial instruments (recognized financial assets and financial liabilities and non-cash financial collateral) and cash collateral is limited to the amount of the related instruments presented in the consolidated balance sheets and therefore any over-collateralization of these positions is not included.

Net exposure is subject to further credit mitigation through the transfer of the exposure to other market counterparties by the use of CDS and credit insurance contracts. Therefore the net exposure presented in the table above is not representative of the Group's counterparty exposure.

28 Tax

Details of current and deferred taxes

in	2018	2017	2016
Current and deferred taxes (CHF million)			
Switzerland	135	82	133
Foreign	426	421	501
Current income tax expense	**561**	**503**	**634**
Switzerland	479	244	(125)
Foreign	321	1,994	(68)
Deferred income tax expense/(benefit)	**800**	**2,238**	**(193)**
Income tax expense	**1,361**	**2,741**	**441**
Income tax expense/(benefit) reported in shareholders' equity related to:			
Gains/(losses) on cash flow hedges	(28)	(24)	(6)
Cumulative translation adjustment	(7)	1	(4)
Unrealized gains/(losses) on securities	(5)	1	1
Actuarial gains/(losses)	(102)	172	136
Net prior service credit/(cost)	(33)	(32)	10
Share-based compensation and treasury shares	1	3	104

Reconciliation of taxes computed at the Swiss statutory rate

in	2018	2017	2016
Income/(loss) before taxes (CHF million)			
Switzerland	1,924	1,736	2,111
Foreign	1,448	57	(4,377)
Income/(loss) before taxes	**3,372**	**1,793**	**(2,266)**
Reconciliation of taxes computed at the Swiss statutory rate (CHF million)			
Income tax expense/(benefit) computed at the statutory tax rate of 22%	742	394	(499)
Increase/(decrease) in income taxes resulting from			
Foreign tax rate differential	107	(110)	(498)
Non-deductible amortization of other intangible assets and goodwill impairment	3	0	1
Other non-deductible expenses	457	354	1,540
Additional taxable income	5	0	87
Lower taxed income	(190)	(276)	(219)
(Income)/loss taxable to noncontrolling interests	12	7	(11)
Changes in tax law and rates	(2)	2,095	145
Changes in deferred tax valuation allowance	(106)	123	76
Change in recognition of outside basis difference	(32)	(19)	218
Tax deductible impairments of Swiss subsidiary investments	(65)	88	(68)
(Windfall tax benefits) /shortfall tax charges on share-based compensation	10	91	–
Other	420	(6)	(331)
Income tax expense	**1,361**	**2,741**	**441**

2018

Foreign tax rate differential of CHF 107 million reflected a foreign tax expense mainly driven by profits made in higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to profits incurred in lower tax jurisdictions, mainly in Singapore. The foreign tax rate expense of CHF 747 million comprised not only the foreign tax expense based on statutory tax rates but also the tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 457 million included the impact of CHF 325 million relating to non-deductible interest expenses (including a contingency accrual of CHF 92 million), CHF 49 million relating to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 15 million relating to non-deductible fines, and other various smaller non-deductible expenses.

Lower taxed income of CHF 190 million included a tax benefit of CHF 66 million related to non-taxable dividend income, CHF 48 million related to non-taxable life insurance income, CHF 33 million related to concessionary and lower taxed income, CHF 23 million related to exempt income, and various smaller items.

Changes in deferred tax valuation allowances of CHF 106 million included a tax benefit from the release of valuation allowances of CHF 191 million, mainly in respect of two of the Group's operating entities in the UK. Also included was the net impact of the increase in valuation allowances on deferred tax assets of CHF 85 million, mainly in respect of one of the Group's operating entities in Switzerland.

Other of CHF 420 million included CHF 202 million relating to the tax impact of transitional adjustments arising on the first adoption of IFRS 9 for own credit movements, CHF 130 million from own credit valuation gains, CHF 65 million relating to the US Base Erosion and Anti-abuse Tax (BEAT), CHF 56 million relating to the net re-assessment of deferred tax balances in respect of one of the Group's operating entities in Switzerland, CHF 26 million relating to the increase of tax contingency accruals, and other smaller balances. This was partially offset by prior year adjustments of CHF 76 million.

2017

Foreign tax rate differential of CHF 110 million reflected a foreign tax benefit mainly driven by losses made in higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to losses incurred in lower tax jurisdictions, mainly in Guernsey. The foreign tax rate expense of CHF 2,415 million comprised not only the foreign tax benefit based on statutory tax rates but also the tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 354 million included the impact of CHF 217 million relating to non-deductible interest expenses (including a contingency accrual of CHF 155 million), CHF 57 million related to the non-deductible portion of the litigation provisions and settlement charges, CHF 27 million related to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 10 million related to non-deductible foreign exchange losses, and other various smaller non-deductible expenses of CHF 43 million.

Lower taxed income of CHF 276 million included a tax benefit of CHF 86 million related to non-taxable life insurance income, CHF 78 million related to non-taxable dividend income, CHF 31 million in respect of income taxed at rates lower than the statutory tax rate, CHF 25 million related to exempt income, and various smaller items.

Changes in tax law and rates of CHF 2,095 million mainly reflected the impact of the US tax reform enacted on December 22, 2017 which resulted in a reduction of the federal corporate income tax rate from 35% to 21%, effective as of January 1, 2018. The US tax reform required a re-assessment of the deferred tax assets.

Changes in deferred tax valuation allowances of CHF 123 million included the net impact of the increase in valuation allowances on deferred tax assets of CHF 320 million, mainly in respect of two of the Group's operating entities in the UK. Also included was a tax benefit from the release of valuation allowances of CHF 197 million, mainly in respect of two of the Group's operating entities, one in the UK and one in Switzerland.

Other of CHF 6 million included CHF 105 million from own credit valuation gains, CHF 85 million relating to tax deductibility of previously taken litigation accruals and CHF 49 million from a favorable court decision, partially offset by CHF 248 million relating to the net re-assessment of deferred tax balances in respect of two of the Group's operating entities in Switzerland reflecting the establishment of Credit Suisse Asset Management & Investor Services (Schweiz) Holding AG, the impact of adverse earnings mix of the current year and changes in forecasted future profitability, CHF 17 million from prior year adjustments and CHF 16 million relating to the increase of tax contingency accruals. The remaining balance included various smaller items.

2016

Foreign tax rate differential of CHF 498 million reflected a foreign tax benefit mainly driven by losses made in higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to profits earned in lower tax jurisdictions, mainly the Bahamas. The foreign tax rate expense of CHF 433 million was not only impacted by the foreign tax benefit based on statutory tax rates but also by tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 1,540 million included the impact of CHF 983 million related to the non-deductible portion of the litigation provisions and settlement charges, CHF 420 million relating to non-deductible interest expenses, CHF 52 million related to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 31 million related to non-deductible foreign exchange losses, CHF 25 million related to onerous lease provisions, and other various smaller non-deductible expenses of CHF 29 million.

Lower taxed income of CHF 219 million included a tax benefit of CHF 71 million related to non-taxable life insurance income, CHF 58 million related to non-taxable dividend income, CHF 19 million in respect of income taxed at rates lower than the statutory tax rate, CHF 11 million related to exempt income, and various smaller items.

Changes in tax law and rates of CHF 145 million reflected a tax expense of CHF 139 million caused by the reduction of deferred tax assets from the enactment of UK corporation tax rate changes, and CHF 6 million related to changes in other countries.

Changes in deferred tax valuation allowances of CHF 76 million included the net impact of the increase in valuation allowances on deferred tax assets of CHF 308 million, mainly in respect of four of the Group's operating entities, two in the UK, one in Hong Kong and one in Switzerland. Additionally, 2016 included an accrual of valuation allowances of CHF 91 million for previously recognized deferred tax assets in respect of one of the Group's operating entities in Hong Kong. Also included was a tax benefit from the release of valuation allowances of CHF 193 million, mainly in respect of one of the Group's operating entities in the UK. The change in UK corporation tax rates caused a release of valuation allowances of CHF 130 million in respect of four of the Group's operating entities in the UK.

Change in recognition of outside basis difference of CHF 218 million reflected a tax expense related to the expected reversal of the outside basis differences relating to Swiss subsidiary investments.

Other of CHF 331 million included a tax benefit of CHF 392 million relating to the re-assessment of deferred tax balances in Switzerland reflecting changes in forecasted future profitability, CHF 37 million from own credit valuation gains and CHF 33 million from prior year adjustments, partially offset by CHF 89 million tax litigation expense and associated interest and penalties relating to two Italian income tax matters which have been resolved as part of an agreement with the Italian tax authorities, and CHF 22 million relating to the increase of tax contingency accruals. The remaining balance included various smaller items.

As of December 31, 2018, the Group had accumulated undistributed earnings from foreign subsidiaries of CHF 9.6 billion compared to CHF 5.1 billion as of December 31, 2017. The increase compared to the end of 2017 reflected a reserve transfer in one of the Group's entities. No deferred tax liability was recorded in respect of those amounts as these earnings are considered indefinitely reinvested. It is not practicable to estimate the amount of unrecognized deferred tax liabilities for these undistributed foreign earnings.

Deferred tax assets and liabilities

end of	2018	2017
Deferred tax assets and liabilities (CHF million)		
Compensation and benefits	957	1,103
Loans	192	330
Investment securities	1,986	1,039
Provisions	582	441
Derivatives	62	97
Real estate	285	337
Net operating loss carry-forwards	6,227	6,829
Goodwill and intangible assets	518	696
Other	198	135

Gross deferred tax assets before valuation allowance	**11,007**	**11,007**
Less valuation allowance	(4,021)	(4,279)
Gross deferred tax assets net of valuation allowance	**6,986**	**6,728**
Compensation and benefits	(426)	(512)
Loans	(87)	(36)
Investment securities	(1,170)	(197)
Provisions	(369)	(520)
Business combinations	(1)	(1)
Derivatives	(214)	(154)
Real estate	(60)	(54)
Other	(154)	(126)
Gross deferred tax liabilities	**(2,481)**	**(1,600)**
Net deferred tax assets	**4,505**	**5,128**
of which deferred tax assets	4,943	5,522
of which net operating losses	1,647	2,213
of which deductible temporary differences	3,296	3,309
of which deferred tax liabilities	(438)	(394)

The decrease in net deferred tax assets from 2017 to 2018 of CHF 623 million was primarily due to the impact of CHF 694 million related to current year earnings and CHF 50 million from the re-measurement of deferred tax balances in Switzerland. These decreases were partially offset by the tax impacts directly recorded in equity and other comprehensive income, mainly related to the pension plan re-measurement and other tax recorded directly in equity of CHF 98 million and foreign exchange

translation gains of CHF 23 million, which are included within the currency translation adjustments recorded in AOCI.

The most significant net deferred tax assets arise in the US and Switzerland and these decreased from CHF 4,809 million, net of a valuation allowance of CHF 541 million as of the end of 2017, to CHF 4,175 million, net of a valuation allowance of CHF 584 million as of the end of 2018.

Due to uncertainty concerning its ability to generate the necessary amount and mix of taxable income in future periods, the Group recorded a valuation allowance against deferred tax assets in the amount of CHF 4.0 billion as of December 31, 2018 compared to CHF 4.3 billion as of December 31, 2017.

Amounts and expiration dates of net operating loss carry-forwards

end of 2018	Total
Net operating loss carry-forwards (CHF million)	
Due to expire within 1 year	108
Due to expire within 2 to 5 years	6,658
Due to expire within 6 to 10 years	1,404
Due to expire within 11 to 20 years	6,798
Amount due to expire	**14,968**
Amount not due to expire	18,631
Total net operating loss carry-forwards	**33,599**

Movements in the valuation allowance

in	2018	2017	2016
Movements in the valuation allowance (CHF million)			
Balance at beginning of period	**4,279**	**4,188**	**3,905**
Net changes	(258)	91	283
Balance at end of period	**4,021**	**4,279**	**4,188**

As part of its normal practice, the Group has conducted a detailed evaluation of its expected future results. This evaluation is dependent on management estimates and assumptions in developing the expected future results, which are based on a strategic business planning process influenced by current economic conditions and assumptions of future economic conditions that are subject to change. This evaluation took into account both positive and negative evidence related to expected future taxable income and also considered stress scenarios. This evaluation has indicated the expected future results that are likely to be earned in jurisdictions where the Group has significant gross deferred tax assets, primarily in the US, Switzerland and the UK. The Group then compared those expected future results with the applicable law governing utilization of deferred tax assets. US tax law allowed for a 20-year carry-forward period for existing net operating losses as of the end of 2017 and any new net operating losses will have an unlimited carry-forward period, Swiss tax law allows for a seven-year carry-forward period for net operating losses and UK tax law allows for an unlimited carry-forward period for net operating losses.

Tax benefits associated with share-based compensation

in	2018	2017	2016
Tax benefits associated with share-based compensation (CHF million)			
Tax benefits recorded in the consolidated statements of operations [1]	242	314	391
Windfall tax benefits/(shortfall tax charges) recorded in additional paid-in capital [2]	–	–	(110)

1 Calculated at the statutory tax rate before valuation allowance considerations.

2 As a result of the adoption of ASU 2016-09 windfall tax benefits and shortfall tax charges on share-based compensation are recognized in the consolidated statements of operations and no longer in additional paid-in capital.

> Refer to “Note 29 – Employee deferred compensation” for further information on share-based compensation.

If, upon settlement of share-based compensation, the tax deduction exceeds the cumulative compensation cost that the Group had recognized in the consolidated financial statements, the utilized tax benefit associated with any excess deduction is considered a “windfall” and recognized in the consolidated statements of operations and reflected as an operating cash inflow in the consolidated statements of cash flows. If, upon settlement, the tax deduction is lower than the cumulative compensation cost that the Group had recognized in the consolidated financial statements, the tax charge associated with the lower deduction is considered a “shortfall”. Tax charges arising on shortfalls are recognized in the consolidated statements of operations.

Uncertain tax positions

US GAAP requires a two-step process in evaluating uncertain income tax positions. In the first step, an enterprise determines whether it is more likely than not that an income tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. Income tax positions meeting the more-likely-than-not recognition threshold are then measured to determine the amount of benefit eligible for recognition in the consolidated financial statements. Each income tax position is measured at the largest amount of tax benefit that is more likely than not to be realized upon ultimate settlement.

Reconciliation of the beginning and ending amount of gross unrecognized tax benefits

	2018	2017	2016
Movements in gross unrecognized tax benefits (CHF million)			
Balance at beginning of period	**481**	**410**	**369**
Increases in unrecognized tax benefits as a result of tax positions taken during a prior period	10	131	52
Decreases in unrecognized tax benefits as a result of tax positions taken during a prior period	(2)	(104)	(43)
Increases in unrecognized tax benefits as a result of tax positions taken during the current period	112	117	17
Decreases in unrecognized tax benefits relating to settlements with tax authorities	0	(73)	(2)
Reductions to unrecognized tax benefits as a result of a lapse of the applicable statute of limitations	(4)	(3)	(7)
Other (including foreign currency translation)	(23)	3	24
Balance at end of period	**574**	**481**	**410**
of which, if recognized, would affect the effective tax rate	574	481	410

Interest and penalties

in	2018	2017	2016
Interest and penalties (CHF million)			
Interest and penalties recognized in the consolidated statements of operations	(28)	29	2
Interest and penalties recognized in the consolidated balance sheets	87	115	86

Interest and penalties are reported as tax expense. The Group is currently subject to ongoing tax audits, inquiries and litigation with the tax authorities in a number of jurisdictions, including Brazil, the Netherlands, the US, the UK and Switzerland. Although the timing of completion is uncertain, it is reasonably possible that some of these will be resolved within 12 months of the reporting date. It is reasonably possible that there will be a decrease of between zero and CHF 26 million in unrecognized tax benefits within 12 months of the reporting date.

The Group remains open to examination from federal, state, provincial or similar local jurisdictions from the following years onward in these major countries: Brazil – 2014; the UK – 2012; Switzerland – 2011; the US – 2010; and the Netherlands – 2006.

29 Employee deferred compensation

Payment of deferred compensation to employees is determined by the nature of the business, role, location and performance of the employee. Unless there is a contractual obligation, granting deferred compensation is solely at the discretion of the Compensation Committee and senior management. Special deferred compensation granted as part of a contractual obligation is typically used to compensate new senior employees for forfeited awards from previous employers upon joining the Group. It is the Group's policy not to make multi-year guarantees.

Compensation expense recognized in the consolidated statement of operations for share-based and other awards that were granted as deferred compensation is recognized in accordance with the specific terms and conditions of each respective award and is primarily recognized over the future requisite service and vesting period, which is determined by the plan, retirement eligibility of employees, two-year moratorium periods on early retirement and certain other terms. All deferred compensation plans are subject to restrictive covenants, which generally include non-compete and non-solicit provisions. Compensation expense for share-based and other awards that were granted as deferred compensation also includes the current estimated outcome of applicable performance criteria, estimated future forfeitures and mark-to-market adjustments for certain cash awards that are still outstanding.

The following tables show the compensation expense for deferred compensation awards granted in 2018 and prior years that was recognized in the consolidated statements of operations during 2018, 2017 and 2016, the total shares delivered, the estimated unrecognized compensation expense for deferred compensation awards granted in 2018 and prior years outstanding as of December 31, 2018 and the remaining requisite service period over which the estimated unrecognized compensation expense will be recognized. The estimated unrecognized compensation expense was based on the fair value of each award on the grant date and included the current estimated outcome of relevant performance criteria and estimated future forfeitures but no estimate for future mark-to-market adjustments. The recognition of compensation expense for the deferred compensation awards granted in February 2019 began in 2019 and thus had no impact on the 2018 consolidated financial statements.

Deferred compensation awards for 2018

In February 2019, the Group granted share awards, performance share awards and Contingent Capital Awards (CCA) as deferred compensation. Deferred compensation was awarded to employees with total compensation of CHF/USD 250,000 or the local currency equivalent or higher.

Deferred compensation expense

in	2018	2017	2016
Deferred compensation expense (CHF million)			
Share awards	526	529	628
Performance share awards	382	348	370
Contingent Capital Awards	154	280	235
Contingent Capital share awards	2	18	30
Capital Opportunity Facility awards	12	14	13
Plus Bond awards [1]	–	–	5
2008 Partner Asset Facility awards [2]	–	7	13
Other cash awards	263	440	335
Total deferred compensation expense	**1,339**	**1,636**	**1,629**
Total shares delivered (million)			
Total shares delivered	46.6	42.0	42.1

1 Compensation expense primarily relates to mark-to-market changes of the underlying assets of the Plus Bonds and the amortization of the voluntary Plus Bonds elected in the first quarter of 2013 and expensed over a three-year period.

2 Compensation expense mainly includes the change in the underlying fair value of the indexed assets during the period.

Estimated unrecognized deferred compensation

end of	2018
Estimated unrecognized compensation expense (CHF million)	
Share awards	466
Performance share awards	167
Contingent Capital Awards	141
Other cash awards	179
Total	**953**
Aggregate remaining weighted-average requisite service period (years)	
Aggregate remaining weighted-average requisite service period	1.3

Does not include the estimated unrecognized compensation expense relating to grants made in 2019 for 2018.

Share awards

Share awards granted in February 2019 are similar to those granted in February 2018. Each share award granted entitles the holder of the award to receive one Group share, subject to service conditions. Share awards vest over three years with one third of the share awards vesting on each of the three anniversaries of the grant date (ratable vesting), with the exception of awards granted to individuals classified as risk managers or senior managers under the UK PRA Remuneration Code or similar regulations in other jurisdictions. Share awards granted to risk managers vest over five years with one fifth of the award vesting on each of the five anniversaries of the grant date, while share awards granted to senior managers vest over five years commencing on the third anniversary of the grant date, with one fifth of the award vesting on each of the third to seventh anniversaries of the grant

date. Share awards are expensed over the service period of the awards. The value of the share awards is solely dependent on the Group share price at the time of delivery.

The Group's share awards include other awards, such as blocked shares and special awards, which may be granted to new employees. Other share awards entitle the holder to receive one Group share and are generally subject to continued employment with the Group, contain restrictive covenants and cancellation provisions and generally vest between zero and five years.

On February 15, 2019, the Group granted 55.6 million share awards with a total value of CHF 638 million. The number of share awards granted to employees was generally determined by dividing the deferred component of variable compensation being granted as share awards by the average price of a Group share over the ten consecutive trading days ended February 28, 2019. The fair value of each share award was CHF 11.75, the Group share price on the grant date. The majority of share awards granted include the right to receive dividend equivalents on vested shares. The estimated unrecognized compensation expense of CHF 629 million was determined based on the fair value of the awards on the grant date, includes the current estimated future forfeitures and will be recognized over the vesting period, subject to early retirement rules.

Share awards granted for previous years

For compensation year	2018	2017	2016
Shares awarded (million)	55.6	34.1	37.8
Value of shares awarded (CHF million)	638	613	566
Fair value of each share awarded (CHF) [1]	11.75	17.22	15.42

1 Based on the Group's share price on the grant date.

In order to comply with Capital Requirements Directive IV requirements, employees who hold key roles in respect of certain Group subsidiaries receive shares that are subject to transfer restrictions for 50% of the amount that would have been paid to them in cash. These shares are vested at the time of grant but remain blocked, that is, subject to transfer restrictions, for six months to three years from the date of grant, depending on the location.

On February 15, 2019, the Group granted 3.0 million blocked shares with a total value of CHF 35 million that vested immediately upon grant, have no future service requirements and were attributed to services performed in 2018.

Blocked share awards granted for previous years

For compensation year	2018	2017	2016
Blocked shares awarded (million)	3.0	2.1	2.5
Value of shares awarded (CHF million)	35	38	37

Share award activities

	2018		2017		2016	
	Number of share awards in million	Weighted-average grant-date fair value in CHF	Number of share awards in million	Weighted-average grant-date fair value in CHF	Number of share awards in million	Weighted-average grant-date fair value in CHF
Share awards						
Balance at beginning of period	**84.9**	**15.73**	**73.2**	**18.77**	**80.3**	**21.58**
Granted	43.8	16.91	54.3[1]	14.53	39.7	17.47
Settled	(40.7)	16.09	(38.2)	19.74	(37.7)	22.64
Forfeited	(4.8)	16.24	(4.4)	16.47	(9.1)	21.87
Balance at end of period	**83.2**	**16.15**	**84.9**	**15.73**	**73.2**	**18.77**
of which vested	8.6	–	8.5	–	8.1	–
of which unvested	74.6	–	76.4	–	65.1	–

1

Includes an adjustment for share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional shares granted.

Performance share awards

Managing directors and all material risk takers and controllers (employees whose activities are considered to have a potentially material impact on the Group's risk profile) received a portion of their deferred variable compensation in the form of performance share awards. Performance share awards are similar to share awards, except that the full balance of outstanding performance share awards, including those awarded in prior years, are subject to performance-based malus provisions.

Performance share awards granted from 2016 and onward are subject to a negative adjustment in the event of a divisional loss by the division in which the employees worked as of December 31, 2018, or a negative ROE of the Group, whichever results in a larger adjustment. For employees in corporate functions and the Strategic Resolution Unit, the negative adjustment only applies in the event of a negative ROE of the Group and is not linked to the performance of the divisions. The basis for the ROE calculation may vary from year to year, depending on the Compensation Committee's determination for the year in which the performance shares are granted.

On February 15, 2019, the Group granted 46.1 million performance share awards with a total value of CHF 532 million. The number of performance share awards granted to employees was generally determined by dividing the deferred component of variable compensation being granted as performance share awards by the average price of a Group share over the ten consecutive trading days ended February 28, 2019. The fair value of each performance share award was CHF 11.75, the Group share price on the grant date. The majority of performance share awards granted include the right to receive dividend equivalents on vested shares. The estimated unrecognized compensation expense of CHF 521 million was determined based on the fair value of the awards on the grant date, includes the current estimated outcome of the relevant performance criteria and estimated future forfeitures and will be recognized over the vesting period, subject to early retirement rules. There was no negative adjustment applied to performance share awards granted in 2018 or in previous years.

Performance share awards granted for previous years

For compensation year	2018	2017	2016
Performance shares awarded (million)	46.1	26.5	29.7
Value of performance shares awarded (CHF million)	532	478	451
Fair value of each performance share awarded (CHF) [1]	11.75	17.22	15.42

1 Based on the Group's share price on the grant date.

Performance share award activities

	2018		2017		2016	
	Number of performance share awards in million	Weighted-average grant-date fair value in CHF	Number of performance share awards in million	Weighted-average grant-date fair value in CHF	Number of performance share awards in million	Weighted-average grant-date fair value in CHF
Performance share awards						
Balance at beginning of period	**54.2**	**15.88**	**48.4**	**19.11**	**55.9**	**21.01**
Granted	26.5	16.98	31.8[1]	14.41	21.4	18.62
Settled	(26.3)	16.07	(23.9)	20.41	(26.5)	22.67
Forfeited	(2.7)	16.26	(2.1)	16.38	(2.4)	19.64
Balance at end of period	**51.7**	**16.33**	**54.2**	**15.88**	**48.4**	**19.11**
of which vested	5.4	–	6.7	–	6.8	–
of which unvested	46.3	–	47.5	–	41.6	–

1 Includes an adjustment for performance share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of

deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional performance shares granted.

Contingent Capital Awards

CCA were granted in February 2019, 2018 and 2017 to managing directors and directors as part of the 2018, 2017 and 2016 deferred variable compensation and have rights and risks similar to those of certain contingent capital instruments issued by the Group in the market. CCA are scheduled to vest on the third anniversary of the grant date, other than those granted to individuals classified as risk managers or senior managers under the UK PRA Remuneration Code or similar regulations in other jurisdictions, where CCA vest on the fifth and seventh anniversaries of the grant date, respectively, and will be expensed over the vesting period. CCA generally provide a conditional right to receive semi-annual cash payments of interest equivalents until settled, with rates being dependent upon the vesting period and currency of denomination:

CCA granted in 2019, 2018 and 2017 that are denominated in US dollars and vest three years from the date of grant receive interest equivalents at a rate of 4.46%, 3.05% and 4.27%, respectively, per annum over the six-month US dollar London Interbank Offered Rate (LIBOR);

CCA granted in 2019, 2018 and 2017 that are denominated in Swiss francs and vest three years from the date of grant receive interest equivalents at a rate of 3.73%, 2.24% and 3.17%, respectively, per annum over the six-month Swiss franc LIBOR;

CCA granted in 2017 that are denominated in US dollars and vest five or seven years from the date of grant receive interest equivalents at a rate of 4.27% per annum over the six-month US-dollar LIBOR; and

CCA granted in 2017 that are denominated in Swiss francs and vest five or seven years from the date of grant receive interest equivalents at a rate of 3.03% and 2.93%, respectively, per annum over the six-month Swiss franc LIBOR.

The rates were set in line with market conditions at the time of grant and existing high-trigger and low-trigger contingent capital instruments that the Group has issued. For CCA granted in February 2019, employees who received compensation in Swiss francs received CCA denominated in Swiss francs and all other employees received CCA denominated in US dollars.

As CCA qualify as going concern loss-absorbing capital of the Group, the timing and form of distribution upon settlement is subject to approval by FINMA. At settlement, employees will receive either a contingent capital instrument or a cash payment based on the fair value of the CCA. The fair value will be determined by the Group. In the case of a cash settlement, the CCA award will be converted into the local currency of each respective employee.

CCA have loss-absorbing features such that prior to settlement, the principal amount of the CCA would be written down to zero and forfeited if any of the following trigger events were to occur:

the Group’s reported common equity tier 1 (CET1) ratio falls below 7%; or

FINMA determines that cancellation of the CCA and other similar contingent capital instruments is necessary, or that the Group requires public sector capital support, in either case to prevent it from becoming insolvent or otherwise failing.

On February 15, 2019, the Group awarded CHF 299 million of CCA that will be expensed over the vesting period. The estimated unrecognized compensation expense of CHF 273 million was determined based on the fair value of the awards on the grant date and includes the current estimated outcome of the relevant performance criteria, the estimated future forfeitures and the expected semi-annual cash payments of interest equivalents and will be recognized over the vesting period.

Contingent Capital Awards granted for previous years

For compensation year	2018	2017	2016
CCA awarded (CHF million)	299	241	229

Contingent Capital share awards

In March 2016, the Group executed a voluntary exchange offer, under which employees had the right to voluntarily convert all or a portion of their respective CCA into Contingent Capital share awards at a conversion price of CHF 14.57. CCA holders elected to convert CHF 226 million of their CCA into Contingent Capital share awards during the election period. This fair value represented an approximate conversion rate of 15%. Each Contingent Capital share award had a grant-date fair value of CHF 14.45 and contains the same contractual term, vesting period, performance criteria and other terms and conditions as the original CCA.

Contingent Capital share award activities

	2018	2017	2016

Contingent Capital share awards (million)			
Balance at beginning of period	**8.4**	**13.5**	**–**
Granted	0.0	0.3[1]	16.4
Settled	(4.9)	(5.0)	(2.6)
Forfeited	(0.1)	(0.4)	(0.3)
Balance at end of period	**3.4**	**8.4**	**13.5**
of which vested	0.7	1.3	1.0
of which unvested	2.7	7.1	12.5

1
Includes an adjustment for Contingent Capital share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional Contingent Capital shares granted.

Capital Opportunity Facility awards

As part of the 2011 annual compensation process, the Group awarded a portion of deferred variable compensation for senior employees in the form of 2011 Partner Asset Facility (PAF2) units. PAF2 units were essentially fixed income structured notes

that are exposed to a portion of the credit risk that arises in the Group's derivative activities, including both current and possible future swaps and other derivative transactions.
PAF2 awards were linked to a portfolio of the Group's credit exposures, providing risk offset and capital relief. Due to regulatory changes, this capital relief would no longer be available. As a result, the Group restructured the awards, requiring PAF2 holders to reallocate the exposure of their awards from the pool of counterparty credit risks in the original PAF2 structure to one of the following options, or a combination thereof:
i) Capital Opportunity Facility (COF): participants elected for their award to be referenced to a COF. The COF is a seven-year facility that is linked to the performance of a portfolio of risk-transfer and capital mitigation transactions to be entered into with the Group chosen by a COF management team. The value of the COF awards will be reduced if there are losses from the COF portfolio, up to the full amount of the award. Participants who elect the COF will receive semi-annual US dollar cash distributions of 6.5% per annum until settlement in cash in 2021, and such semi-annual distributions will reduce the cash settlement amount payable in 2021; and
ii) CCA: participants elected to receive CCA, with similar terms to the instruments granted as part of the 2013 compensation awards.
2008 Partner Asset Facility awards
As part of the 2008 annual compensation process, the Group granted employees in the former Investment Banking division with the corporate title of managing director or director the majority of the deferred compensation in the form of 2008 Partner Asset Facility (PAF) awards, denominated in US dollars. The PAF awards were indexed to, and represented a first-loss interest in, a specified pool of illiquid assets (Asset Pool) that originated in the former Investment Banking division.
In the final year of the contractual term, the PAF holders received a final settlement in cash equal to the notional value, less all previous cash payments made to the PAF holder, plus any related gains or less any related losses on the liquidation of the Asset Pool. During 2017, the final settlement of the outstanding PAF awards of CHF 789 million was made.
Other cash awards
Other cash awards include certain special awards as well as voluntary deferred compensation plans and employee investment plans. For certain special awards, compensation expense was primarily driven by their vesting schedule; for other cash awards, compensation expense was driven by mark to market and performance adjustments, as the majority of the awards are fully vested.
During 2018, the Group granted deferred fixed cash compensation of CHF 98 million to certain employees in the Americas. This compensation will be expensed in the Global Markets, Investment Banking & Capital Markets and International Wealth Management divisions over a three-year vesting period from the grant date. Amortization of this compensation totaled CHF 52 million in 2018.
During 2017, the Group granted deferred cash retention awards of CHF 65 million relating to the reorganization of the Asia Pacific business. These awards will be expensed over a two-year vesting period from the grant date. Amortization of these awards totaled CHF 28 million in 2017 and was recognized in the Corporate Center. The Group granted deferred fixed cash awards of CHF 90 million to certain employees in the US. These awards will be expensed in the Global Markets, Investment Banking & Capital Markets and International Wealth Management divisions over a three-year vesting period from the grant date. Amortization of these awards totaled CHF 48 million in 2017.
In 2016, the Group granted deferred share and cash retention awards of CHF 249 million relating to the reorganization of the Global Markets and Investment Banking & Capital Markets businesses. These awards will be expensed over a vesting period of up to seven years from the grant date. Amortization of these awards in 2016 of CHF 118 million was recognized in the Corporate Center.
Delivered shares
In 2018 and 2017, the Group fully covered its share delivery obligations through market purchases. In 2016, the Group's share delivery obligations were covered mainly through the issuance of shares from conditional capital, with a portion covered by shares purchased in the market.

30 Related parties

Parties are considered to be related if one party has the ability to control the other party or exercise significant influence over the other party in making financial or operational decisions, or if another party controls both. The Group's related parties include key management personnel, close family members of key management personnel and entities that are controlled, significantly influenced, or for which significant voting power is held, by key management personnel or their close family members. Key management personnel are those individuals having authority and responsibility for planning, directing and controlling the activities of the Group, that is, members of the Executive Board and the Board of Directors.

Banking relationships

The Group is a global financial services provider. Many of the members of the Executive Board and the Board of Directors, their close family members or companies associated with them maintain banking relationships with the Group. The Group or any of its banking subsidiaries may from time to time enter into financing and other banking agreements with companies in which current members of the Executive Board or the Board of Directors have a significant influence as defined by the SEC, such as holding executive and/or board level roles in these companies. With the exception of the transactions described below, relationships with members of the Executive Board or the Board of Directors and such companies are in the ordinary course of business and are entered into on an arm's length basis. Also, unless otherwise noted, all loans to members of the Executive Board, members of the Board of Directors, their close family members or companies associated with them were made in the ordinary course of business, were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons and did not involve more than the normal risk of collectability or present other unfavorable features. As of December 31, 2018, 2017 and 2016, there were no loan exposures to such related parties that were not made in the ordinary course of business and at prevailing market conditions.

Related party loans

Executive Board and Board of Directors loans

The majority of loans outstanding to members of the Executive Board and the Board of Directors are mortgages or loans against securities.

All mortgage loans to members of the Executive Board are granted either with variable or fixed interest rates over a certain period. Typically, mortgages are granted for periods of up to ten years. Interest rates applied are based on refinancing costs plus a margin, and interest rates and other terms are consistent with those applicable to other employees. Loans against securities are granted at interest rates and on terms applicable to such loans granted to other employees. The same credit approval and risk assessment procedures apply to members of the Executive Board as for other employees. Unless otherwise noted, all loans to members of the Executive Board were made in the ordinary course of business and substantially on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons and in consideration of the terms which apply to all Group employees. These loans did not involve more than the normal risk of collectability or present other unfavorable features. The highest loan outstanding to an Executive Board member was CHF 6 million to Helman Sitohang as of December 31, 2018.

Members of the Board of Directors with loans, including the Chairman of the Board of Directors, do not benefit from employee conditions, but are subject to conditions applied to clients with a comparable credit standing. Unless otherwise noted, all loans to members of the Board of Directors were made in the ordinary course of business and substantially on the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other persons. Such loans did not involve more than the normal risk of collectability or present other unfavorable features.

Executive Board and Board of Directors loans

in	2018	2017	2016
Executive Board loans (CHF million)			
Balance at beginning of period	**26**[1]	**25**	**26**
Additions	8	3	6
Reductions	(1)	(2)	(7)
Balance at end of period	**33**[1]	**26**	**25**

Board of Directors loans (CHF million)			
Balance at beginning of period	**11**[2]	**10**	**8**
Additions	0	1	3
Reductions	(1)	0	(1)
Balance at end of period	**10**[2]	**11**	**10**

1
The number of individuals with outstanding loans at the beginning and the end of the year was eight.
2
The number of individuals with outstanding loans at the beginning and the end of the year was four.

Equity method investees loans

The Group or its subsidiaries grant loans to equity method investees in the normal course of business.

> Refer to “Note 40 – Significant subsidiaries and equity method investments” for a list of equity method investments.

Loans made by the Group or any subsidiaries to equity method investees

in	2018	2017	2016
Loans to equity method investees (CHF million)			
Balance at beginning of period	**173**	**173**	**135**
Net borrowings/(repayments)	158	0	38
Balance at end of period	**331**	**173**	**173**

Other related party transactions

Tier 1 capital instruments

Beginning in February 2011, the Group entered into agreements with entities affiliated with Qatar Investment Authority (QIA) and The Olayan Group, each of which has significant holdings of Group shares and other Group financial products, to purchase tier 1 high-trigger capital instruments. The agreements were subsequently amended in 2012 and 2013.

In October 2018, the Group redeemed the following tier 1 high-trigger capital instruments:

- USD 1.725 billion 9.5%, held by an affiliate of The Olayan Group;
- USD 1.72 billion 9.5%, held by an affiliate of QIA; and
- CHF 2.5 billion 9.0%, held by an affiliate of QIA.

At the time of the original transaction, the Group determined that this was a material transaction and deemed QIA and The Olayan Group to be related parties of the Group's then Board of Directors members Jassim Bin Hamad J.J. Al Thani and Aziz R.D. Syriani for purposes of evaluating the terms and corporate governance of the original transaction. At that time, the Board of Directors (except for Mr. Bin Hamad J.J. Al Thani and Mr. Syriani, who abstained from participating in the determination process) determined that the terms of the original transaction, given its size, the nature of the contingent capital instrument, for which there was no established market, and the terms of the notes issued and held by QIA and The Olayan Group, were fair. As of April 26, 2013 and April 28, 2017, respectively, Mr. Syriani and Mr. Bin Hamad J.J. Al Thani retired from the Board of Directors and no other person affiliated with The Olayan Group or with QIA has been elected as a member of the Board of Directors.

Other

In December 2018, a subsidiary of the Group executed a transaction with an affiliate to sell a minority interest in a trading platform for a gain of approximately USD 80 million.

Liabilities due to own pension plans

Liabilities due to the Group's own defined benefit pension plans as of December 31, 2018 and 2017 of CHF 735 million and CHF 336 million, respectively, were reflected in various liability accounts in the Group's consolidated balance sheets.

31 Pension and other post-retirement benefits

The Group sponsors defined contribution pension plans, defined benefit pension plans and other post-retirement defined benefit plans such as post-retirement health care.

Defined contribution pension plans

Defined contribution plans provide each participant with an individual account. The benefits to be provided to a participant are solely based on the contributions made to that employee's account and are affected by income, expenses and gains and losses allocated to the account. As such, there are no stipulations of a defined annuity benefit at retirement and the participants bear the full actuarial as well as investment risk.

The Group contributes to various defined contribution pension plans primarily in the US and the UK as well as other countries throughout the world. During 2018, 2017 and 2016, the Group contributed to these plans and recognized as expense CHF 153 million, CHF 165 million and CHF 161 million, respectively.

Defined benefit pension and other post-retirement defined benefit plans

Defined benefit pension plans

Defined benefit pension plans are pension plans that define specific benefits for an employee upon that employee's retirement. These benefits are usually determined by taking into account the employee's salary, years of service and age of retirement. Retirees bear neither the actuarial risk (for example, the risk that the retirees of the plan live longer than expected), nor the investment risk (that is, that plan assets invested and associated returns will be insufficient to meet the expected benefits due to low or negative returns on contributions). The Group's funding policy for these plans is in accordance with local laws and tax requirements.

Swiss pension plan

The Group's most significant defined benefit pension plan, the Credit Suisse Swiss Pension Plan (Swiss pension plan), is located and covers its employees in Switzerland and is set up as a trust domiciled in Zurich. The Swiss pension plan provides benefits in the event of retirement, death and disability and meets or exceeds the minimum benefits required under the Swiss Federal Law on Occupational Retirement, Survivors' and Disability Pension Plans (BVG). Benefits in the Swiss pension plan are determined on the basis of the accumulated employer and employee contributions and accumulated interest credited. Although the Swiss pension plan is largely defined contribution in nature, it is treated as a defined benefit plan under US GAAP, mainly due to a guaranteed minimum return on contributions and guaranteed payment of lifetime pensions. As of December 31, 2018 and 2017, the Swiss pension plan comprised 69% and 73%, respectively, of all the Group's employees participating in defined benefit plans, 82% and 81%, respectively, of the fair value of plan assets, and 83% and 82%, respectively, of the pension benefit obligation of the Group's defined benefit plans.

Employee contributions in the savings section depend on their age and are determined as a percentage of the pensionable salary. The employees can select between three different levels of contributions which vary between 5% and 14% depending on their age. The Group's contribution varies between 7.5% and 25% of the pensionable salary depending on the employee's age.

The Swiss Federal council sets the minimum statutory interest rate on savings balances on an annual basis that applies to the BVG minimum pensionable salary (1.0% as of January 1, 2019 and 2018). The statutory interest rate on savings balances does not apply to extra mandatory benefits. The Board of Trustees of the Swiss pension fund sets the interest rate to be applied on the accumulated savings balance on an annual basis.

When employees retire, their savings balance is converted into an annuity and the conversion rate is the percentage used to convert the assets accrued in the Swiss pension plan to an annual lifetime retirement pension. The level of the conversion rate depends on the life expectancy of future retirees and on the long-term potential for returns in the capital markets. The Board of Trustees of the Swiss pension plan has the responsibility to set the conversion rates for the plan. In December 2016, the Board of Trustees of the Swiss pension plan decided in favor of further decreases in conversion rates. In the future, decisions on conversion rates will be set for a planning horizon of at least eight years.

International pension plans

Various defined benefit pension plans cover the Group's employees outside Switzerland. These plans provide benefits in the event of retirement, death, disability or termination of employment. Retirement benefits under the international pension plans depend on age, contributions and salary. The Group's principal defined benefit pension plans outside Switzerland are located in the US and in the UK. Both of these plans are funded, closed to new participants and have ceased accruing new benefits. Smaller defined benefit pension plans, both funded and unfunded, are operated in other

locations.

Other post-retirement defined benefit plans

In the US, the Group's defined benefit plans provide post-retirement benefits other than pension benefits that primarily focus on health and welfare benefits for certain retired employees. In exchange for the current services provided by the employee, the Group promises to provide health and welfare benefits after the employee retires. The Group's obligation for that compensation is incurred as employees render the services necessary to earn their post-retirement benefits.

Components of net periodic benefit costs

				Defined benefit pension plans			Other post-retirement defined benefit plans		
	Switzerland			International			International		
in	2018	2017	2016	2018	2017	2016	2018	2017	2016
Net periodic benefit costs (CHF million)									
Service costs on benefit obligation	242	243	288	16	22	20	0	0	0
Interest costs on benefit obligation	63	57	141	86	91	124	5	6	8
Expected return on plan assets	(483)	(473)	(536)	(114)	(133)	(175)	0	0	0
Amortization of recognized prior service cost/(credit)	(126)	(131)	(116)	0	0	0	0	0	0
Amortization of recognized actuarial losses/(gains)	306	340	366	47	60	41	8	7	10
Settlement losses/(gains)	35	37	24	0	0	72	0	0	0
Curtailment losses/(gains)	(12)	(23)	(18)	(1)	(10)	0	0	0	0
Special termination benefits	38	19	22	0	0	0	0	0	0
Net periodic benefit costs/(credits)	**63**	**69**	**171**	**34**	**30**	**82**	**13**	**13**	**18**

Net periodic benefit costs of defined benefit plans

The net periodic benefit costs for defined benefit pension and other post-retirement defined benefit plans are the costs of the respective plan for a period during which an employee renders services. The actual amount to be recognized is determined using the standard actuarial methodology which considers, among other factors, current service cost, interest cost, expected return on plan assets and the amortization of both prior service cost/(credit) and actuarial losses/(gains) recognized in AOCI.

Service costs on benefit obligation reflected in compensation and benefits – other for 2018, 2017 and 2016 were CHF 258 million, CHF 265 million and CHF 308 million, respectively.

Since the second quarter of 2011, as part of its strategic plan, the Group has launched a number of cost efficiency measures, including headcount reduction. This resulted in curtailment gains of CHF 12 million, CHF 23 million and CHF 18 million in 2018, 2017 and 2016, respectively, reflecting the immediate recognition of a credit relating to the years of service no longer expected to be rendered. Additional costs of CHF 35 million, CHF 37 million and CHF 24 million in 2018, 2017 and 2016, respectively, related to the settlement of the pension obligation for employees in Switzerland whose employment has effectively been terminated or who have left the Group due to a sale of their business. Special termination benefit costs of CHF 38 million, CHF 19 million and CHF 22 million have been recognized in 2018, 2017 and 2016, respectively, relating to early retirements in Switzerland in the context of the cost efficiency measures.

During the second half of 2016, lump-sum settlement offers were made to terminated vested members of the pension fund in the US. As a result of members accepting this offer, there was an additional cost of CHF 72 million relating to the settlement of pension obligations for these members.

Benefit obligation

The benefit obligation is expressed as either accumulated benefit obligation (ABO) or PBO. While the ABO refers to the actuarial present value based on employee services rendered prior to that date and takes into account current and past compensation levels, the PBO also applies an assumption as to future compensation levels.

The table “Obligations and funded status of the plans” shows the changes in the PBO, the ABO, the fair value of plan assets and the amounts recognized in the consolidated balance sheets for the defined benefit pension and other post-retirement defined benefit plans.

US GAAP requires an employer to recognize the funded status of the defined benefit pension and other post-retirement defined benefit plans on the balance sheet. The funded status of these plans is determined as the difference between the fair value of plan assets and the PBO. The funded status may vary from year to year due to changes in the fair value of plan assets and variations of the PBO following changes in the underlying assumptions and census data used to determine the PBO. In 2018 and 2017, the curtailments, settlements and special termination benefits in Switzerland, which impacted the PBO, related to the headcount reduction in the context of the cost efficiency measures.

Effective January 1, 2017, the Board of Trustees of the Swiss pension plan changed a number of retirement benefits, reflecting the plan’s ability to finance benefits on an ongoing long-term basis. These changes reflected the prospective higher costs of providing retirement benefits due to lower expected asset returns, lower interest rates and increased life expectancy. These considerations have resulted in incremental reductions of conversion rates, the introduction of the reference age 65 for all insured persons, changes to the bridging pension related to the Swiss Old-Age and Survivors Insurance, enhanced lump-sum withdrawal options on retirement and the reduction of the maximum retirement pension. Furthermore, the Board of Trustees of the Swiss pension plan also agreed to improve death and disability benefits and to introduce a cohabiting partner’s pension.

Obligations and funded status of the plans

			Defined benefit pension plans		Other post-retirement defined benefit plans	
	Switzerland		International		International	
in / end of	2018	2017	2018	2017	2018	2017
PBO (CHF million) [1]						
Beginning of the measurement period	**15,885**	**15,885**	**3,390**	**3,337**	**173**	**184**
Plan participant contributions	204	205	0	0	0	0
Service cost	242	243	16	22	0	0
Interest cost	63	57	86	91	5	6
Plan amendments	20	0	10	0	0	0
Settlements	(125)	(144)	(1)	0	0	0
Curtailments	(8)	(22)	(1)	(11)	0	0
Special termination benefits	38	19	1	1	0	0
Actuarial losses/(gains)	(58)	471	(229)	171	(9)	2
Benefit payments	(829)	(829)	(233)	(287)	(11)	(11)
Exchange rate losses/(gains)	0	0	(88)	66	2	(8)
End of the measurement period	**15,432**	**15,885**	**2,951**	**3,390**	**160**	**173**
Fair value of plan assets (CHF million)						
Beginning of the measurement period	**16,996**	**15,951**	**4,088**	**4,000**	**0**	**0**
Actual return on plan assets	(454)	1,398	(141)	256	0	0
Employer contributions	433	415	19	22	11	11
Plan participant contributions	204	205	0	0	0	0
Settlements	(125)	(144)	(1)	0	0	0
Benefit payments	(829)	(829)	(233)	(287)	(11)	(11)
Exchange rate gains/(losses)	0	0	(128)	97	0	0
End of the measurement period	**16,225**	**16,996**	**3,604**	**4,088**	**0**	**0**
Funded status recognized (CHF million)						
Funded status of the plan – overfunded/(underfunded)	793	1,111	653	698	(160)	(173)
Funded status recognized in the consolidated balance sheet as of December 31	**793**	**1,111**	**653**	**698**	**(160)**	**(173)**
Total amount recognized (CHF million)						
Noncurrent assets	793	1,111	1,001	1,058	0	0
Current liabilities	0	0	(10)	(11)	(11)	(11)
Noncurrent liabilities	0	0	(338)	(349)	(149)	(162)
Net amount recognized in the consolidated balance sheet as of December 31	**793**	**1,111**	**653**	**698**	**(160)**	**(173)**
ABO (CHF million) [2]						
End of the measurement	**14,534**	**14,841**	**2,921**	**3,351**	**160**	**173**

period

1

Including estimated future salary increases.

2

Excluding estimated future salary increases.

The net amount recognized in the consolidated balance sheets as of December 31, 2018 and 2017 for the defined benefit pension plans was an overfunding of CHF 1,446 million and CHF 1,809 million, respectively.

In 2019, the Group expects to contribute CHF 384 million to the Swiss and international defined benefit pension plans and CHF 11 million to other post-retirement defined benefit plans.

PBO or ABO in excess of plan assets

The following table shows the aggregate PBO and ABO, as well as the aggregate fair value of plan assets for those plans with PBO in excess of plan assets and those plans with ABO in excess of plan assets as of December 31, 2018 and 2017, respectively.

Defined benefit pension plans in which PBO or ABO exceeded plan assets

	PBO exceeds fair value of plan assets[1]				ABO exceeds fair value of plan assets[1]			
	Switzerland		International		Switzerland		International	
December 31	2018	2017	2018	2017	2018	2017	2018	2017
PBO/ABO exceeded plan assets (CHF million)								
PBO	0	0	1,336	1,464	0	0	1,325	1,447
ABO	0	0	1,312	1,433	0	0	1,304	1,420
Fair value of plan assets	0	0	989	1,104	0	0	978	1,088

1 Includes only those defined benefit pension plans where the PBO/ABO exceeded the fair value of plan assets.

Amount recognized in AOCI and OCI

The following table shows the actuarial gains/(losses) and prior service credit/(cost) which were recorded in AOCI and subsequently recognized as components of net periodic benefit costs.

Amounts recognized in AOCI, net of tax

	Defined benefit pension plans		Other post-retirement defined benefit plans		Total	
end of	2018	2017	2018	2017	2018	2017
Amounts recognized in AOCI (CHF million)						
Actuarial gains/(losses)	(3,951)	(3,547)	(23)	(36)	(3,974)	(3,583)
Prior service credit/(cost)	384	519	3	3	387	522
Total	**(3,567)**	**(3,028)**	**(20)**	**(33)**	**(3,587)**	**(3,061)**

The following tables show the changes in OCI due to actuarial gains/(losses) and prior service credit/(cost) recognized in AOCI during 2018 and 2017 and the amortization of the aforementioned items as components of net periodic benefit costs for these periods as well as the amounts expected to be amortized in 2019.

Amounts recognized in OCI

	Defined benefit pension plans			Other post-retirement defined benefit plans			
in	Gross	Tax	Net	Gross	Tax	Net	Total net
2018 (CHF million)							
Actuarial gains/(losses)	(905)	182	(723)	9	(2)	7	(716)
Prior service credit/(cost)	(30)	4	(26)	0	0	0	(26)
Amortization of actuarial losses/(gains)	353	(68)	285	8	(2)	6	291
Amortization of prior service cost/(credit)	(126)	27	(99)	0	0	0	(99)
Immediate recognition due to curtailment/settlement	30	(6)	24	0	0	0	24
Total	**(678)**	**139**	**(539)**	**17**	**(4)**	**13**	**(526)**
2017 (CHF million)							
Actuarial gains/(losses)	406	(82)	324	(2)	1	(1)	323
Amortization of actuarial losses/(gains)	400	(76)	324	7	(3)	4	328
	(131)	26	(105)	0	0	0	(105)

Amortization of prior service cost/(credit)							
Immediate recognition due to curtailment/settlement	36	(8)	28	0	0	0	28
Total	**711**	**(140)**	**571**	**5**	**(2)**	**3**	**574**

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Amounts in AOCI, net of tax, expected to be amortized

	Defined benefit pension plans	Other post-retirement defined benefit plans
Amortization in 2019 (CHF million)		
Actuarial losses/(gains)	238	2
Prior service cost/(credit)	(122)	0
Total	**116**	**2**

Assumptions

The measurement of both the net periodic benefit costs and the benefit obligation is determined using explicit assumptions, each of which individually represents the best estimate of a particular future event.

Weighted-average assumptions used to determine net periodic benefit costs and benefit obligation

	Defined benefit pension plans						Other post-retirement defined benefit plans		
	Switzerland			International			International		
December 31	2018	2017	2016	2018	2017	2016	2018	2017	2016
Net periodic benefit cost (%)									
Discount rate - service costs	1.02	1.01	0.90	2.96	2.92	4.05	3.86	4.03	4.50
Discount rate - interest costs	0.41	0.37	0.90	2.77	2.79	4.05	3.28	3.48	4.50
Salary increases	0.50	0.50	0.80	2.97	3.55	3.56	–	–	–
Interest rate on savings balances	0.86	0.85	1.25	–	–	–	–	–	–
Expected long-term rate of return on plan assets	3.00	3.00	3.50	3.22	3.88	5.07	–	–	–
Benefit obligation (%)									
Discount rate	1.03	0.86	0.85	3.30	2.83	3.10	4.37	3.70	4.21
Salary increases	0.75	0.50	0.50	2.90	2.97	3.55	–	–	–
Interest rate on savings balances	1.03	0.86	0.85	–	–	–	–	–	–

Net periodic benefit cost and benefit obligation assumptions

The assumptions used to determine the benefit obligation as of the measurement date are also used to calculate the net periodic benefit costs for the 12-month period following this date.

The discount rates are determined based on yield curves, constructed from high-quality corporate bonds currently available and observable in the market and are expected to be available during the period to maturity of the pension benefits. In countries where there is no deep market in high-quality corporate bonds with longer durations, the best available market information, including governmental bond yields and risk premiums, is used to construct the yield curve. Credit Suisse adopted the spot rate approach for the valuation as of December 31, 2016, whereby individual spot rates on the yield curve are applied to each year's cash flow in measuring the plan's benefit obligation as well as future service costs and interest costs.

The assumption pertaining to salary increases is used to calculate the PBO, which is measured using an assumption as to future compensation levels.

When Credit Suisse estimates the interest rate on savings balances, expected future changes in the interest rate environment are taken into consideration. Specifically, Credit Suisse uses the cash flow weighted average of the yield

curve used for the discount rate as the best estimate for the interest rate on savings balances for these long term projections.
The expected long-term rate of return on plan assets assumption is applied to the market-related value of assets to calculate the expected return on plan assets as a component of the net periodic benefit costs. It reflects the average rate of returns expected on the funds invested or to be invested to provide for the benefits included in the PBO. In estimating that rate, appropriate consideration is given to the returns being earned by the plan assets and the rates of return expected to be available for reinvestment. The expected long-term rate of return on plan assets is based on total return forecasts, expected volatility and correlation estimates, reflecting interrelationships between and within asset classes held. Where possible, similar, if not related, approaches are followed to forecast returns for the various asset classes.
The expected long-term rate of return on debt securities reflects both accruing interest and price returns. The probable long-term relationship between the total return and certain exogenous variables is used, which links the total return forecasts on debt securities to forecasts of the macroeconomic environment.
The expected long-term rate of ROE securities is based on a two-stage dividend discount model which considers economic and market forecasts to compute a market-implied equity risk premium. Dividends are estimated using market consensus earnings and the historical payout ratio. A subsequent scenario analysis is used to stress test the level of the return.

The expected long-term rate of return on real estate is based on economic models that reflect both the rental and the capital market side of the direct real estate market. This allows for a replicable and robust forecasting methodology for expected returns on real estate equity, fund and direct market indices.

The expected long-term rate of return on private equity and hedge funds is estimated by determining the key factors in their historical performance using private equity and hedge fund benchmarks and indices. To capture these factors, multiple linear regression models with lagged returns are used.

Mortality assumptions are based on standard mortality tables and standard models and methodologies for projecting future improvements to mortality as developed and published by external independent actuarial societies and actuarial organizations.

Mortality tables and life expectancies for major plans

		Life expectancy at age 65 for a male member currently				Life expectancy at age 65 for a female member currently			
		aged 65		aged 45		aged 65		aged 45	
December 31		2018	2017	2018	2017	2018	2017	2018	2017
Life expectancy (years)									
Switzerland	BVG 2015 tables[1]	21.6	21.6	23.2	23.1	23.6	23.5	25.1	25.1
UK	SAPS S2 light tables[2]	23.7	23.8	25.3	25.4	24.8	24.8	26.5	26.6
US	RP-2014 mortality tables[3]	21.5	21.5	22.7	22.7	23.4	23.3	24.5	24.4

1
The BVG 2015 tables were used, which included final CMI projections, with a long-term rate of improvement of 1.25% per annum.

2
95% of Self-Administered Pension Scheme (SAPS) S2 light tables were used, which included final CMI projections, with a long-term rate of improvement of 1.5% per annum.

3
The Retirement Projection 2014 (RP-2014) mortality tables were used, with projections based on the Social Security Administration's intermediate improvement scale.

Under US GAAP, the assumptions used to value the PBO should always represent the best estimate as of the measurement date. Credit Suisse regularly reviews the actuarial assumptions used to value and measure the defined benefit obligation on a periodic basis as required by US GAAP.

> Refer to “Critical accounting estimates” in II – Operating and financial review and “Note 1- Summary of significant accounting policies” for further information.

Review of assumptions

As part of its reviews in 2016, 2017 and 2018, Credit Suisse concluded that additional refinements to the assumptions for the Swiss pension plan were required in order to reflect the best estimate. As a result, Credit Suisse enhanced its methodology for determining the actuarial assumptions for the Swiss pension plan as follows:

For estimating the discount rates used for discounting expected future cash flows when valuing the PBO, Credit Suisse introduced a more standardized approach for setting this assumption and improved the construction of the yield curve where the market for high-quality Swiss corporate bonds with long-term maturities was not sufficiently deep. The individual spot rates on the yield curve were applied for discounting each respective year’s cash flow in measuring the Swiss pension plan’s benefit obligation as of December 31, 2016.

In Switzerland, the mortality tables used for the occupational pension fund are the BVG series, which are currently reviewed every five years. Credit Suisse incorporates future improvements in life expectancy on a continuous basis by applying future expected improvements to the periodic BVG 2015 tables using the Continuous Mortality Investigation (CMI) model with a long-term improvement rate of 1.25%. As part of its review during 2017, Credit Suisse adopted the final version of the CMI model as published in early 2017 for the valuation of the Swiss pension plan. This resulted in an increase in the PBO of CHF 140 million in 2017.

In setting the assumption for the future interest rate on savings balances and future conversion rates, management took into consideration the expected level of future interest rates based on the yield curve used for the discount rate in addition to the legal minimum requirements, current rates approved by the Board of Trustees of the Swiss pension

fund and historical trends.

For discounting expected future cash flows, Credit Suisse adopted the “spot rate approach” for the valuation as of December 31, 2016, whereby individual spot rates on the yield curve are applied to each year’s cash flow in measuring the plan’s benefit obligation as well as future service costs and interest costs. Under the previous methodology, a single weighted-average discount rate derived from the yield curve was applied to each cash flow. Incorporating the “spot rate approach” reduced the 2017 net periodic benefit costs by CHF 87 million as compared to the prior methodology.

Health care cost assumptions

The health care cost trend is used to determine the appropriate other post-retirement defined benefit costs. In determining those costs, an annual weighted-average rate is assumed in the cost of covered health care benefits. The following table provides an overview of the assumed health care cost trend rates and the sensitivity of a one percentage point increase or decrease of the rate.

Health care cost trend rates and sensitivity

in / end of	2018	2017	2016
Health care cost trend rate (%)			
Annual weighted-average health care cost trend rate [1]	8.7	8.3	8.3
Increase/(decrease) in post-retirement expenses (CHF million)			
One percentage point increase in health care cost trend rates	0.1	0.1	0.2
One percentage point decrease in health care cost trend rates	(0.1)	(0.1)	(0.2)
Increase/(decrease) in post-retirement benefit obligation (CHF million)			
One percentage point increase in health care cost trend rates	3	3	4
One percentage point decrease in health care cost trend rates	(3)	(3)	(4)

1 The annual health care cost trend rate is assumed to decrease gradually to achieve the long-term health care cost trend rate of 5% by 2026.

The annual health care cost trend rate used to determine the net periodic benefit costs for 2019 is 8.7%.

Plan assets and investment strategy

Plan assets, which are assets that have been segregated and restricted to provide for plan benefits, are measured at their fair value as of the measurement date.

The Group's defined benefit pension plans employ a total return investment approach, whereby a diversified mix of debt and equity securities and alternative investments, specifically hedge funds and private equity, are used to maximize the long-term return of plan assets while incurring a prudent level of risk. The intent of this strategy is to meet or outperform plan liabilities over the long term. Risk tolerance is established through careful consideration of plan liabilities, plan funded status and corporate financial condition. Furthermore, equity securities are diversified across different geographic regions as well as across growth, value and small and large capitalization stocks. Real estate and alternative investments, such as private equity and hedge funds, are used to enhance long-term returns while improving portfolio diversification. Derivatives may be used to hedge or increase market exposure, but are not used to leverage the portfolio beyond the market value of the underlying investments. Investment risk is measured and monitored on an ongoing basis through periodic asset/liability studies and quarterly investment portfolio reviews. To limit investment risk, the Group pension plans follow defined strategic asset allocation guidelines. At times of major market uncertainties and stress, these guidelines may be further restricted.

As of December 31, 2018 and 2017, the total fair value of Group equity securities and options was CHF 76 million and CHF 118 million, respectively.

Fair value hierarchy of plan assets

> Refer to "Fair value measurement" in Note 35 – Financial instruments for discussion of the fair value hierarchy.

Fair value of plan assets

The following tables present the plan assets measured at fair value on a recurring basis as of December 31, 2018 and 2017 for the Group's defined benefit pension plans.

Plan assets measured at fair value on a recurring basis end of	2018					2017				
	Level 1	Level 2	Level 3	Assets measured at net asset value per share	Total	Level 1	Level 2	Level 3	Assets measured at net asset value per share	Total
Plan assets at fair value (CHF million)										
Cash and cash equivalents	763	0	0	0	763	384	0	0	0	384
Debt securities	3,742	150	34	751	4,677	3,144	325	37	742	4,248
of which corporates	3,742	150	34	751	4,677	3,144	325	37	742	4,248
Equity securities	5,113	0	0	0	5,113	6,780	10	0	0	6,790
Real estate	875	0	1,345	0	2,220	727	0	1,257	0	1,984
of which direct	0	0	1,297	0	1,297	0	0	1,244	0	1,244
of which indirect	875	0	48	0	923	727	0	13	0	740
Alternative investments	704	24	0	2,724	3,452	513	14	0	3,063	3,590
of which private equity	0	0	0	1,503	1,503	0	0	0	1,313	1,313
of which hedge funds	356	0	0	762	1,118	153	0	0	1,292	1,445
of which other	348	24	0	459	831	360	14	0	458	832
Switzerland	**11,197**	**174**	**1,379**	**3,475**	**16,225**	**11,548**	**349**	**1,294**	**3,805**	**16,996**
Cash and cash equivalents	86	123	0	0	209	70	133	0	0	203
Debt securities	1,889	846	0	328	3,063	1,991	1,080	0	370	3,441
of which governments	1,574	5	0	0	1,579	1,622	9	0	0	1,631
of which corporates	315	841	0	328	1,484	369	1,071	0	370	1,810
Equity securities	52	12	0	74	138	55	14	0	147	216
Real estate – indirect	0	0	0	29	29	0	0	0	27	27
Alternative investments	0	19	0	61	80	0	33	0	76	109
of which hedge funds	0	0	0	61	61	0	0	0	76	76
of which other	0	19[1]	0	0	19	0	33[1]	0	0	33
Other investments	0	85	0	0	85	0	92	0	0	92
International	**2,027**	**1,085**	**0**	**492**	**3,604**	**2,116**	**1,352**	**0**	**620**	**4,088**
Total plan assets at fair value	**13,224**	**1,259**	**1,379**	**3,967**	**19,829**	**13,664**	**1,701**	**1,294**	**4,425**	**21,084**

The Swiss pension fund uses exchange-traded futures to manage the economic exposure of the portfolio. Under US GAAP, these futures are not carried at fair value as they are settled on a daily basis and are considered brokerage receivables and payables. Consequently, they are excluded from this table. These futures

increased/(decreased) the economic exposure to cash and cash equivalents by CHF (86) million and CHF 1,405 million in 2018 and 2017, respectively, decreased the economic exposure to debt securities – corporate bonds by CHF 76 million in 2017 and (increased)/decreased the economic exposure to equity securities by CHF (86) million and CHF 1,329 million in 2018 and 2017, respectively.

1 Primarily related to derivative instruments.

Plan assets measured at fair value on a recurring basis for level 3

				Actual return on plan assets				
	Balance at beginning of period	Transfers in	Transfers out	On assets still held at reporting date	On assets sold during the period	Purchases, sales, settlements	Foreign currency translation impact	Balance at end of period
2018 (CHF million)								
Debt securities – corporates	37	0	0	0	0	(3)	0	34
Real estate	1,257	0	0	53	0	35	0	1,345
of which direct	1,244	0	0	53	0	0	0	1,297
of which indirect	13	0	0	0	0	35	0	48
Total plan assets at fair value	**1,294**	**0**	**0**	**53**	**0**	**32**	**0**	**1,379**
of which Switzerland	1,294	0	0	53	0	32	0	1,379
2017 (CHF million)								
Debt securities – corporates	7	35	0	1	0	(6)	0	37
Real estate	1,204	13	0	42	1	(3)	0	1,257
of which direct	1,204	0	0	42	1	(3)	0	1,244
of which indirect	0	13	0	0	0	0	0	13
Total plan assets at fair value	**1,211**	**48**	**0**	**43**	**1**	**(9)**	**0**	**1,294**
of which Switzerland	1,204	48	0	43	1	(2)	0	1,294
of which International	7	0	0	0	0	(7)	0	0

Qualitative disclosures of valuation techniques used to measure fair value

Cash and cash equivalents

Cash and cash equivalents includes money market instruments such as bankers' acceptances, certificates of deposit, CP, book claims, treasury bills, other rights and commingled funds. Valuations of money market instruments and commingled funds are generally based on observable inputs.

Debt securities

Debt securities include government and corporate bonds which are generally quoted in active markets or as units in mutual funds. Debt securities for which market prices are not available, are valued based on yields reflecting the perceived risk of the issuer and the maturity of the security, recent disposals in the market or other modeling techniques, which may involve judgment. Units in mutual funds which are not directly quoted on a public stock exchange and/or for which a fair value is not readily determinable are measured at fair value using NAV.

Equity securities

Equity securities held include common equity shares, convertible bonds and shares in investment companies and units in mutual funds. The common equity shares are generally traded on public stock exchanges for which quoted prices are regularly available. Convertible bonds are generally valued using observable pricing sources. Shares in investment companies and units in mutual funds, which are not directly quoted on a public stock exchange and/or for which a fair value is not readily determinable, are measured at fair value using NAV.

Real estate

Real estate includes direct real estate as well as investments in real estate investment companies, trusts or mutual funds. Direct real estate is initially measured at its transaction price, which is the best estimate of fair value. Thereafter, direct real estate is individually measured at fair value based on a number of factors that include any recent rounds of financing involving third-party investors, comparable company transactions, multiple analyses of cash flows or book values, or discounted cash flow analyses. The availability of information used in these modeling techniques is often limited and involves significant judgment in evaluating these different factors over time. Real estate investment companies, trusts and mutual funds, which are not directly quoted on a public stock exchange and/or for which a fair value is not readily determinable, are measured at fair value using NAV.

Alternative investments

Private equity includes direct investments, investments in partnerships that make private equity and related investments in various portfolio companies and funds and fund of funds partnerships. Private equity consists of both publicly traded securities and private securities. Publicly traded investments that are restricted or that are not quoted in active markets are valued based on publicly available quotes with appropriate adjustments for liquidity or trading restrictions. Private equity is valued taking into account a number of factors, such as the most recent round of financing involving unrelated new investors, earnings multiple analyses using comparable companies or discounted cash flow analyses. Private equity for which a fair value is not readily determinable is measured at fair value using NAV provided by the general partner.

Hedge funds that are not directly quoted on a public stock exchange, and/or for which a fair value is not readily determinable, are measured at fair value using NAV provided by the fund administrator.

Derivatives

Derivatives include both OTC and exchange-traded derivatives. The fair value of OTC derivatives is determined on the basis of inputs that include those characteristics of the derivative that have a bearing on the economics of the instrument. The determination of the fair value of many derivatives involves only a limited degree of subjectivity since the required inputs are generally observable in the marketplace. Other more complex derivatives may use unobservable inputs. Such inputs include long-dated volatility assumptions on OTC option transactions and recovery rate assumptions for credit derivative transactions. The fair value of exchange-traded derivatives is typically derived from the observable exchange prices and/or observable inputs.

Plan asset allocation

The following table shows the plan asset allocation as of the measurement date calculated based on the fair value at that date including the performance of each asset class.

Plan asset allocation

	Switzerland		International	
December 31	2018	2017	2018	2017
Weighted-average (%)				
Cash and cash equivalents	4.7	2.3	5.8	5.0
Debt securities	28.8	25.0	85.0	84.0
Equity securities	31.5	39.9	3.8	5.3
Real estate	13.7	11.7	0.8	0.7
Alternative investments	21.3	21.1	2.2	2.7
Insurance	0.0	0.0	2.4	2.3
Total	**100.0**	**100.0**	**100.0**	**100.0**

The following table shows the target plan asset allocation for 2019 in accordance with the Group's investment strategy. The target plan asset allocation is used to determine the expected return on plan assets to be considered in the net periodic benefit costs for 2019.

2019 target plan asset allocation

	Switzerland	International
Weighted-average (%)		
Cash and cash equivalents	10.0	0.3
Debt securities	32.0	88.9
Equity securities	30.0	5.1
Real estate	10.0	0.6
Alternative investments	18.0	2.7
Insurance	0.0	2.4
Total	**100.0**	**100.0**

Estimated future benefit payments

The following table shows the estimated future benefit payments for defined benefit pension and other post-retirement defined benefit plans.

Estimated future benefit payments

	Defined benefit pension plans	Other post-retirement defined benefit plans
Payments (CHF million)		
2019	1,199	11
2020	927	12
2021	925	12
2022	903	12
2023	915	12

For five years thereafter	4,686	53
338		

32 Derivatives and hedging activities

Derivatives are generally either privately negotiated OTC contracts or standard contracts transacted through regulated exchanges. The Group's most frequently used freestanding derivative products, entered into for trading and risk management purposes, include interest rate, credit default and cross-currency swaps, interest rate and foreign exchange options, foreign exchange forward contracts and foreign exchange and interest rate futures.

The Group also enters into contracts that are not considered derivatives in their entirety but include embedded derivative features. Such transactions primarily include issued and purchased structured debt instruments where the return may be calculated by reference to an equity security, index or third-party credit risk, or that have non-standard interest or foreign exchange terms.

On the date a derivative contract is entered into, the Group designates it as belonging to one of the following categories:

- trading activities;
- a risk management transaction that does not qualify as a hedge under accounting standards (referred to as an economic hedge);
- a hedge of the fair value of a recognized asset or liability;
- a hedge of the variability of cash flows to be received or paid relating to a recognized asset or liability or a forecasted transaction; or
- a hedge of a net investment in a foreign operation.

Trading activities

The Group is active in most of the principal trading markets and transacts in many trading and hedging products. As noted above, this includes the use of swaps, futures, options and structured products, such as custom transactions using combinations of derivatives, in connection with its sales and trading activities. Trading activities include market making, positioning and arbitrage activities. The majority of the Group's derivatives were used for trading activities.

Economic hedges

Economic hedges arise when the Group enters into derivative contracts for its own risk management purposes, but the contracts entered into do not qualify for hedge accounting under US GAAP. These economic hedges include the following types:

- interest rate derivatives to manage net interest rate risk on certain core banking business assets and liabilities;
- foreign exchange derivatives to manage foreign exchange risk on certain core banking business revenue and expense items, as well as on core banking business assets and liabilities;
- credit derivatives to manage credit risk on certain loan portfolios;
- futures to manage risk on equity positions including convertible bonds; and
- equity derivatives to manage equity/index risks on certain structured products.

Derivatives used in economic hedges are included as trading assets or trading liabilities in the consolidated balance sheets.

Hedge accounting

Fair value hedges

The Group designates fair value hedges as part of an overall interest rate risk management strategy that incorporates the use of derivative instruments to minimize fluctuations in earnings that are caused by interest rate volatility. In addition to hedging changes in fair value due to interest rate risk associated with fixed rate loans, repurchase agreements and long-term debt instruments, the Group uses:

- cross-currency swaps to convert foreign-currency-denominated fixed rate assets or liabilities to floating rate functional currency assets or liabilities; and
- foreign exchange forward contracts to hedge the foreign exchange risk associated with available-for-sale securities.

Cash flow hedges

The Group designates cash flow hedges as part of its strategy to mitigate its risk to variability of cash flows on loans, deposits and other debt obligations by using interest rate swaps to convert variable rate assets or liabilities to fixed rates. The Group also uses cross-currency swaps to convert foreign-currency-denominated fixed and floating rate assets or liabilities to fixed rate assets or liabilities based on the currency profile to which the Group elects to be exposed. This includes, but is not limited to, Swiss francs and US dollars. Further, the Group uses derivatives to hedge its cash flows associated with forecasted transactions. As of the end of 2018, the maximum length of time over which

the Group hedged its exposure to the variability in future cash flows for forecasted transactions, excluding those forecasted transactions related to the payment of variable interest on existing financial instruments, was five years.

Net investment hedges

The Group designates net investment hedges as part of its strategy to hedge selected net investments in foreign operations against adverse movements in foreign exchange rates, typically using forward foreign exchange contracts.

Hedge effectiveness assessment

The Group assesses the effectiveness of hedging relationships both prospectively and retrospectively. The prospective assessment is made both at the inception of a hedging relationship and on an ongoing basis, and requires the Group to justify its expectation that the relationship will be highly effective over future periods. The retrospective assessment is also performed on an ongoing basis and requires the Group to determine whether or not the hedging relationship has actually been effective. If the Group concludes, through a retrospective evaluation, that hedge accounting is appropriate for the current period, then it measures the amount of hedge ineffectiveness to be recognized in earnings.

Fair value of derivative instruments

The tables below present gross derivative replacement values by type of contract and whether the derivative is used for trading purposes or in a qualifying hedging relationship. Notional amounts have also been provided as an indication of the volume of derivative activity within the Group.

Information on bifurcated embedded derivatives has not been included in these tables. Under US GAAP, the Group elected to account for substantially all financial instruments with an embedded derivative that is not considered clearly and closely related to the host contract at fair value.

> Refer to "Note 35 – Financial instruments" for further information.

Fair value of derivative instruments

	Trading			Hedging[1]		
end of 2018	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)
Derivative instruments (CHF billion)						
Forwards and forward rate agreements	7,477.7	3.6	3.7	0.0	0.0	0.0
Swaps	13,220.5	49.0	45.4	44.6	0.1	0.2
Options bought and sold (OTC)	2,027.6	17.0	17.1	0.0	0.0	0.0
Futures	256.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	111.1	0.3	0.3	0.0	0.0	0.0
Interest rate products	**23,093.7**	**69.9**	**66.5**	**44.6**	**0.1**	**0.2**
Forwards	1,124.5	9.5	10.5	12.0	0.1	0.1
Swaps	456.6	14.4	17.4	0.0	0.0	0.0
Options bought and sold (OTC)	313.0	3.9	4.3	0.0	0.0	0.0
Futures	10.7	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	1.3	0.0	0.0	0.0	0.0	0.0
Foreign exchange products	**1,906.1**	**27.8**	**32.2**	**12.0**	**0.1**	**0.1**
Forwards	0.7	0.2	0.1	0.0	0.0	0.0
Swaps	152.6	4.0	5.1	0.0	0.0	0.0
Options bought and sold (OTC)	211.9	7.3	6.5	0.0	0.0	0.0
Futures	39.2	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	356.7	11.9	14.4	0.0	0.0	0.0
Equity/index-related products	**761.1**	**23.4**	**26.1**	**0.0**	**0.0**	**0.0**
Credit derivatives [2]	**469.4**	**5.4**	**6.6**	**0.0**	**0.0**	**0.0**
Forwards	8.2	0.1	0.1	0.0	0.0	0.0
Swaps	13.5	1.5	0.6	0.0	0.0	0.0
Options bought and sold (OTC)	9.5	0.1	0.1	0.0	0.0	0.0
Futures	9.3	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	1.9	0.0	0.0	0.0	0.0	0.0
Other products [3]	**42.4**	**1.7**	**0.8**	**0.0**	**0.0**	**0.0**
Total derivative instruments	**26,272.7**	**128.2**	**132.2**	**56.6**	**0.2**	**0.3**

The notional amount, PRV and NRV (trading and hedging) was CHF 26,329.3 billion, CHF 128.4 billion and CHF 132.5 billion, respectively, as of December 31, 2018.

1

Relates to derivative contracts that qualify for hedge accounting under US GAAP.

2

Primarily credit default swaps.

3

Primarily precious metals, commodity and energy products.

Fair value of derivative instruments (continued)

	Trading				Hedging[1]	
end of 2017	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)
Derivative instruments (CHF billion)						
Forwards and forward rate agreements	8,509.3	1.2	1.2	0.0	0.0	0.0
Swaps	13,047.8	60.4	56.6	46.8	0.2	0.2
Options bought and sold (OTC)	2,374.5	25.2	24.0	0.0	0.0	0.0
Futures	547.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	419.2	0.2	0.3	0.0	0.0	0.0
Interest rate products	**24,898.6**	**87.0**	**82.1**	**46.8**	**0.2**	**0.2**
Forwards	1,387.9	10.7	11.1	13.3	0.0	0.2
Swaps	581.1	15.2	19.9	0.0	0.0	0.0
Options bought and sold (OTC)	414.8	4.6	4.8	2.1	0.0	0.0
Futures	13.0	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	5.4	0.0	0.0	0.0	0.0	0.0
Foreign exchange products	**2,402.2**	**30.5**	**35.8**	**15.4**	**0.0**	**0.2**
Forwards	0.9	0.0	0.1	0.0	0.0	0.0
Swaps	198.7	3.8	4.9	0.0	0.0	0.0
Options bought and sold (OTC)	221.3	8.3	7.9	0.0	0.0	0.0
Futures	32.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	373.2	9.3	10.3	0.0	0.0	0.0
Equity/index-related products	**826.9**	**21.4**	**23.2**	**0.0**	**0.0**	**0.0**
Credit derivatives [2]	**524.9**	**7.7**	**8.9**	**0.0**	**0.0**	**0.0**
Forwards	7.0	0.0	0.1	0.0	0.0	0.0
Swaps	17.9	1.5	1.4	0.0	0.0	0.0
Options bought and sold (OTC)	10.1	0.1	0.0	0.0	0.0	0.0
Futures	15.6	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	2.1	0.0	0.0	0.0	0.0	0.0
Other products [3]	**52.7**	**1.6**	**1.5**	**0.0**	**0.0**	**0.0**
Total derivative instruments	**28,705.3**	**148.2**	**151.5**	**62.2**	**0.2**	**0.4**

The notional amount, PRV and NRV (trading and hedging) was CHF 28,767.5 billion, CHF 148.4 billion and CHF 151.9 billion, respectively, as of December 31, 2017.

1
Relates to derivative contracts that qualify for hedge accounting under US GAAP.

2
Primarily credit default swaps.

3
Primarily precious metals, commodity and energy products.

Fair value hedges

in	2018	2017	2016
Gains/(losses) recognized in income on derivatives (CHF million)			

Interest rate products	(415)	(285)	(116)
Total	**(415)**	**(285)**	**(116)**
Gains/(losses) recognized in income on hedged items (CHF million)			
Interest rate products	423	290	111
Total	**423**	**290**	**111**
Details of fair value hedges (CHF million)			
Net gains/(losses) on the ineffective portion	8	5	(5)

Represents gains/(losses) recognized in trading revenues.

Cash flow hedges

in	2018	2017	2016
Gains/(losses) recognized in AOCI on derivatives (CHF million)			
Interest rate products	(76)	(56)	(5)
Foreign exchange products	(95)	(30)	(9)
Total	**(171)**	**(86)**	**(14)**
Gains/(losses) reclassified from AOCI into income (CHF million)			
Interest rate products [1]	(85)	(11)	29
Foreign exchange products	(48)[2,3,4]	(24)[2,3]	(16)[2,3,4]
Total	**(133)**	**(35)**	**13**
Details of cash flow hedges (CHF million)			
Net gains/(losses) on the ineffective portion [2]	0	(1)	(1)

Represents gains/(losses) on effective portion.

1 Included in interest and dividend income.

2 Included in trading revenues.

3 Included in other revenues.

4 Included in total other operating expenses.

The net loss associated with cash flow hedges expected to be reclassified from AOCI within the next 12 months was CHF 53 million.

Net investment hedges

in	2018	2017	2016
Gains/(losses) recognized in AOCI on derivatives (CHF million)			
Foreign exchange products	133	(475)	(536)
Total	**133**	**(475)**	**(536)**

Represents gains/(losses) on effective portion.

The Group includes all derivative instruments not included in hedge accounting relationships in its trading activities.

> Refer to “Note 7 – Trading revenues” for gains and losses on trading activities by product type.

Disclosures relating to contingent credit risk

Certain of the Group’s derivative instruments contain provisions that require it to maintain a specified credit rating from each of the major credit rating agencies. If the ratings fall below the level specified in the contract, the counterparties to the agreements could request payment of additional collateral on those derivative instruments that are in a net liability position. Certain of the derivative contracts also provide for termination of the contract, generally upon a downgrade of either the Group or the counterparty. Such derivative contracts are reflected at close-out costs. The following table provides the Group’s current net exposure from contingent credit risk relating to derivative contracts with bilateral counterparties and SPEs that include credit support agreements, the related collateral posted and the additional collateral required in a one-notch, two-notch and a three-notch downgrade event, respectively. The table also includes derivative contracts with contingent credit risk features without credit support agreements that have accelerated termination event conditions. The current net exposure for derivative contracts with bilateral counterparties and contracts with accelerated termination event conditions is the aggregate fair value of derivative instruments that were in a net liability position. For SPEs, the current net exposure is the contractual amount that is used to determine the collateral payable in the event of a downgrade. The contractual amount could include both the NRV and a percentage of the notional value of the derivative.

Contingent credit risk

	2018	2017

end of	Bilateral counterparties	Special purpose entities	Accelerated terminations	Total	Bilateral counterparties	Special purpose entities	Accelerated terminations	Total
Contingent credit risk (CHF billion)								
Current net exposure	3.6	0.1	0.3	**4.0**	5.4	0.1	1.2	**6.7**
Collateral posted	3.4	0.1	–	**3.5**	4.4	0.1	–	**4.5**
Impact of a one-notch downgrade event	0.2	0.0	0.0	**0.2**	0.2	0.1	0.1	**0.4**
Impact of a two-notch downgrade event	0.9	0.0	0.1	**1.0**	0.9	0.2	0.5	**1.6**
Impact of a three-notch downgrade event	1.0	0.1	0.2	**1.3**	1.0	0.4	0.7	**2.1**

The impact of a downgrade event reflects the amount of additional collateral required for bilateral counterparties and special purpose entities and the amount of additional termination expenses for accelerated terminations, respectively.

Credit derivatives

Credit derivatives are contractual agreements in which the buyer generally pays a fee in exchange for a contingent payment by the seller if there is a credit event on the underlying referenced entity or asset. They are generally privately negotiated OTC contracts, with numerous settlement and payment terms, and most are structured so that they specify the occurrence of an identifiable credit event, which can include bankruptcy, insolvency, receivership, material adverse restructuring of debt or failure to meet obligations when due.

The Group enters into credit derivative contracts in the normal course of business, buying and selling protection to facilitate client transactions and as a market maker. This includes providing structured credit products for its clients to enable them to hedge

their credit risk. The referenced instruments of these structured credit products are both investment grade and non-investment grade and could include corporate bonds, sovereign debt, ABS and loans. These instruments can be formed as single items (single-named instruments) or combined on a portfolio basis (multi-named instruments). The Group purchases protection to economically hedge various forms of credit exposure, for example, the economic hedging of loan portfolios or other cash positions. Finally, the Group also takes proprietary positions which can take the form of either purchased or sold protection.
The credit derivatives most commonly transacted by the Group are CDS and credit swaptions. CDSs are contractual agreements in which the buyer of the swap pays an upfront and/or a periodic fee in return for a contingent payment by the seller of the swap following a credit event of the referenced entity or asset. Credit swaptions are options with a specified maturity to buy or sell protection under a CDS on a specific referenced credit event.
In addition, to reduce its credit risk, the Group enters into legally enforceable netting agreements with its derivative counterparties. Collateral on these derivative contracts is usually posted on a net counterparty basis and cannot be allocated to a particular derivative contract.
> Refer to “Note 27 – Offsetting of financial assets and financial liabilities” for further information on netting.
Credit protection sold
Credit protection sold is the maximum potential payout, which is based on the notional value of derivatives and represents the amount of future payments that the Group would be required to make as a result of credit risk-related events. The Group believes that the maximum potential payout is not representative of the actual loss exposure based on historical experience. This amount has not been reduced by the Group’s rights to the underlying assets and the related cash flows. In accordance with most credit derivative contracts, should a credit event (or settlement trigger) occur, the Group is usually liable for the difference between the credit protection sold and the recourse it holds in the value of the underlying assets. The maximum potential amount of future payments has not been reduced for any cash collateral paid to a given counterparty as such payments would be calculated after netting all derivative exposures, including any credit derivatives with that counterparty in accordance with a related master netting agreement. Due to such netting processes, determining the amount of collateral that corresponds to credit derivative exposures only is not possible.
To reflect the quality of the payment risk on credit protection sold, the Group assigns an internally generated rating to those instruments referenced in the contracts. Internal ratings are assigned by experienced credit analysts based on expert judgment that incorporates analysis and evaluation of both quantitative and qualitative factors. The specific factors analyzed, and their relative importance, are dependent on the type of counterparty. The analysis emphasizes a forward-looking approach, concentrating on economic trends and financial fundamentals, and making use of peer analysis, industry comparisons and other quantitative tools. External ratings and market information are also used in the analysis process where available.
Credit protection purchased
Credit protection purchased represents those instruments where the underlying reference instrument is identical to the reference instrument of the credit protection sold. The maximum potential payout amount of credit protection purchased for each individual identical underlying reference instrument may be greater or lower than the notional amount of protection sold.
The Group also considers estimated recoveries that it would receive if the specified credit event occurred, including both the anticipated value of the underlying referenced asset that would, in most instances, be transferred to the Group and the impact of any purchased protection with an identical reference instrument and product type.
Other protection purchased
In the normal course of business, the Group purchases protection to offset the risk of credit protection sold that may have similar, but not identical, reference instruments, and may use similar, but not identical, products, which reduces the total credit derivative exposure. Other protection purchased is based on the notional value of the instruments.
The Group purchases its protection from banks and broker dealers, other financial institutions and other counterparties.
Fair value of credit protection sold
The fair values of the credit protection sold give an indication of the amount of payment risk, as the negative fair values increase when the potential payment under the derivative contracts becomes more probable.
Credit protection sold/purchased

The following tables do not include all credit derivatives and differ from the credit derivatives in the “Fair value of derivative instruments” table. This is due to the exclusion of certain credit derivative instruments under US GAAP, which defines a credit derivative as a derivative instrument (a) in which one or more of its underlyings are related to the credit risk of a specified entity (or a group of entities) or an index based on the credit risk of a group of entities and (b) that exposes the seller to potential loss from credit risk-related events specified in the contract.

Total return swaps (TRS) of CHF 9.7 billion and CHF 6.7 billion as of December 31, 2018 and 2017, respectively, were also excluded because a TRS does not expose the seller to potential loss from credit risk-related events specified in the contract. A TRS only provides protection against a loss in asset value and not against additional amounts as a result of specific credit events.

Credit protection sold/purchased

end of	Credit protection sold	Credit protection purchased[1]	Net credit protection (sold)/ purchased	Other protection purchased	2018 Fair value of credit protection sold	Credit protection sold	Credit protection purchased[1]	Net credit protection (sold)/ purchased	Other protection purchased	Fai o pro
Single-name instruments (CHF billion)										
Investment grade [2]	(46.0)	43.1	(2.9)	11.8	0.2	(57.6)	53.8	(3.8)	15.3	
Non-investment grade	(26.2)	24.3	(1.9)	17.7	(0.2)	(28.2)	25.5	(2.7)	14.3	
Total single-name instruments	**(72.2)**	**67.4**	**(4.8)**	**29.5**	**0.0**	**(85.8)**	**79.3**	**(6.5)**	**29.6**	
of which sovereign	(16.4)	15.0	(1.4)	5.5	(0.1)	(21.0)	19.2	(1.8)	6.2	
of which non-sovereign	(55.8)	52.4	(3.4)	24.0	0.1	(64.8)	60.1	(4.7)	23.4	
Multi-name instruments (CHF billion)										
Investment grade [2]	(102.9)	102.4	(0.5)	25.1	(0.8)	(107.1)	104.7	(2.4)	59.3	
Non-investment grade	(26.5)	25.3	(1.2)	8.4[3]	0.1	(21.0)	19.6	(1.4)	12.0[3]	
Total multi-name instruments	**(129.4)**	**127.7**	**(1.7)**	**33.5**	**(0.7)**	**(128.1)**	**124.3**	**(3.8)**	**71.3**	
of which sovereign	(0.2)	0.2	0.0	0.0	0.0	(0.3)	0.3	0.0	0.3	
of which non-sovereign	(129.2)	127.5	(1.7)	33.5	(0.7)	(127.8)	124.0	(3.8)	71.0	
Total instruments (CHF billion)										
Investment grade [2]	(148.9)	145.5	(3.4)	36.9	(0.6)	(164.7)	158.5	(6.2)	74.6	
Non-investment grade	(52.7)	49.6	(3.1)	26.1	(0.1)	(49.2)	45.1	(4.1)	26.3	
Total instruments	**(201.6)**	**195.1**	**(6.5)**	**63.0**	**(0.7)**	**(213.9)**	**203.6**	**(10.3)**	**100.9**	
of which sovereign	(16.6)	15.2	(1.4)	5.5	(0.1)	(21.3)	19.5	(1.8)	6.5	
of which non-sovereign	(185.0)	179.9	(5.1)	57.5	(0.6)	(192.6)	184.1	(8.5)	94.4	

1 Represents credit protection purchased with identical underlyings and recoveries.

2 Based on internal ratings of BBB and above.

3 Includes synthetic securitized loan portfolios.

The following table reconciles the notional amount of credit derivatives included in the table “Fair value of derivative instruments” to the table “Credit protection sold/purchased”.

Credit derivatives

end of	2018	2017
Credit derivatives (CHF billion)		
Credit protection sold	201.6	213.9
Credit protection purchased	195.1	203.6
Other protection purchased	63.0	100.9
Other instruments [1]	9.7	6.5
Total credit derivatives	**469.4**	**524.9**

1
Consists of total return swaps and other derivative instruments.

The segregation of the future payments by maturity range and underlying risk gives an indication of the current status of the potential for performance under the derivative contracts.

Maturity of credit protection sold

end of	Maturity less than 1 year	Maturity between 1 to 5 years	Maturity greater than 5 years	Total
2018 (CHF billion)				
Single-name instruments	13.1	54.9	4.2	72.2
Multi-name instruments	28.8	80.6	20.0	129.4
Total instruments	**41.9**	**135.5**	**24.2**	**201.6**
2017 (CHF billion)				
Single-name instruments	21.6	59.4	4.8	85.8
Multi-name instruments	31.2	79.9	17.0	128.1
Total instruments	**52.8**	**139.3**	**21.8**	**213.9**

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33 Guarantees and commitments

Guarantees

In the ordinary course of business, guarantees are provided that contingently obligate the Group to make payments to third parties if the counterparty fails to fulfill its obligation under a borrowing or other contractual arrangement. The total gross amount disclosed within the Guarantees table reflects the maximum potential payment under the guarantees. The carrying value represents the higher of the initial fair value (generally the related fee received or receivable) less cumulative amortization and the Group's current best estimate of payments that will be required under existing guarantee arrangements.

Guarantees provided by the Group are classified as follows: credit guarantees and similar instruments, performance guarantees and similar instruments, derivatives and other guarantees.

Guarantees

end of	Maturity less than 1 year	Maturity between 1 to 3 years	Maturity between 3 to 5 years	Maturity greater than 5 years	Total gross amount	Total net amount[1]	Carrying value	Collateral received
2018 (CHF million)								
Credit guarantees and similar instruments	2,228	439	218	398	3,283	3,194	14	1,748
Performance guarantees and similar instruments	5,008	1,344	552	240	7,144	6,278	44	3,153
Derivatives [2]	17,594	3,995	1,256	778	23,623	23,623	919	[3]
Other guarantees	4,325	1,405	640	517	6,887	6,814	56	4,169
Total guarantees	**29,155**	**7,183**	**2,666**	**1,933**	**40,937**	**39,909**	**1,033**	**9,070**
2017 (CHF million)								
Credit guarantees and similar instruments	1,817	520	314	435	3,086	2,837	12	1,603
Performance guarantees and similar instruments	4,931	1,639	373	200	7,143	6,216	44	3,012
Derivatives [2]	15,520	6,860	1,397	727	24,504	24,504	403	[3]
Other guarantees	4,461	1,006	708	503	6,678	6,673	47	3,833
Total guarantees	**26,729**	**10,025**	**2,792**	**1,865**	**41,411**	**40,230**	**506**	**8,448**

1
Total net amount is computed as the gross amount less any participations.

2
Excludes derivative contracts with certain active commercial and investment banks and certain other counterparties, as such contracts can be cash settled and the Group had no basis to conclude it was probable that the counterparties held, at inception, the underlying instruments.

3
Collateral for derivatives accounted for as guarantees is not significant.

Credit guarantees and similar instruments

Credit guarantees and similar instruments are contracts that require the Group to make payments should a third party fail to do so under a specified existing credit obligation. The position includes standby letters of credit, commercial and residential mortgage guarantees and other guarantees associated with VIEs.

Standby letters of credit are made in connection with the corporate lending business and other corporate activities, where the Group provides guarantees to counterparties in the form of standby letters of credit, which represent obligations to make payments to third parties if the counterparties fail to fulfill their obligations under a borrowing arrangement or other contractual obligation.

Commercial and residential mortgage guarantees are made in connection with the Group's commercial mortgage activities in the US, where the Group sells certain commercial and residential mortgages to Fannie Mae and agrees to bear a percentage of the losses triggered by the borrowers failing to perform on the mortgage. The Group also issues guarantees that require it to reimburse Fannie Mae for losses on certain whole loans underlying mortgage-backed securities issued by Fannie Mae, which are triggered by borrowers failing to perform on the underlying mortgages. The Group also provides guarantees to VIEs and other counterparties under which it may be required to buy assets from such entities upon the occurrence of certain triggering events such as rating downgrades and/or substantial decreases in the fair value of those assets.

Performance guarantees and similar instruments

Performance guarantees and similar instruments are arrangements that require contingent payments to be made when certain performance-related targets or covenants are not met. Such covenants may include a customer's obligation to deliver certain products and services or to perform under a construction contract. Performance guarantees are frequently executed as part of project finance transactions. The position includes private equity fund guarantees and guarantees related to residential mortgage securitization activities.

For private equity fund guarantees, the Group has provided investors in private equity funds sponsored by a Group entity guarantees on potential obligations of certain general partners to return

amounts previously paid as carried interest to those general partners if the performance of the remaining investments declines. To manage its exposure, the Group generally withholds a portion of carried interest distributions to cover any repayment obligations. In addition, pursuant to certain contractual arrangements, the Group is obligated to make cash payments to certain investors in certain private equity funds if specified performance thresholds are not met. Further, as part of the Group's residential mortgage securitization activities in the US, the Group may guarantee the collection by the servicer and remittance to the securitization trust of prepayment penalties. The Group will have to perform under these guarantees in the event the servicer fails to remit the prepayment penalties.

Derivatives

Derivatives which may also have the characteristics of a guarantee are issued in the ordinary course of business, generally in the form of written put options. Such derivative contracts do not meet the characteristics of a guarantee if they are cash settled and the Group has no basis to conclude it is probable that the counterparties held, at inception, the underlying instruments related to the derivative contracts. The Group has concluded that these conditions were met for certain active commercial and investment banks and certain other counterparties, and accordingly, the Group has reported such contracts as derivatives only.

The Group manages its exposure to these derivatives by engaging in various hedging strategies to reduce its exposure. For some contracts, such as written interest rate caps or foreign exchange options, the maximum payout is not determinable as interest rates or exchange rates could theoretically rise without limit. For these contracts, notional amounts were disclosed in the table above in order to provide an indication of the underlying exposure. In addition, the Group carries all derivatives at fair value in the consolidated balance sheets and has considered the performance triggers and probabilities of payment when determining those fair values. It is more likely than not that written put options that are in-the-money to the counterparty will be exercised, for which the Group's exposure was limited to the carrying value reflected in the table.

Other guarantees

Other guarantees include bankers' acceptances, residual value guarantees, deposit insurance, contingent considerations in business combinations, the minimum value of an investment in mutual funds or private equity funds and all other guarantees that were not allocated to one of the categories above.

Deposit-taking banks and securities dealers in Switzerland and certain other European countries are required to ensure the payout of privileged deposits in case of specified restrictions or compulsory liquidation of a deposit-taking bank. In Switzerland, deposit-taking banks and securities dealers jointly guarantee an amount of up to CHF 6 billion. Upon occurrence of a payout event triggered by a specified restriction of business imposed by FINMA or by the compulsory liquidation of another deposit-taking bank, the Group's contribution will be calculated based on its share of privileged deposits in proportion to total privileged deposits. Based on –FINMA's estimate for the Group's banking subsidiaries in Switzerland, the Group's share in the deposit insurance guarantee program for the period July 1, 2018 to June 30, 2019 is CHF 0.5 billion. These deposit insurance guarantees were reflected in other guarantees.

Representations and warranties on residential mortgage loans sold

In connection with the Global Markets division's sale of US residential mortgage loans, the Group has provided certain representations and warranties relating to the loans sold. The Group has provided these representations and warranties relating to sales of loans to institutional investors, primarily banks, and non-agency, or private label, securitizations. The loans sold are primarily loans that the Group has purchased from other parties. The scope of representations and warranties, if any, depends on the transaction, but can include: ownership of the mortgage loans and legal capacity to sell the loans; loan-to-value ratios and other characteristics of the property, the borrower and the loan; validity of the liens securing the loans and absence of delinquent taxes or related liens; conformity to underwriting standards and completeness of documentation; and origination in compliance with law. If it is determined that representations and warranties were breached, the Group may be required to repurchase the related loans or indemnify the investors to make them whole for losses. Whether the Group will incur a loss in connection with repurchases and make whole payments depends on: the extent to which claims are made; the validity of such claims made within the statute of limitations (including the likelihood and ability to enforce claims); whether the Group can successfully claim against parties that sold loans to the Group and made representations and warranties to the Group; the residential real estate market, including the number of defaults; and whether the obligations of the securitization vehicles were guaranteed or insured by third parties.

During 2018, the Group received repurchase claims for residential mortgage loans that were not significant, and loans repurchased during this period and related losses were not material. The balance of outstanding repurchase claims as of the end of 2018 was not significant.

Repurchase claims on residential mortgage loans sold that are subject to arbitration or litigation proceedings, or become so during the reporting period, are not included in this Guarantees and commitments disclosure but are addressed in litigation and related loss contingencies and provisions. The Group is involved in litigation relating to representations and warranties on residential mortgages sold.

> Refer to “Note 39 – Litigation” for further information.

Disposal-related contingencies and other indemnifications

The Group has certain guarantees for which its maximum contingent liability cannot be quantified. These guarantees are not reflected in the “Guarantees” table and are discussed below.

Disposal-related contingencies

In connection with the sale of assets or businesses, the Group sometimes provides the acquirer with certain indemnification provisions. These indemnification provisions vary by counterparty in scope and duration and depend upon the type of assets or businesses sold. They are designed to transfer the potential risk of certain unquantifiable and unknowable loss contingencies, such as litigation, tax and intellectual property matters, from the acquirer to the seller. The Group closely monitors all such contractual agreements in order to ensure that indemnification provisions are adequately provided for in the Group’s consolidated financial statements.

Other indemnifications

The Group provides indemnifications to certain counterparties in connection with its normal operating activities for which it is not possible to estimate the maximum amount that it could be obligated to pay. As a normal part of issuing its own securities, the Group typically agrees to reimburse holders for additional tax withholding charges or assessments resulting from changes in applicable tax laws or the interpretation of those laws. Securities that include these agreements to pay additional amounts generally also include a related redemption or call provision if the obligation to pay the additional amounts results from a change in law or its interpretation and the obligation cannot be avoided by the issuer taking reasonable steps to avoid the payment of additional amounts. Since such potential obligations are dependent on future changes in tax laws, the related liabilities the Group may incur as a result of such changes cannot be reasonably estimated. In light of the related call provisions typically included, the Group does not expect any potential liabilities in respect of tax gross-ups to be material.

The Group is a member of numerous securities exchanges and clearing houses and may, as a result of its membership arrangements, be required to perform if another member defaults and available amounts as defined in the relevant exchange’s or clearing house’s default waterfalls are not sufficient to cover losses of another member’s default. The exchange’s or clearing house’s default management procedures may provide for cash calls to non-defaulting members which may be limited to the amount (or a multiple of the amount) of the Group’s contribution to the guarantee fund. However, if these cash calls are not sufficient to cover losses, the default waterfall and default management procedures may foresee further loss allocation. Furthermore, some clearing house arrangements require members to assume a proportionate share of non-default losses, if such losses exceed the specified resources allocated for such purpose by the clearing house. Non-default losses result from the clearing house’s investment of guarantee fund contributions and initial margin or are other losses unrelated to the default of a clearing member. The Group has determined that it is not possible to reasonably estimate the maximum potential amount of future payments due under the membership arrangements. In addition, the Group believes that any potential requirement to make payments under these membership arrangements is remote.

Lease commitments

CHF million	
2019	501
2020	445
2021	331
2022	306
2023	261
Thereafter	1,980
Future operating lease commitments	**3,824**
Less minimum non-cancellable sublease rentals	190
Total net future minimum lease commitments	**3,634**

Rental expense for operating leases

in CHF million	2018	2017	2016
Minimum rental expense	516	575	550
Sublease rental income	(54)	(65)	(89)

Total net expenses for operating leases	**462**	**510**	**461**

Operating lease commitments

The Group has contractual commitments under operating lease arrangements for certain premises and equipment. Under operating leases, the leased property is not reported on the balance sheet of the lessee. Lease payments required by the contract are generally expensed on a straight-line basis over the term of the lease. The related commitments for future rental expenses under operating leases are included in the table “Lease commitments”.

From time to time, the Group may enter into sale-leaseback transactions, in which an asset is sold and immediately leased back. If specific criteria are met, such asset is derecognized from the balance sheet and an operating lease is recognized. If the present value of the lease payments is equal to or higher than 10% of the fair value of the property sold, any resulting gains up to an amount equal to the present value of the lease payments are deferred and recognized in the statement of operations over the term of the lease as a reduction of rental expense. Gains on sale-leaseback transactions for which the lease payments are lower than 10% of the fair value of the property sold or gains in excess of the present value of the lease payments are recognized in the statements of operations upon completion of the sale.

Sale-leaseback transactions

During 2018, the Group entered into one sale-leaseback transaction in respect of own property, which was recognized as an operating lease arrangement with a lease term of ten years. In

2017, we did not enter into any sale-leaseback transactions, and in 2016, the Group entered into several smaller sale-leaseback transactions in respect of own property, which were all recognized as operating lease arrangements with lease terms of between one and five years. The total contractual rental expenses were CHF 5 million for the 2018 sale-leaseback transaction and CHF 30 million for the 2016 sale-leaseback transactions.

Other commitments

end of	Maturity less than 1 year	Maturity between 1 to 3 years	Maturity between 3 to 5 years	Maturity greater than 5 years	Total gross amount	Total net amount[1]	Collateral received
2018 (CHF million)							
Irrevocable commitments under documentary credits	5,056	182	0	0	5,238	5,077	3,651
Irrevocable loan commitments [2]	26,882	34,188	45,938	9,065	116,073	111,967	57,153
Forward reverse repurchase agreements	31	0	0	0	31	31	31
Other commitments	329	11	119	33	492	492	4
Total other commitments	**32,298**	**34,381**	**46,057**	**9,098**	**121,834**	**117,567**	**60,839**
2017 (CHF million)							
Irrevocable commitments under documentary credits	4,976	113	1	1	5,091	5,000	3,218
Irrevocable loan commitments [2]	24,296	33,649	40,425	8,031	106,401	101,270	42,307
Forward reverse repurchase agreements	12	0	0	0	12	12	12
Other commitments	219	13	11	104	347	347	0
Total other commitments	**29,503**	**33,775**	**40,437**	**8,136**	**111,851**	**106,629**	**45,537**

1
Total net amount is computed as the gross amount less any participations.

2
Irrevocable loan commitments do not include a total gross amount of CHF 113,580 million and CHF 108,663 million of unused credit limits as of December 31, 2018 and 2017, respectively, which were revocable at the Group's sole discretion upon notice to the client.

Other commitments

Irrevocable commitments under documentary credits

Irrevocable commitments under documentary credits include exposures from trade finance related to commercial letters of credit under which the Group guarantees payments to exporters against presentation of shipping and other documents.

Irrevocable loan commitments

Irrevocable loan commitments are irrevocable credit facilities extended to clients and include fully or partially undrawn commitments that are legally binding and cannot be unconditionally cancelled by the Group. Commitments to originate mortgage loans that will be held for sale are considered derivatives for accounting purposes and are not included in this disclosure. Such commitments are reflected as derivatives in the consolidated balance sheets.

Forward reverse repurchase agreements

Forward reverse repurchase agreements represent transactions in which the initial cash exchange of the reverse repurchase transactions takes place on specified future dates. The Group enters into forward reverse repurchase agreements with counterparties that may have existing funded reverse repurchase agreements. Depending on the details of the counterparty contract with Credit Suisse, both a counterparty’s existing funded reverse repurchase

agreement and any forward reverse repurchase agreements under contract with the same counterparty are considered.

Other commitments

Other commitments include private equity commitments, firm commitments in underwriting securities, commitments arising from deferred payment letters of credit and from acceptances in circulation and liabilities for call and put options on shares and other equity instruments.

34 Transfers of financial assets and variable interest entities

In the normal course of business, the Group enters into transactions with, and makes use of, SPEs. An SPE is an entity in the form of a trust or other legal structure designed to fulfill a specific limited need of the company that organized it and is generally structured to isolate the SPE's assets from creditors of other entities, including the Group. The principal uses of SPEs are to assist the Group and its clients in securitizing financial assets and creating investment products. The Group also uses SPEs for other client-driven activity, such as to facilitate financings, and for Group tax or regulatory purposes.

Transfers of financial assets

Securitizations

The majority of the Group's securitization activities involve mortgages and mortgage-related securities and are predominantly transacted using SPEs. In a typical securitization, the SPE purchases assets financed by proceeds received from the SPE's issuance of debt and equity instruments, certificates, CP and other notes of indebtedness. These assets and liabilities are recorded on the balance sheet of the SPE and not reflected on the Group's consolidated balance sheet, unless either the Group sold the assets to the entity and the accounting requirements for sale were not met or the Group consolidates the SPE.

The Group purchases commercial and residential mortgages for the purpose of securitization and sells these mortgage loans to SPEs. These SPEs issue commercial mortgage-backed securities (CMBS), residential mortgage-backed securities (RMBS) and ABS that are collateralized by the assets transferred to the SPE and that pay a return based on the returns on those assets. Investors in these mortgage-backed securities or ABS typically have recourse to the assets in the SPEs. Third-party guarantees may further enhance the creditworthiness of the assets. The investors and the SPEs have no recourse to the Group's assets. The Group is typically an underwriter of, and makes a market in, these securities.

The Group also transacts in re-securitizations of previously issued RMBS securities. Typically, certificates issued out of an existing securitization vehicle are sold into a newly created and separate securitization vehicle. Often, these re-securitizations are initiated in order to re-securitize an existing security to give the investor an investment with different risk ratings or characteristics.

The Group also uses SPEs for other asset-backed financings relating to client-driven activity and for Group tax or regulatory purposes. Types of structures included in this category include managed collateralized loan obligations (CLOs), CLOs, leveraged finance, repack and other types of transactions, including life insurance structures, emerging market structures set up for financing, loan participation or loan origination purposes, and other alternative structures created for the purpose of investing in venture capital-like investments. CLOs are collateralized by loans transferred to the CLO vehicle and pay a return based on the returns on the loans. Leveraged finance structures are used to assist in the syndication of certain loans held by the Group, while repack structures are designed to give a client collateralized exposure to specific cash flows or credit risk backed by collateral purchased from the Group. In these asset-backed financing structures, investors typically only have recourse to the collateral of the SPE and do not have recourse to the Group's assets.

When the Group transfers assets into an SPE, it must assess whether that transfer is accounted for as a sale of the assets. Transfers of assets may not meet sale requirements if the assets have not been legally isolated from the Group and/or if the Group's continuing involvement is deemed to give it effective control over the assets. If the transfer is not deemed a sale, it is instead accounted for as a secured borrowing, with the transferred assets as collateral.

Gains and losses on securitization transactions depend, in part, on the carrying values of mortgages and loans involved in the transfer and are allocated between the assets sold and any beneficial interests retained according to the relative fair values at the date of sale.

The Group does not retain material servicing responsibilities from securitization activities.

The following table provides the gains or losses and proceeds from the transfer of assets relating to 2018, 2017 and 2016 securitizations of financial assets that qualify for sale accounting and subsequent derecognition, along with the cash flows between the Group and the SPEs used in any securitizations in which the Group still has continuing involvement, regardless of when the securitization occurred.

Securitizations in	2018	2017	2016
Gains/(losses) and cash flows (CHF million)			
CMBS			
Net gain/(loss) [1]	10	37	(2)
Proceeds from transfer of assets	5,861	6,604	3,954
Cash received on interests that continue to be held	41	28	69
RMBS			
Net gain/(loss) [1]	(1)	0	(4)
Proceeds from transfer of assets	22,536	14,817	9,866
Purchases of previously transferred financial assets or its underlying collateral	0	(2)	0
Servicing fees	3	3	2
Cash received on interests that continue to be held	576	368	529
Other asset-backed financings			
Net gain [1]	77	31	26
Proceeds from transfer of assets	6,422	7,664	2,813
Purchases of previously transferred financial assets or its underlying collateral [2]	(318)	(380)	(68)
Fees [3]	142	135	137
Cash received on interests that continue to be held	3	4	2

1
Includes underwriting revenues, deferred origination fees, gains or losses on the sale of collateral to the SPE and gains or losses on the sale of newly issued securities to third parties, but excludes net interest income on assets prior to the securitization. The gains or losses on the sale of the collateral is the difference between the fair value on the day prior to the securitization pricing date and the sale price of the loans.

2
Line item was omitted in 2017 and 2016.

3
Represents management fees and performance fees earned for investment management services provided to managed CLOs.

Continuing involvement in transferred financial assets

The Group may have continuing involvement in the financial assets that are transferred to an SPE, which may take several forms, including, but not limited to, servicing, recourse and guarantee arrangements, agreements to purchase or redeem transferred assets, derivative instruments, pledges of collateral and beneficial interests in the transferred assets. Beneficial interests, which are valued at fair value, include rights to receive all or portions of specified cash inflows received by an SPE, including, but not limited to, senior and subordinated shares of interest, principal, or other cash inflows to be “passed through” or “paid through”, premiums due to guarantors, CP obligations, and residual interests, whether in the form of debt or equity.

The Group’s exposure resulting from continuing involvement in transferred financial assets is generally limited to beneficial interests typically held by the Group in the form of instruments issued by SPEs that are senior, subordinated or residual tranches. These instruments are held by the Group typically in connection with underwriting or market-making activities and are included in trading assets in the consolidated balance sheets. Any changes in the fair value of these beneficial interests are recognized in the consolidated statements of operations.

Investors usually have recourse to the assets in the SPE and often benefit from other credit enhancements, such as collateral accounts, or from liquidity facilities, such as lines of credit or liquidity put option of asset purchase

agreements. The SPE may also enter into a derivative contract in order to convert the yield or currency of the underlying assets to match the needs of the SPE investors, or to limit or change the credit risk of the SPE. The Group may be the provider of certain credit enhancements as well as the counterparty to any related derivative contract.

The following table provides the outstanding principal balance of assets to which the Group continued to be exposed after the transfer of the financial assets to any SPE and the total assets of the SPE as of December 31, 2018 and 2017, regardless of when the transfer of assets occurred.

Principal amounts outstanding and total assets of SPEs resulting from continuing involvement

end of	2018	2017
CHF million		
CMBS		
Principal amount outstanding	25,330	19,918
Total assets of SPE	35,760	31,586
RMBS		
Principal amount outstanding	40,253	35,645
Total assets of SPE	41,242	36,770
Other asset-backed financings		
Principal amount outstanding	23,036	20,916
Total assets of SPE	47,542	39,330

Principal amount outstanding relates to assets transferred from the Group and does not include principal amounts for assets transferred from third parties.

Fair value of beneficial interests

The fair value measurement of the beneficial interests held at the time of transfer and as of the reporting date that result from any continuing involvement is determined using fair value estimation techniques, such as the present value of estimated future cash flows that incorporate assumptions that market participants customarily use in these valuation techniques. The fair value of the assets or liabilities that result from any continuing involvement does not include any benefits from financial instruments that the Group may utilize to hedge the inherent risks.

Key economic assumptions at the time of transfer

> Refer to “Fair value measurement” in Note 35 – Financial instruments for further information on the fair value hierarchy.

Key economic assumptions used in measuring fair value of beneficial interests at time of transfer

	2018		2017		2016	
at time of transfer, in	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS
CHF million, except where indicated						
Fair value of beneficial interests	662	3,613	445	2,400	69	2,068
of which level 2	640	3,509	444	2,221	69	1,827
of which level 3	22	103	1	179	0	241
Weighted-average life, in years	6.6	7.8	10.0	6.0	8.4	7.2
Prepayment speed assumption (rate per annum), in % [1]	[2]	5.0 – 13.5	[2]	1.0 – 22.9	[2]	5.0 – 33.0
Cash flow discount rate (rate per annum), in % [3]	3.6 – 9.8	3.0 – 13.6	2.4 – 9.0	2.0 – 29.5	2.4 – 4.9	1.2 – 24.4
Expected credit losses (rate per annum), in % [4]	1.8 – 3.1	2.3 – 7.2	0.6 – 3.4	0.8 – 6.3	0.0 – 0.0	2.5 – 11.2

Transfers of assets in which the Group does not have beneficial interests are not included in this table.

1 Prepayment speed assumption (PSA) is an industry standard prepayment speed metric used for projecting prepayments over the life of a residential mortgage loan. PSA utilizes the constant prepayment rate (CPR) assumptions. A 100% prepayment assumption assumes a prepayment rate of 0.2% per annum of the outstanding principal balance of mortgage loans in the first month. This increases by 0.2 percentage points thereafter during the term of the mortgage loan, leveling off to a CPR of 6% per annum beginning in the 30th month and each month thereafter during the term of the mortgage loan. 100 PSA equals 6 CPR.

2 To deter prepayment, commercial mortgage loans typically have prepayment protection in the form of prepayment lockouts and yield maintenances.

3 The rate was based on the weighted-average yield on the beneficial interests.

4 The range of expected credit losses only reflects instruments with an expected credit loss greater than zero unless all of the instruments have an expected credit loss of zero.

Key economic assumptions as of the reporting date

The following table provides the sensitivity analysis of key economic assumptions used in measuring the fair value of beneficial interests held in SPEs as of December 31, 2018 and 2017.

Key economic assumptions used in measuring fair value of beneficial interests held in SPEs

	2018			2017		
end of	CMBS [1]	RMBS [1]	Other[2] asset-backed financing	CMBS [1]	RMBS [1]	Other[2] asset-backed financing

			activities			activities
CHF million, except where indicated						
Fair value of beneficial interests	805	2,006	226	579	1,985	665
of which non-investment grade	112	307	26	100	508	50
Weighted-average life, in years	5.7	7.9	5.6	4.7	8.1	6.4
Prepayment speed assumption (rate per annum), in % [3]	– 2.0 –	20.0	–	– 1.0 –	25.0	–
Impact on fair value from 10% adverse change	–	(22.3)	–	–	(35.0)	–
Impact on fair value from 20% adverse change	–	(43.2)	–	–	(68.1)	–
Cash flow discount rate (rate per annum), in % [4]	3.4 – 14.3	3.0 – 21.3	1.0 – 21.2	2.7 – 12.3	1.9 – 30.6	1.0 – 21.2
Impact on fair value from 10% adverse change	(20.7)	(52.1)	(2.9)	(8.8)	(49.2)	(12.4)
Impact on fair value from 20% adverse change	(37.6)	(101.3)	(5.7)	(17.0)	(95.3)	(24.5)
Expected credit losses (rate per annum), in % [5]	0.8 – 4.7	0.6 – 18.8	1.0 – 21.2	0.6 – 6.3	0.5 – 28.2	0.7 – 21.2
Impact on fair value from 10% adverse change	(10.2)	(23.8)	(2.4)	(3.9)	(23.6)	(6.6)
Impact on fair value from 20% adverse change	(17.3)	(46.7)	(4.8)	(7.8)	(46.1)	(12.9)

1
To deter prepayment, commercial mortgage loans typically have prepayment protection in the form of prepayment lockouts and yield maintenances.

2
CDOs and CLOs within this category are generally structured to be protected from prepayment risk.

3
PSA is an industry standard prepayment speed metric used for projecting prepayments over the life of a residential mortgage loan. PSA utilizes the CPR assumptions. A 100% prepayment assumption assumes a prepayment rate of 0.2% per annum of the outstanding principal balance of mortgage loans in the first month. This increases by 0.2 percentage points thereafter during the term of the mortgage loan, leveling off to a CPR of 6% per annum beginning in the 30th month and each month thereafter during the term of the mortgage loan. 100 PSA equals 6 CPR.

4
The rate was based on the weighted-average yield on the beneficial interests.
5
The range of expected credit losses only reflects instruments with an expected credit loss greater than zero unless all of the instruments have an expected credit loss of zero.
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These sensitivities are hypothetical and do not reflect economic hedging activities. Changes in fair value based on a 10% or 20% variation in assumptions generally cannot be extrapolated because the relationship of the change in assumption to the change in fair value may not be linear. Also, the effect of a variation in a particular assumption on the fair value of the beneficial interests is calculated without changing any other assumption. In practice, changes in one assumption may result in changes in other assumptions (for example, increases in market interest rates may result in lower prepayments and increased credit losses), which might magnify or counteract the sensitivities.

Transfers of financial assets where sale treatment was not achieved

The following table provides the carrying amounts of transferred financial assets and the related liabilities where sale treatment was not achieved as of December 31, 2018 and 2017.

> Refer to “Note 36 – Assets pledged and collateral” for further information.

Carrying amounts of transferred financial assets and liabilities where sale treatment was not achieved

end of	2018	2017
CHF million		
Other asset-backed financings		
Trading assets	255	347
Other assets	0	48
Liability to SPE, included in other liabilities	(255)	(395)

Securities sold under repurchase agreements and securities lending transactions accounted for as secured borrowings

For securities sold under repurchase agreements and securities lending transactions accounted for as secured borrowings, US GAAP requires the disclosure of the collateral pledged and the associated risks to which a transferor continues to be exposed after the transfer. This provides an understanding of the nature and risks of short-term collateralized financing obtained through these types of transactions.

Securities sold under repurchase agreements and securities lending transactions represent collateralized financing transactions used to earn net interest income, increase liquidity or facilitate trading activities. These transactions are collateralized principally by government debt securities, corporate debt securities, asset-backed securities, equity securities and other collateral and have terms ranging from on demand to a longer period of time.

In the event of the Group’s default or a decline in fair value of collateral pledged, the repurchase agreement provides the counterparty with the right to liquidate the collateral held or request additional collateral. Similarly, in the event of the Group’s default, the securities lending transaction provides the counterparty the right to liquidate the securities borrowed.

The following tables provide the gross obligation relating to securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral by the class of collateral pledged and by remaining contractual maturity as of December 31, 2018 and 2017.

Securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral – by class of collateral pledged

end of	2018	2017
CHF billion		
Government debt securities	31.1	31.4
Corporate debt securities	9.6	15.1
Asset-backed securities	1.8	5.0
Other	0.2	0.6
Securities sold under repurchase agreements	**42.7**	**52.1**
Government debt securities	1.4	2.7
Corporate debt securities	0.2	0.4
Equity securities	3.2	4.8
Other	0.2	0.3
Securities lending transactions	**5.0**	**8.2**
Government debt securities	3.6	1.8
Corporate debt securities	1.0	0.6
Asset-backed securities	0.1	0.0

Equity securities	37.0	35.6
Other	0.0	0.1
Obligation to return securities received as collateral, at fair value	**41.7**	**38.1**
Total	**89.4**	**98.4**

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Securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral – by remaining contractual maturity

	Remaining contractual maturities				
end of	On demand[1]	Up to 30 days[2]	31–90 days	More than 90 days	Total
2018 (CHF billion)					
Securities sold under repurchase agreements	7.4	26.3	6.7	2.3	42.7
Securities lending transactions	4.1	0.9	0.0	0.0	5.0
Obligation to return securities received as collateral, at fair value	41.4	0.1	0.2	0.0	41.7
Total	**52.9**	**27.3**	**6.9**	**2.3**	**89.4**
2017 (CHF billion)					
Securities sold under repurchase agreements	7.2	32.5	5.2	7.2	52.1
Securities lending transactions	5.7	2.2	0.0	0.3	8.2
Obligation to return securities received as collateral, at fair value	37.9	0.0	0.0	0.2	38.1
Total	**50.8**	**34.7**	**5.2**	**7.7**	**98.4**

1
Includes contracts with no contractual maturity that may contain termination arrangements subject to a notice period.
2
Includes overnight transactions.
> Refer to “Note 27 – Offsetting of financial assets and financial liabilities” for further information on the gross amount of securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral and the net amounts disclosed in the consolidated balance sheets.

Variable interest entities

As a normal part of its business, the Group engages in various transactions that include entities that are considered VIEs and are grouped into three primary categories: collateralized debt obligations (CDOs)/CLOs, CP conduits and financial intermediation. VIEs are SPEs that typically either lack sufficient equity to finance their activities without additional subordinated financial support or are structured such that the holders of the voting rights do not substantively participate in the gains and losses of the entity. VIEs may be sponsored by the Group or third parties. Such entities are required to be assessed for consolidation, compelling the primary beneficiary to consolidate the VIE. The consolidation assessment requires an entity to determine whether it has the power to direct the activities that most significantly affect the economics of the VIE as well as whether the reporting entity has potentially significant benefits or losses in the VIE. The primary beneficiary assessment must be re-evaluated on an ongoing basis.

Application of the requirements for consolidation of VIEs may require the exercise of significant management judgment. In the event consolidation of a VIE is required, the exposure to the Group is limited to that portion of the VIE's assets attributable to any variable interest held by the Group prior to any risk management activities to hedge the Group's net exposure. Any interests held in the VIE by third parties, even though consolidated by the Group, will not typically impact its results of operations.

Transactions with VIEs are generally executed to facilitate securitization activities or to meet specific client needs, such as providing liquidity or investing opportunities, and, as part of these activities, the Group may hold interests in the VIEs. Securitization-related transactions with VIEs involve selling or purchasing assets as well as possibly entering into related derivatives with those VIEs, providing liquidity, credit or other support. Other transactions with VIEs include derivative transactions in the Group's capacity as the prime broker. The Group also enters into lending arrangements with VIEs for the purpose of financing projects or the acquisition of assets. Typically, the VIE's assets are restricted in nature in that they are held primarily to satisfy the obligations of the entity. Further, the Group is involved with VIEs which were formed for the purpose of offering alternative investment solutions to clients. Such VIEs relate primarily to private equity investments, fund-linked vehicles or funds of funds, where the Group acts as structurer, manager, distributor, broker, market maker or liquidity provider.

As a consequence of these activities, the Group holds variable interests in VIEs. Such variable interests consist of financial instruments issued by VIEs and which are held by the Group, certain derivatives with VIEs or loans to VIEs. Guarantees issued by the Group to or on behalf of VIEs may also qualify as variable interests. For such guarantees, including derivatives that act as guarantees, the notional amount of the respective guarantees is presented to represent the exposure. In general, investors in consolidated VIEs do not have recourse to the Group in the event of a default, except where a guarantee was provided to the investors or where the Group is the counterparty to a derivative transaction involving VIEs.

Total assets of consolidated and non-consolidated VIEs for which the Group has involvement represent the total assets of the VIEs even though the Group's involvement may be significantly less due to interests held by third-party investors. The asset balances for non-consolidated VIEs where the Group has significant involvement represent the most current information available to the Group regarding the remaining principal balance of assets owned. In most cases, the asset balances represent an amortized cost basis without regards to impairments in fair value, unless fair value information is readily available.

The Group's maximum exposure to loss is different from the carrying value of the assets of the VIE. This maximum exposure to loss consists of the carrying value of the Group variable interests held as trading assets, derivatives and loans, the notional amount of guarantees and off-balance sheet commitments to VIEs, rather than the amount of total assets of the VIEs. The maximum exposure to loss does not reflect the Group's risk management activities, including effects from financial instruments that the Group may utilize to economically hedge the risks inherent in these VIEs. The economic risks associated with VIE exposures held by the Group, together with all relevant risk mitigation initiatives, are included in the Group's risk management framework.

The Group has not provided financial or other support to consolidated or non-consolidated VIEs that it was not contractually required to provide.

Collateralized debt and loan obligations

The Group engages in CDO/CLO transactions to meet client and investor needs, earn fees and sell financial assets and, for CLOs, loans. The Group may act as underwriter, placement agent or asset manager and may warehouse assets prior to the closing of a transaction. As part of its structured finance business, the Group purchases loans and other

debt obligations from and on behalf of clients for the purpose of securitization. The loans and other debt obligations are sold to VIEs, which in turn issue CDO/CLOs to fund the purchase of assets such as investment grade and high yield corporate debt instruments.
Typically, the collateral manager in a managed CDO/CLO is deemed to be the entity that has the power to direct the activities that most affect the economics of the entity. In a static CDO/CLO this “power” role is more difficult to analyze and may be the sponsor of the entity or the CDS counterparty.
CDO/CLOs provide credit risk exposure to a portfolio of ABS or loans (cash CDO/CLOs) or a reference portfolio of securities or loans (synthetic CDO/CLOs). Cash CDO/CLO transactions hold actual securities or loans whereas synthetic CDO/CLO transactions use CDS to exchange the underlying credit risk instead of using cash assets. The Group may also act as a derivative counterparty to the VIEs, which are typically not variable interests, and

may invest in portions of the notes or equity issued by the VIEs. The CDO/CLO entities may have actively managed portfolios or static portfolios.
The securities issued by these VIEs are payable solely from the cash flows of the related collateral, and third-party creditors of these VIEs do not have recourse to the Group in the event of default.
The Group's exposure in CDO/CLO transactions is typically limited to interests retained in connection with its underwriting or market-making activities. Unless the Group has been deemed to have "power" over the entity and these interests are potentially significant, the Group is not the primary beneficiary of the vehicle and does not consolidate the entity. The Group's maximum exposure to loss does not include any effects from financial instruments used to economically hedge the risks of the VIEs.
Commercial paper conduit
The Group acts as the administrator and provider of liquidity and credit enhancement facilities for Alpine Securitization Ltd (Alpine), a multi-seller asset-backed CP conduit used for client and Group financing purposes. Alpine discloses to CP investors certain portfolio and asset data and submits its portfolio to rating agencies for public ratings. This CP conduit purchases assets such as loans and receivables or enters into reverse repurchase agreements and finances such activities through the issuance of CP backed by these assets. The CP conduit can enter into liquidity facilities with third-party entities pursuant to which it may be required to purchase assets from these entities to provide them with liquidity and credit support. The financing transactions are structured to provide credit support to the CP conduit in the form of over-collateralization and other asset-specific enhancements. Alpine is a separate legal entity that is wholly owned by the Group. However, its assets are available to satisfy only the claims of its creditors. In addition, the Group, as administrator and liquidity facility provider, has significant exposure to and power over the activities of Alpine. Alpine is considered a VIE for accounting purposes and the Group is deemed the primary beneficiary and consolidates this entity.
The overall average maturity of Alpine's outstanding CP was approximately 129 days as of December 31, 2018. Alpine was rated A-1(sf) by Standard & Poor's and P-1(sf) by Moody's and had exposures mainly in a reverse repurchase agreement with a Group entity, consumer loans and car loans.
The Group's commitment to this CP conduit consists of obligations under liquidity agreements. The liquidity agreements are asset-specific arrangements, which require the Group to provide short-term financing to the CP conduit or to purchase assets from the CP conduit in certain circumstances, including a lack of liquidity in the CP market such that the CP conduit cannot refinance its obligations or, in some cases, a default of an underlying asset. The asset-specific credit enhancements provided by the client seller of the assets remain unchanged as a result of such a purchase. In entering into such agreements, the Group reviews the credit risk associated with these transactions on the same basis that would apply to other extensions of credit.
The Group's economic risks associated with the CP conduit are included in the Group's risk management framework including counterparty, economic risk capital and scenario analysis.
Financial intermediation
The Group has significant involvement with VIEs in its role as a financial intermediary on behalf of clients.
The Group considers the likelihood of incurring a loss equal to the maximum exposure to be remote because of the Group's risk mitigation efforts, including, but not limited to, economic hedging strategies and collateral arrangements. The Group's economic risks associated with consolidated and non-consolidated VIE exposures arising from financial intermediation, together with all relevant risk mitigation initiatives, are included in the Group's risk management framework.
Financial intermediation consists of securitizations, funds, loans, and other vehicles.
Securitizations
Securitizations are primarily CMBS, RMBS and ABS vehicles. The Group acts as an underwriter, market maker, liquidity provider, derivative counterparty and/or provider of credit enhancements to VIEs related to certain securitization transactions.
The maximum exposure to loss is the carrying value of the loan securities and derivative positions that are variable interests, if any, plus the exposure arising from any credit enhancements the Group provided. The Group's maximum exposure to loss does not include any effects from financial instruments used to economically hedge the risks of the VIEs.

The activities that have the most significant impact on the securitization vehicle are the decisions relating to defaulted loans, which are controlled by the servicer. The party that controls the servicing has the ability to make decisions that significantly affect the result of the activities of the securitization vehicle. If a securitization vehicle has multiple parties that control servicing over specific assets, the Group determines it has power when it has control over the servicing of greater than 50% of the assets in the securitization vehicle. When a servicer or its related party also has an economic interest that has the potential to absorb a significant portion of the gains and/or losses, it will be deemed the primary beneficiary and consolidate the vehicle. If the Group determines that it controls the relevant servicing, it then determines if it has the obligation to absorb losses from, or the right to receive benefits of, the securitization vehicle that could potentially be significant to the vehicle, primarily by evaluating the amount and nature of securities issued by the vehicle that it holds. Factors considered in this analysis include the level of subordination of the securities held as well as the size of the position, based on the

percentage of the class of securities and the total deal classes of securities issued. The more subordinated the level of securities held, the more likely it is that the Group will be the primary beneficiary. This consolidation analysis is performed each reporting period based on changes in inventory and the levels of assets remaining in the securitization. The Group typically consolidates securitization vehicles when it is the servicer and has holdings stemming from its role as underwriter. Short-term market making holdings in vehicles are not typically considered to be potentially significant for the purposes of this assessment.
In the case of re-securitizations of previously issued RMBS securities, the re-securitization vehicles are passive in nature and do not have any significant ongoing activities that require management, and decisions relating to the design of the securitization transaction at its inception are the key power relating to the vehicle. Activities at inception include selecting the assets and determining the capital structure. The power over a re-securitization vehicle is typically shared between the Group and the investor(s) involved in the design and creation of the vehicle. The Group concludes that it is the primary beneficiary of a re-securitization vehicle when it owns substantially all of the bonds issued from the vehicle.
Funds
Funds include investment structures such as mutual funds, funds of funds, private equity funds and fund-linked products where the investors' interest is typically in the form of debt rather than equity, thereby making them VIEs. The Group may have various relationships with such VIEs in the form of structurer, investment advisor, investment manager, administrator, custodian, underwriter, placement agent, market maker and/or as prime broker. These activities include the use of VIEs in structuring fund-linked products, hedge funds of funds or private equity investments to provide clients with investment opportunities in alternative investments. In such transactions, a VIE holds underlying investments and issues securities that provide the investors with a return based on the performance of those investments.
The maximum exposure to loss consists of the fair value of instruments issued by such structures that are held by the Group as a result of underwriting or market-making activities, financing provided to the vehicles and the Group's exposure resulting from principal protection and redemptions features. The investors typically retain the risk of loss on such transactions, but for certain fund types, the Group may provide principal protection on the securities to limit the investors' exposure to downside market risk. The Group's maximum exposure to loss does not include any effects from financial instruments used to economically hedge the risk of the VIEs.
Another model is used to assess funds for consolidation under US GAAP. Rather than the consolidation model which incorporates power and the potential to absorb significant risk and rewards, a previous consolidation model is used which results in the Group being the primary beneficiary and consolidating the funds if it holds more than 50% of their outstanding issuances.
Loans
The Group provides loans to financing vehicles owned or sponsored by clients or third-parties. These tailored lending arrangements are established to purchase, lease or otherwise finance and manage clients' assets and include financing of specified client assets, of an individual single-asset used by the client or business ventures. The respective owner of the assets or manager of the businesses provides the equity in the vehicle.
The maximum exposure to loss is the carrying value of the Group's loan exposure, which is subject to the same credit risk management procedures as loans issued directly to clients. The clients' creditworthiness is carefully reviewed, loan-to-value ratios are strictly set and, in addition, clients provide equity, additional collateral or guarantees, all of which significantly reduce the Group's exposure. The Group considers the likelihood of incurring a loss equal to the maximum exposure to be remote because of the Group's risk mitigation efforts, which includes over-collateralization and effective monitoring to ensure that a sufficient loan-to-value ratio is maintained.
The third-party sponsor of the VIE will typically have control over the assets during the life of the structure and have the potential to absorb significant gains and losses; the Group is typically not the primary beneficiary of these structures and will not have to consolidate them. However, a change in the structure, such as a default of the sponsor, may result in the Group gaining control over the assets. If the Group's lending is significant, it may then be required to consolidate the entity.
Other
Other includes additional vehicles where the Group provides financing and trust preferred issuance vehicles. Trust preferred issuance vehicles are utilized to assist the Group in raising capital-efficient financing. The VIE issues

preference shares which are guaranteed by the Group and uses the proceeds to purchase the debt of the Group. The Group's guarantee of its own debt is not considered a variable interest and, as it has no holdings in these vehicles, the Group has no maximum exposure to loss. Non-consolidated VIEs include only the total assets of trust preferred issuance vehicles, as the Group has no variable interests with these entities.

Consolidated VIEs

The Group has significant involvement with VIEs in its role as a financial intermediary on behalf of clients. The Group consolidates all VIEs related to financial intermediation for which it was the primary beneficiary.

The consolidated VIEs table provides the carrying amounts and classifications of the assets and liabilities of consolidated VIEs as of December 31, 2018 and 2017.

Consolidated VIEs in which the Group was the primary beneficiary

				Financial intermediation			
end of	CDO/ CLO	CP Conduit	Securi- tizations	Funds	Loans	Other	Total
2018 (CHF million)							
Cash and due from banks	15	1	68	17	52	20	173
Trading assets	72	0	170	418	944	12	1,616
Investment securities	0	0	1,432	0	0	0	1,432
Other investments	0	0	0	153	1,073	279	1,505
Net loans	0	0	119	0	23	245	387
Premises and equipment	0	0	0	0	39	0	39
Other assets	57	16	863	4	33	1,037	2,010
of which loans held-for-sale	57	0	107	0	3	0	167
Total assets of consolidated VIEs	**144**	**17**	**2,652**	**592**	**2,164**	**1,593**	**7,162**
Trading liabilities	0	0	0	0	3	0	3
Short-term borrowings	0	5,465	0	0	0	0	5,465
Long-term debt	48	0	1,487	174	26	29	1,764
Other liabilities	0	43	1	8	98	127	277
Total liabilities of consolidated VIEs	**48**	**5,508**	**1,488**	**182**	**127**	**156**	**7,509**
2017 (CHF million)							
Cash and due from banks	22	0	96	32	70	12	232
Trading assets	17	0	10	179	1,122	20	1,348
Investment securities	0	0	381	0	0	0	381
Other investments	0	0	0	350	1,197	286	1,833
Net loans	0	0	0	3	21	243	267
Premises and equipment	0	0	0	0	151	0	151
Other assets	83	4	1,070	21	32	1,188	2,398
of which loans held-for-sale	83	0	152	0	3	0	238
Total assets of consolidated VIEs	**122**	**4**	**1,557**	**585**	**2,593**	**1,749**	**6,610**
Trading liabilities	0	0	0	0	3	0	3
Short-term borrowings	0	6,672[1]	0	0	0	0	6,672
Long-term debt	51	0	752	0	26	34	863
Other liabilities	0	237[1]	1	26	111	66	441
Total liabilities of consolidated VIEs	**51**	**6,909**	**753**	**26**	**140**	**100**	**7,979**

1 Amounts were omitted in prior periods and have been corrected.

Non-consolidated VIEs

The non-consolidated VIEs table provides the carrying amounts and classification of the assets of variable interests recorded in the Group's consolidated balance sheets, maximum exposure to loss and total assets of the non-consolidated VIEs.

Total variable interest assets for which the company has involvement represent the carrying value of the variable interests in non-consolidated VIEs that are recorded in the consolidated balance sheet of the Group (for example, direct holdings in investment funds, loans and other receivables).

Maximum exposure to loss represents the carrying value of total variable interest assets in non-consolidated VIEs of the Group and the notional amounts of guarantees and off-balance sheet commitments which are variable interests that have been extended to non-consolidated VIEs. Such amounts, particularly notional amounts of derivatives, guarantees and off-balance sheet commitments, do not represent the anticipated losses in connection with these transactions as they do not take into consideration the effect of collateral, recoveries or the probability of loss. In addition, they exclude the effect of offsetting financial instruments that are held to mitigate these risks and have not been reduced by unrealized losses previously recorded by the Group in connection with guarantees, off-balance sheet commitments or derivatives.

Total assets of non-consolidated VIEs are the assets of the non-consolidated VIEs themselves and are typically unrelated to the exposures the Group has with these entities due to variable interests held by third-party investors. Accordingly, these amounts are not considered for risk management purposes.

Certain VIEs have not been included in the following table, including VIEs structured by third parties in which the Group's interest is in the form of securities held in the Group's inventory, certain repurchase financings to funds and single-asset financing vehicles not sponsored by the Group to which the Group provides financing but has very little risk of loss due to over-collateralization and/or guarantees, failed sales where the Group does not have any other holdings and other entities out of scope.

Non-consolidated VIEs

			Financial intermediation			
end of	CDO/ CLO	Securi- tizations	Funds	Loans	Other	Total
2018 (CHF million)						
Trading assets	209	4,527	927	183	3,703	9,549
Net loans	154	1,475	1,591	5,246	430	8,896
Other assets	3	19	120	0	444	586
Total variable interest assets	**366**	**6,021**	**2,638**	**5,429**	**4,577**	**19,031**
Maximum exposure to loss	**366**	**7,637**	**2,653**	**8,680**	**5,150**	**24,486**
Total assets of non-consolidated VIEs	**7,033**	**96,483**	**68,258**	**20,804**	**31,336**	**223,914**
2017 (CHF million)						
Trading assets	746	4,573	1,014	224	2,388	8,945
Net loans	620	1,563	2,438	4,591	328	9,540
Other assets	9	11	67	1	437	525
Total variable interest assets	**1,375**	**6,147**	**3,519**	**4,816**	**3,153**	**19,010**
Maximum exposure to loss	**1,375**	**7,617**	**3,526**	**7,061**	**4,079**	**23,658**
Total assets of non-consolidated VIEs	**15,874**	**64,839**	**66,703**	**16,270**	**35,198**	**198,884**

35 Financial instruments

The disclosure of the Group's financial instruments below includes the following sections:

- Concentration of credit risk;
- Fair value measurement (including fair value hierarchy, transfers between levels; level 3 reconciliation; qualitative and quantitative disclosures of valuation techniques and nonrecurring fair value changes);
- Fair value option; and
- Disclosures about fair value of financial instruments not carried at fair value.

Concentrations of credit risk

Credit risk concentrations arise when a number of counterparties are engaged in similar business activities, are located in the same geographic region or when there are similar economic features that would cause their ability to meet contractual obligations to be similarly impacted by changes in economic conditions.

The Group regularly monitors the credit risk portfolio by counterparty, industry, country and product to ensure that such potential concentrations are identified, using a comprehensive range of quantitative tools and metrics. Credit limits relating to counterparties and products are managed through counterparty limits which set the maximum credit exposures the Group is willing to assume to specific counterparties over specified periods. Country limits are established to avoid any undue country risk concentration.

From an industry point of view, the combined credit exposure of the Group is diversified. A large portion of the credit exposure is with individual clients, particularly through residential mortgages in Switzerland, or relates to transactions with financial institutions. In both cases, the customer base is extensive and the number and variety of transactions are broad. For transactions with financial institutions, the business is also geographically diverse, with operations focused in the Americas, Europe and, to a lesser extent, Asia Pacific.

Fair value measurement

A significant portion of the Group's financial instruments is carried at fair value. Deterioration of financial markets could significantly impact the fair value of these financial instruments and the results of operations.

The fair value of the majority of the Group's financial instruments is based on quoted prices in active markets or observable inputs. These instruments include government and agency securities, certain CP, most investment grade corporate debt, certain high yield debt securities, exchange-traded and certain OTC derivatives and most listed equity securities.

In addition, the Group holds financial instruments for which no prices are available and which have few or no observable inputs. For these instruments, the determination of fair value requires subjective assessment and judgment, depending on liquidity, pricing assumptions, the current economic and competitive environment and the risks affecting the specific instrument. In such circumstances, valuation is determined based on management's own judgments about the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk. These instruments include certain OTC derivatives, including interest rate, foreign exchange, equity and credit derivatives, certain corporate equity-linked securities, mortgage-related and CDO securities, private equity investments and certain loans and credit products, including leveraged finance, certain syndicated loans and certain high yield bonds, and life finance instruments. The fair value measurement disclosures exclude derivative transactions that are daily settled.

The fair value of financial instruments is impacted by factors such as benchmark interest rates, prices of financial instruments issued by third parties, commodity prices, foreign exchange rates and index prices or rates. In addition, valuation adjustments are an integral part of the valuation process when market prices are not indicative of the credit quality of a counterparty, and are applied to both OTC derivatives and debt instruments. The impact of changes in a counterparty's credit spreads (known as credit valuation adjustments) is considered when measuring the fair value of assets, and the impact of changes in the Group's own credit spreads (known as debit valuation adjustments) is considered when measuring the fair value of its liabilities. For OTC derivatives, the impact of changes in both the Group's and the counterparty's credit standing is considered when measuring their fair value, based on current CDS prices. The adjustments also take into account contractual factors designed to reduce the Group's credit exposure to a counterparty, such as collateral held and master netting agreements. For hybrid debt instruments with embedded derivative features, the impact of changes in the Group's credit standing is considered when measuring their fair value, based on current funded debt spreads.

US GAAP permits a reporting entity to measure the fair value of a group of financial assets and financial liabilities on the basis of the price that would be received to sell a net long position or paid to transfer a net short position for a particular risk exposure in an orderly transaction between market participants at the measurement date. As such, the Group continues to apply bid and offer adjustments to net portfolios of cash securities and/or derivative instruments to adjust the value of the net position from a mid-market price to the appropriate bid or offer level that would be realized under normal market conditions for the net long or net short position for a specific market risk. In addition, the Group reflects the net exposure to credit risk for its derivative instruments where the Group has legally enforceable agreements with its counterparties that mitigate credit risk exposure in the event of default.

Valuation adjustments are recorded in a reasonable and consistent manner that results in an allocation to the relevant disclosures in the notes to the financial statements as if the valuation adjustment had been allocated to the individual unit of account.
Fair value hierarchy
The levels of the fair value hierarchy are defined as follows:
Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities that the Group has the ability to access. This level of the fair value hierarchy provides the most reliable evidence of fair value and is used to measure fair value whenever available.
Level 2*:* Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly or indirectly. These inputs include: (i) quoted prices for similar assets or liabilities in active markets; (ii) quoted prices for identical or similar assets or liabilities in markets that are not active, that is, markets in which there are few transactions for the asset or liability, the prices are not current or price quotations vary substantially either over time or among market makers, or in which little information is publicly available; (iii) inputs other than quoted prices that are observable for the asset or liability; or (iv) inputs that are derived principally from or corroborated by observable market data by correlation or other means.
Level 3: Inputs that are unobservable for the asset or liability. These inputs reflect the Group's own assumptions about the assumptions that market participants would use in pricing the asset or liability (including assumptions about risk). These inputs are developed based on the best information available in the circumstances, which include the Group's own data. The Group's own data used to develop unobservable inputs is adjusted if information indicates that market participants would use different assumptions.
The Group records net open positions at bid prices if long, or at ask prices if short, unless the Group is a market maker in such positions, in which case mid-pricing is utilized. Fair value measurements are not adjusted for transaction costs.
Qualitative disclosures of valuation techniques
The following information on the valuation techniques and significant unobservable inputs of the various financial instruments and the section "Uncertainty of fair value measurements at the reporting date from the use of significant unobservable inputs" should be read in conjunction with the tables "Assets and liabilities measured at fair value on a recurring basis", "Quantitative information about level 3 assets at fair value" and "Quantitative information about level 3 liabilities at fair value".
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions
Securities purchased under resale agreements and securities sold under repurchase agreements are measured at fair value using discounted cash flow analysis. Future cash flows are discounted using observable market interest rate repurchase/resale curves for the applicable maturity and underlying collateral of the instruments. As such, the significant majority of both securities purchased under resale agreements and securities sold under repurchase agreements are included in level 2 of the fair value hierarchy. Structured resale and repurchase agreements include embedded derivatives, which are measured using the same techniques as described below for stand-alone derivative contracts held for trading purposes or used in hedge accounting relationships. If the value of the embedded derivative is determined using significant unobservable inputs, those structured resale and repurchase agreements included are classified as level 3 in the fair value hierarchy. The significant unobservable input is funding spread.
Securities purchased under resale agreements are usually fully collateralized or over-collateralized by government securities, money market instruments, corporate bonds, or other debt instruments. In the event of counterparty default, the collateral service agreement provides the Group with the right to liquidate the collateral held.
Debt securities
Foreign governments
Foreign government debt securities typically have quoted prices in active markets and are mainly categorized as level 1 instruments. Valuations of foreign government debt securities for which market prices are not available are based on yields reflecting credit rating, historical performance, delinquencies, loss severity, the maturity of the security, recent transactions in the market or other modeling techniques, which may involve judgment. Those securities where the price or model inputs are observable in the market are categorized as level 2 instruments, while those securities where prices are not observable and significant model inputs are unobservable are categorized as level 3 of the fair value hierarchy.
Corporates

Corporate bonds are priced to reflect current market levels either through recent market transactions or broker or dealer quotes. Where a market price for the particular security is not directly available, valuations are obtained based on yields reflected by other instruments in the specific or similar entity's capital structure and adjusting for differences in seniority and maturity, benchmarking to a comparable security where market data is available (taking into consideration differences in credit, liquidity and maturity), or through the application of cash flow modeling techniques utilizing observable inputs, such as current interest rate curves and observable CDS spreads. Significant unobservable inputs may include correlation and price. For securities using market comparable price, the differentiation between level 2 and level 3 is based upon the relative significance of any yield adjustments as well as the accuracy of the comparison characteristics (i.e., the observable comparable security may be in the same country but a different industry and may have a different seniority level – the lower the comparability the more likely the security will be level 3).

RMBS, CMBS and CDO securities

Fair values of RMBS, CMBS and CDO may be available through quoted prices, which are often based on the prices at which similarly structured and collateralized securities trade between dealers and to and from customers. Fair values of RMBS, CMBS and CDO for which there are significant unobservable inputs are valued using capitalization rate and discount rate. Price may not be observable for fair value measurement purposes for many reasons, such as the length of time since the last executed transaction for the related security, use of a price from a similar instrument, or use of a price from an indicative quote. Fair values determined by market comparable price may include discounted cash flow models using the inputs credit spread, default rate, discount rate, prepayment rate and loss severity. Prices from similar observable instruments are used to calculate implied inputs which are then used to value unobservable instruments using discounted cash flow. The discounted cash flow price is then compared to the unobservable prices and assessed for reasonableness.

For most structured debt securities, determination of fair value requires subjective assessment depending on liquidity, ownership concentration, and the current economic and competitive environment. Valuation is determined based on the Front Office's own assumptions about how market participants would price the asset. Collateralized bond and loan obligations are split into various structured tranches and each tranche is valued based upon its individual rating and the underlying collateral supporting the structure. Valuation models are used to value both cash and synthetic CDOs.

Equity securities

The majority of the Group's positions in equity securities are traded on public stock exchanges for which quoted prices are readily and regularly available and are therefore categorized as level 1 instruments. Level 2 and level 3 equities include fund-linked products, convertible bonds or equity securities with restrictions that are not traded in active markets. Significant unobservable inputs may include earnings before interest, taxes, depreciation and amortization (EBITDA) multiple and market comparable price.

Derivatives

Derivatives held for trading purposes or used in hedge accounting relationships include both OTC and exchange-traded derivatives. The fair values of exchange-traded derivatives measured using observable exchange prices are included in level 1 of the fair value hierarchy. For exchange-traded derivatives where the volume of trading is low, the observable exchange prices may not be considered executable at the reporting date. These derivatives are valued in the same manner as similar observable OTC derivatives and are included in level 2 of the fair value hierarchy. If the similar OTC derivative used for valuing the exchange-traded derivative is not observable, the exchange-traded derivative is included in level 3 of the fair value hierarchy.

The fair values of OTC derivatives are determined on the basis of either industry standard models or internally developed proprietary models. Both model types use various observable and unobservable inputs in order to determine fair value. The inputs include those characteristics of the derivative that have a bearing on the economics of the instrument. The determination of the fair value of many derivatives involves only a limited degree of subjectivity because the required inputs are observable in the marketplace, while more complex derivatives may use unobservable inputs that rely on specific proprietary modeling assumptions. Where observable inputs (prices from exchanges, dealers, brokers or market consensus data providers) are not available, attempts are made to infer values from observable prices through model calibration (spot and forward rates, mean reversion, benchmark interest rate curves and volatility inputs for commonly traded option products). For inputs that cannot be derived from other sources, estimates from historical data may be made. OTC derivatives where the majority of the value is derived from market observable inputs are categorized as level 2 instruments, while those where the majority of the value is derived from unobservable inputs are categorized as level 3 of the fair value hierarchy.

The valuation of derivatives includes an adjustment for the cost of funding uncollateralized OTC derivatives.

Interest rate derivatives

OTC vanilla interest rate products, such as interest rate swaps, swaptions and caps and floors are valued by discounting the anticipated future cash flows. The future cash flows and discounting are derived from market standard yield curves and industry standard volatility inputs. Where applicable, exchange-traded prices are also used to value exchange-traded futures and options and can be used in yield curve construction. For more complex products, inputs include, but are not limited to basis spread, correlation, credit spread, prepayment rate and volatility skew.

Foreign exchange derivatives

Foreign exchange derivatives include vanilla products such as spot, forward and option contracts where the anticipated discounted future cash flows are determined from foreign exchange forward curves and industry standard optionality modeling techniques. Where applicable, exchange-traded prices are also used for futures and option prices. For more complex products inputs include, but are not limited to, contingent probability, correlation and prepayment rate.

Equity and index-related derivatives

Equity derivatives include a variety of products ranging from vanilla options and swaps to exotic structures with bespoke payoff profiles. The main inputs in the valuation of equity derivatives may include buyback probability, correlation, gap risk, price and volatility.

Generally, the interrelationship between the correlation and volatility is positively correlated.

Credit derivatives

Credit derivatives include index, single-name and multi-name CDS in addition to more complex structured credit products. Vanilla products are valued using industry standard models and inputs that are generally market observable including credit spread and recovery rate.

Complex structured credit derivatives are valued using proprietary models requiring inputs such as correlation, credit spread, funding spread, loss severity, prepayment rate and recovery rate. These inputs are generally implied from available market observable data.

Other trading assets

Other trading assets primarily include life settlement and premium finance instruments and RMBS loans. Life settlement and premium finance instruments are valued using proprietary models with several inputs. The significant unobservable inputs of the fair value for life settlement and premium finance instruments is the estimate of market implied life expectancy, while for RMBS loans it is market comparable price.

For life settlement and premium finance instruments, individual life expectancy rates are typically obtained by multiplying a base mortality curve for the general insured population provided by a professional actuarial organization together with an individual-specific multiplier. Individual-specific multipliers are determined based on data from third-party life expectancy data providers, which examine the insured individual's medical conditions, family history and other factors to arrive at a life expectancy estimate.

For RMBS loans, the use of market comparable price varies depending upon each specific loan. For some loans, similar to unobservable RMBS securities, prices from similar observable instruments are used to calculate implied inputs which are then used to value unobservable instruments using discounted cash flow. The discounted cash flow price is then compared to the unobservable prices and assessed for reasonableness. For other RMBS loans, the loans are categorized by specific characteristics, such as loan-to-value ratio, average account balance, loan type (single or multi-family), lien, seasoning, coupon, FICO score, locality, delinquency status, cash flow velocity, roll rates, loan purpose, occupancy, servicers advance agreement type, modification status, Federal Housing Administration insurance, property value and documentation quality. Loans with unobservable prices are put into consistent buckets which are then compared to market observable comparable prices in order to assess the reasonableness of those unobservable prices.

Other investments

Private equity funds, hedge funds and equity method investment funds

Equity method investment funds principally include equity investments in the form of a) direct investments in third-party hedge funds, private equity funds and funds of funds, b) equity method investments where the Group has the ability to significantly influence the operating and financial policies of the investee, and c) direct investments in non-marketable equity securities.

Direct investments in third-party hedge funds, private equity funds and funds of funds are measured at fair value based on their published NAVs as permitted by ASC Topic 820 – Fair Value Measurement. In some cases, NAVs may be adjusted where there is sufficient evidence that the NAV published by the investment manager is not in line with the fund's observable market data, it is probable that the investment will be sold for an amount other than NAV or other circumstances exist that would require an adjustment to the published NAV. Although rarely adjusted, significant judgment is involved in making any adjustments to the published NAVs. The investments for which the fair value is measured using the NAV practical expedient are not categorized within the fair value hierarchy.

Direct investments in non-marketable equity securities consist of both real estate investments and non-real estate investments. Equity-method investments and direct investments in non-marketable equity securities are initially measured at their transaction price, as this is the best estimate of fair value. Thereafter, these investments are individually measured at fair value based upon a number of factors that include any recent rounds of financing involving third-party investors, comparable company transactions, multiple analyses of cash flows or book values, or discounted cash flow analyses. The availability of information used in these modeling techniques is often limited and involves significant judgment in evaluating these different factors over time. As a result, these investments are included in level 3 of the fair value hierarchy.

Life finance instruments

Life finance instruments include single premium immediate annuities (SPIA) and other premium finance instruments. Life finance instruments are valued in a similar manner as described for life settlement and premium finance

instruments under the other trading assets section above.
Loans
The Group's loan portfolio which is measured at fair value primarily consists of commercial and industrial loans and loans to financial institutions. Within these categories, loans measured at fair value include commercial loans, real estate loans, corporate loans, leverage finance loans and emerging market loans. Fair value is based on recent transactions and quoted prices, where available. Where recent transactions and quoted prices are not available, fair value may be determined by relative value benchmarking (which includes pricing based upon another position in the same capital structure, other comparable loan issues, generic industry credit spreads, implied credit spreads derived from CDS for the specific borrower, and enterprise valuations) or calculated

based on the exit price of the collateral, based on current market conditions.
Both the funded and unfunded portion of revolving credit lines on the corporate lending portfolio are valued using a loan pricing model, which requires estimates of significant inputs including credit conversion factors, credit spreads, recovery rates and weighted average life of the loan. Significant unobservable inputs may include credit spread and price.
The Group's other assets and liabilities include mortgage loans held in conjunction with securitization activities and assets and liabilities of VIEs and mortgage securitizations that do not meet the criteria for sale treatment under US GAAP. The fair value of mortgage loans held in conjunction with securitization activities is determined on a whole-loan basis and is consistent with the valuation of RMBS loans discussed in "Other trading assets" above. Whole-loan valuations are calculated based on the exit price reflecting the current market conditions. The fair value of assets and liabilities of VIEs and mortgage securitizations that do not meet the criteria for sale treatment under US GAAP are determined based on the quoted prices for securitized bonds, where available, or on cash flow analyses for securitized bonds, when quoted prices are not available. The fair value of the consolidated financial assets of RMBS and CMBS securitization vehicles, which qualify as collateralized financing entities, are measured on the basis of the more observable fair value of the VIEs' financial liabilities.
Short-term borrowings and long-term debt
The Group's short-term borrowings and long-term debt include structured notes (hybrid financial instruments that are both bifurcatable and non-bifurcatable) and vanilla debt. The fair value of structured notes is based on quoted prices, where available. When quoted prices are not available, fair value is determined by using a discounted cash flow model incorporating the Group's credit spreads, the value of derivatives embedded in the debt and the residual term of the issuance based on call options. Derivatives structured into the issued debt are valued consistently with the Group's stand-alone derivative contracts held for trading purposes or used in hedge accounting relationships as discussed above. The fair value of structured debt is heavily influenced by the combined call options and performance of the underlying derivative returns. Significant unobservable inputs for short-term borrowings and long-term debt include buyback probability, correlation, credit spread, gap risk, mean reversion, price, recovery rate and volatility. Generally, the interrelationships between correlation, credit spread, gap risk and volatility inputs are positively correlated.
Other liabilities
Failed sales
These liabilities represent the financing of assets that did not achieve sale accounting treatment under US GAAP. Failed sales are valued in a manner consistent with the related underlying financial instruments.

Assets and liabilities measured at fair value on a recurring basis

end of 2018	Level 1	Level 2	Level 3	Netting impact[1]	Assets measured at net asset value per share[2]	Total
Assets (CHF million)						
Cash and due from banks	0	115	0	–	–	115
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	0	81,818	0	–	–	81,818
Securities received as collateral	37,962	3,704	30	–	–	41,696
Trading assets	76,124	156,066	8,814	(109,927)	1,126	132,203
of which debt securities	23,726	36,321	2,076	–	12	62,135
of which foreign governments	23,547	4,542	232	–	–	28,321
of which corporates	66	7,984	1,260	–	12	9,322
of which RMBS	0	19,652	269	–	–	19,921
of which equity securities	42,758	2,459	132	–	1,114	46,463
of which derivatives	7,999	116,942	3,298	(109,927)	–	18,312
of which interest rate products	3,557	65,823	507	–	–	–
of which foreign exchange products	25	27,526	258	–	–	–
of which equity/index-related products	4,415	17,967	1,054	–	–	–
of which credit derivatives	0	4,739	673	–	–	–
of which other derivatives	1	633	806	–	–	–
of which other trading assets	1,641	344	3,308	–	–	5,293
Investment securities	2	2,743	166	–	–	2,911
Other investments	14	7	1,309	–	1,104	2,434
of which life finance instruments	0	0	1,067	–	–	1,067
Loans	0	10,549	4,324	–	–	14,873
of which real estate	0	146	515	–	–	661
of which commercial and industrial loans	0	3,976	1,949	–	–	5,925
of which financial institutions	0	4,164	1,391	–	–	5,555
Other intangible assets (mortgage servicing rights)	0	0	163	–	–	163
Other assets	117	5,807	1,543	(204)	–	7,263
of which loans held-for-sale	0	4,238	1,235	–	–	5,473
Total assets at fair value	**114,219**	**260,809**	**16,349**	**(110,131)**	**2,230**	**283,476**

1 Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

2
In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.
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Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2018	Level 1	Level 2	Level 3	Netting impact[1]	Liabilities measured at net asset value per share[2]	Total
Liabilities (CHF million)						
Due to banks	0	406	0	–	–	406
Customer deposits	0	2,839	453	–	–	3,292
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	0	14,828	0	–	–	14,828
Obligation to return securities received as collateral	37,962	3,704	30	–	–	41,696
Trading liabilities	31,940	123,615	3,589	(116,985)	10	42,169
of which debt securities	4,460	3,511	25	–	–	7,996
of which foreign governments	4,328	255	0	–	–	4,583
of which equity securities	18,785	118	37	–	10	18,950
of which derivatives	8,695	119,986	3,527	(116,985)	–	15,223
of which interest rate products	3,699	62,649	189	–	–	–
of which foreign exchange products	32	31,983	160	–	–	–
of which equity/index-related products	4,961	19,590	1,500	–	–	–
of which credit derivatives	0	5,485	1,140	–	–	–
Short-term borrowings	0	7,284	784	–	–	8,068
Long-term debt	0	51,270	12,665	–	–	63,935
of which structured notes over one year and up to two years	0	7,242	528	–	–	7,770
of which structured notes over two years	0	28,215	11,800	–	–	40,015
Other liabilities	0	7,881	1,341	(221)	–	9,001
Total liabilities at fair value	**69,902**	**211,827**	**18,862**	**(117,206)**	**10**	**183,395**

1
Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

2
In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2017	Level 1	Level 2	Level 3	Netting impact[1]	Assets measured at net asset value per share[2]	Total
Assets (CHF million)						
Cash and due from banks	0	212	0	–	–	212
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	0	77,498	0	–	–	77,498
Securities received as collateral	36,697	1,331	46	–	–	38,074
of which debt securities	576	802	0	–	–	1,378
of which corporates	0	726	0	–	–	726
of which equity securities	36,121	529	46	–	–	36,696
Trading assets	87,352	187,767	8,754	(128,592)	1,053	156,334
of which debt securities	29,828	40,645	2,292	–	–	72,765
of which foreign governments	29,561	4,256	270	–	–	34,087
of which corporates	179	10,231	1,412	–	–	11,822
of which RMBS	0	21,399	320	–	–	21,719
of which CMBS	0	2,501	16	–	–	2,517
of which CDO	0	2,255	126	–	–	2,381
of which equity securities	51,025	3,481	163	–	1,053	55,722
of which derivatives	3,577	141,347	3,289	(128,592)	–	19,621
of which interest rate products	1,219	84,932	801	–	–	–
of which foreign exchange products	19	30,302	188	–	–	–
of which equity/index-related products	2,338	18,251	833	–	–	–
of which credit derivatives	0	7,107	634	–	–	–
of which other trading assets	2,922	2,294	3,010	–	–	8,226
Investment securities	250	1,899	42	–	–	2,191
of which debt securities	244	1,780	42	–	–	2,066
of which foreign governments	97	1,139	0	–	–	1,236
of which corporates	0	238	0	–	–	238
of which RMBS	0	167	40	–	–	207
of which CMBS	0	171	2	–	–	173
of which equity securities	6	119	0	–	–	125
Other investments	25	16	1,601	–	1,864	3,506
of which private equity	0	0	29	–	351	380
of which equity funds	0	0	22	–	141	163
of which hedge funds	0	0	0	–	391	391
of which debt funds	0	0	0	–	239	239
	25	9	271	–	1,122	1,427

of which other equity investments						
of which private	18	9	271	–	1,122	1,420
of which life finance instruments	0	7	1,301	–	–	1,308
Loans	0	10,777	4,530	–	–	15,307
of which commercial and industrial loans	0	3,437	2,207	–	–	5,644
of which financial institutions	0	4,890	1,480	–	–	6,370
Other intangible assets (mortgage servicing rights)	0	0	158	–	–	158
Other assets	101	7,570	1,511	(164)	–	9,018
of which loans held-for-sale	0	5,800	1,350	–	–	7,150
Total assets at fair value	**124,425**	**287,070**	**16,642**	**(128,756)**	**2,917**	**302,298**

1
Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

2
In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2017	Level 1	Level 2	Level 3	Netting impact[1]	Liabilities measured at net asset value per share[2]	Total
Liabilities (CHF million)						
Due to banks	0	197	0	–	–	197
Customer deposits	0	3,056	455	–	–	3,511
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	0	15,262	0	–	–	15,262
Obligation to return securities received as collateral	36,697	1,331	46	–	–	38,074
of which debt securities	576	802	0	–	–	1,378
of which corporates	0	726	0	–	–	726
of which equity securities	36,121	529	46	–	–	36,696
Trading liabilities	23,108	149,637	3,226	(136,861)	9	39,119
of which debt securities	5,160	4,139	2	–	–	9,301
of which foreign governments	5,108	746	0	–	–	5,854
of which corporates	12	3,334	2	–	–	3,348
of which equity securities	14,217	883	55	–	9	15,164
of which derivatives	3,731	144,615	3,169	(136,861)	–	14,654
of which interest rate products	1,254	80,534	317	–	–	–
of which foreign exchange products	8	35,707	100	–	–	–
of which equity/index-related products	2,468	19,459	1,301	–	–	–
of which credit derivatives	0	7,982	898	–	–	–
Short-term borrowings	0	10,174	845	–	–	11,019
Long-term debt	0	51,127	12,501	–	–	63,628
of which treasury debt over two years	0	936	0	–	–	936
of which structured notes over one year and up to two years	0	6,216	149	–	–	6,365
of which structured notes over two years	0	32,782	12,259	–	–	45,041
of which other debt instruments over two years	0	2,221	61	–	–	2,282
of which other subordinated bonds	0	5,567	0	–	–	5,567
of which non-recourse liabilities	0	833	30	–	–	863
Other liabilities	0	7,379	1,478	(233)	–	8,624
of which failed sales	0	439	223	–	–	662
Total liabilities at fair value	**59,805**	**238,163**	**18,551**	**(137,094)**	**9**	**179,434**

1
Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

2
In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis for level 3

								Trading revenues		Other
2018	Balance at beginning of period	Transfers in	Transfers out	Purchases	Sales	Issuances	Settlements	On transfers in / out	On all other	C transfe in / o
Assets (CHF million)										
Securities received as collateral	46	0	(15)	102	(103)	0	0	0	0	
Trading assets	8,754	1,563	(1,602)	40,057	(40,138)	1,394	(1,477)	(21)	303	
of which debt securities	2,292	802	(904)	3,301	(3,261)	0	0	25	(150)	
of which foreign governments	270	21	(12)	45	(67)	0	0	0	4	
of which corporates	1,412	491	(593)	2,582	(2,583)	0	0	31	(72)	
of which RMBS	320	211	(225)	370	(333)	0	0	(3)	(74)	
of which equity securities	163	132	(95)	51	(185)	0	0	8	55	
of which derivatives	3,289	510	(525)	0	0	1,394	(1,434)	(56)	144	
of which interest rate products	801	18	(66)	0	0	100	(116)	17	(237)	
of which foreign exchange derivatives	188	3	(2)	0	0	14	(24)	(2)	79	
of which equity/index-related products	833	329	(317)	0	0	447	(436)	(77)	300	
of which credit derivatives	634	160	(141)	0	0	505	(438)	5	(59)	
of which other derivatives	833	0	1	0	0	328	(420)	1	61	
of which other trading assets	3,010	119	(78)	36,705	(36,692)	0	(43)	2	254	
Investment securities	42	8	(121)	281	(28)	0	(205)	0	185	
Other investments	1,601	79	(102)	229	(406)	0	0	0	(93)	
of which life finance instruments	1,301	0	0	151	(299)	0	0	0	(96)	
Loans	4,530	934	(393)	163	(491)	1,563	(1,866)	7	(134)	
of which real estate	171	196	(81)	0	0	307	(64)	2	(8)	
of which commercial and industrial loans	2,207	348	(29)	1	(226)	783	(1,057)	0	(83)	

of which financial institutions	1,480	335	(53)	150	(133)	332	(746)	10	8
Other intangible assets (mortgage servicing rights)	158	0	0	1	0	0	0	0	0
Other assets	1,511	288	(191)	1,610	(1,357)	300	(540)	22	(32)
of which loans held-for-sale	1,350	243	(166)	1,447	(1,310)	300	(539)	21	(44)
Total assets at fair value	**16,642**	**2,872**	**(2,424)**	**42,443**	**(42,523)**	**3,257**	**(4,088)**	**8**	**229**
Liabilities (CHF million)									
Customer deposits	455	0	0	0	0	0	0	0	32
Obligation to return securities received as collateral	46	0	(15)	102	(103)	0	0	0	0
Trading liabilities	3,226	768	(641)	127	(107)	2,573	(1,527)	(7)	(839)
of which debt securities	2	30	(24)	39	(23)	0	0	0	1
of which equity securities	55	19	(5)	87	(80)	0	0	(3)	(33)
of which derivatives	3,169	719	(612)	1	(4)	2,573	(1,527)	(4)	(807)
of which interest rate derivatives	317	25	(11)	0	0	156	(145)	16	(171)
of which foreign exchange derivatives	100	19	(1)	0	0	55	(29)	0	15
of which equity/index-related derivatives	1,301	429	(364)	0	0	1,306	(548)	(36)	(592)
of which credit derivatives	898	247	(235)	0	0	806	(572)	16	(30)
Short-term borrowings	845	335	(242)	0	0	1,090	(1,133)	3	(117)
Long-term debt	12,501	2,988	(3,108)	0	0	5,628	(3,656)	(25)	(1,368)
of which structured notes over one year and up to two years	149	452	(296)	0	0	745	(501)	(10)	(14)
of which structured notes over two years	12,259	2,368	(2,800)	0	0	4,761	(3,115)	(17)	(1,355)
Other liabilities	1,478	117	(29)	45	(128)	20	(420)	(7)	97
Total liabilities at fair value	**18,551**	**4,208**	**(4,035)**	**274**	**(338)**	**9,311**	**(6,736)**	**(36)**	**(2,195)**
Net assets/(liabilities) at fair value	**(1,909)**	**(1,336)**	**1,611**	**42,169**	**(42,185)**	**(6,054)**	**2,648**	**44**	**2,424**

Assets and liabilities measured at fair value on a recurring basis for level 3 (continued)

								Trading revenues		Other
2017	Balance at beginning of period	Transfers in	Transfers out	Purchases	Sales	Issuances	Settlements	On transfers in / out	On all other	C transfe in / o
Assets (CHF million)										
Interest-bearing deposits with banks	1	40	0	0	(41)	0	0	0	0	
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	174	0	0	0	0	26	(193)	0	0	
Securities received as collateral	70	3	(1)	65	(86)	0	0	0	0	
Trading assets	12,765	1,159	(2,046)	15,810	(18,032)	1,317	(2,068)	121	252	
of which debt securities	3,977	608	(1,074)	2,747	(3,705)	0	0	(4)	(80)	
of which corporates	1,674	276	(654)	2,203	(2,005)	0	0	(4)	14	
of which RMBS	605	280	(229)	85	(305)	0	0	3	(95)	
of which CMBS	65	6	(17)	2	(13)	0	0	(3)	(21)	
of which CDO	1,165	39	(157)	174	(1,047)	0	0	0	(16)	
of which equity securities	240	49	(35)	146	(260)	0	0	0	33	
of which derivatives	4,305	416	(839)	0	0	1,317	(1,817)	123	(63)	
of which interest rate products	748	56	(53)	0	0	118	(183)	6	104	
of which equity/index-related products	914	142	(98)	0	0	443	(597)	14	58	
of which credit derivatives	688	216	(252)	0	0	381	(297)	38	(110)	
of which other trading assets	4,243	86	(98)	12,917	(14,067)	0	(251)	2	362	
Investment securities	72	0	(17)	100	(113)	0	(90)	(1)	95	
Other investments	1,906	23	(22)	350	(589)	0	0	0	9	
of which equity	318	23	(22)	165	(171)	0	0	0	(7)	
of which life finance instruments	1,588	0	0	185	(418)	0	0	0	16	
Loans	6,585	1,130	(947)	106	(580)	1,151	(2,743)	15	85	

of which commercial and industrial loans	3,816	448	(482)	71	(395)	590	(1,705)	(2)	21
of which financial institutions	1,829	352	(126)	33	(176)	444	(821)	28	(6)
Other intangible assets (mortgage servicing rights)	138	0	0	23	(1)	0	0	0	0
Other assets	1,679	347	(132)	759	(1,056)	1,054	(885)	(1)	(172)
of which loans held-for-sale	1,316	286	(113)	667	(904)	1,053	(885)	(2)	0
Total assets at fair value	**23,390**	**2,702**	**(3,165)**	**17,213**	**(20,498)**	**3,548**	**(5,979)**	**134**	**269**
Liabilities (CHF million)									
Customer deposits	410	0	0	0	0	35	(3)	0	(61)
Obligation to return securities received as collateral	70	3	(1)	65	(86)	0	0	0	0
Trading liabilities	3,737	566	(1,049)	113	(134)	1,193	(1,625)	140	461
of which interest rate derivatives	538	57	(36)	0	0	45	(258)	6	(14)
of which foreign exchange derivatives	150	11	(1)	0	0	9	(12)	0	(52)
of which equity/index-related derivatives	1,181	54	(188)	0	0	543	(692)	17	441
of which credit derivatives	851	377	(392)	0	0	350	(376)	61	66
Short-term borrowings	516	95	(172)	0	0	865	(472)	(2)	19
Long-term debt	13,415	1,172	(3,004)	0	0	4,540	(4,479)	(12)	1,400
of which structured notes over two years	12,434	995	(2,886)	0	0	3,913	(3,079)	(14)	1,390
Other liabilities	1,684	150	(102)	211	(304)	9	(403)	(25)	(6)
of which failed sales	219	80	(70)	189	(218)	0	0	(7)	40
Total liabilities at fair value	**19,832**	**1,986**	**(4,328)**	**389**	**(524)**	**6,642**	**(6,982)**	**101**	**1,813**
Net assets/(liabilities) at fair value	**3,558**	**716**	**1,163**	**16,824**	**(19,974)**	**(3,094)**	**1,003**	**33**	**(1,544)**

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Gains and losses on assets and liabilities measured at fair value on a recurring basis (level 3)

	2018			2017		
in	Trading revenues	Other revenues	Total revenues	Trading revenues	Other revenues	Total revenues
Gains and losses on assets and liabilities (CHF million)						
Net realized/unrealized gains/(losses) included in net revenues	2,468	(162)	**2,306**[1]	(1,511)	(319)	**(1,830)**[1]
Whereof:						
Unrealized gains/(losses) relating to assets and liabilities still held as of the reporting date	(34)	(5)	**(39)**	(2,088)	22	**(2,066)**

1 Excludes net realized/unrealized gains/(losses) attributable to foreign currency translation impact.

Both observable and unobservable inputs may be used to determine the fair value of positions that have been classified within level 3. As a result, the unrealized gains and losses for assets and liabilities within level 3 presented in the table above may include changes in fair value that were attributable to both observable and unobservable inputs. The Group employs various economic hedging techniques in order to manage risks, including risks in level 3 positions. Such techniques may include the purchase or sale of financial instruments that are classified in levels 1 and/or 2. The realized and unrealized gains and losses for assets and liabilities in level 3 presented in the table above do not reflect the related realized or unrealized gains and losses arising on economic hedging instruments classified in levels 1 and/or 2.

Transfers in and out of level 3

Transfers into level 3 assets during 2018 were CHF 2,872 million, primarily from trading assets and loans. The transfers were primarily in the financing and credit businesses due to limited observability of pricing data and reduced pricing information from external providers. Transfers out of level 3 assets during 2018 were CHF 2,424 million, primarily in trading assets and loans. The transfers out of level 3 assets were primarily in the financing and fixed income businesses due to improved observability of pricing data and increased availability of pricing information from external providers.

Transfers into level 3 assets during 2017 were CHF 2,702 million, primarily from trading assets and loans. The transfers were primarily in the credit, financing and fixed income businesses due to limited observability of pricing data and reduced pricing information from external providers. Transfers out of level 3 assets during 2017 were CHF 3,165 million, primarily in trading assets and loans. The transfers out of level 3 assets were primarily in the Strategic Resolution Unit and financing businesses due to improved observability of pricing data and increased availability of pricing information from external providers.

Uncertainty of fair value measurements at the reporting date from the use of significant unobservable inputs

For level 3 assets with a significant unobservable input of buyback probability, correlation, contingent probability, EBITDA multiple, funding spread, mortality rate, price, volatility or volatility skew, in general, an increase in the significant unobservable input would increase the fair value. For level 3 assets with a significant unobservable input of default rate, capitalization rate, credit curve for corporates or sovereigns, credit spread, discount rate, gap risk, market implied life expectancy (for life settlement and premium finance instruments), prepayment rate and recovery rate, in general, an increase in the significant unobservable input would decrease the fair value.

For level 3 liabilities, in general, an increase in the related significant unobservable inputs would have the inverse impact on fair value. An increase in the significant unobservable input credit spread, contingent probability, gap risk, market implied life expectancy (for life settlement and premium finance instruments) and mortality would increase the fair value. An increase in the significant unobservable input basis spread, buyback probability, correlation, discount rate, fund gap risk, funding spread, mortality rate, prepayment rate, price, recovery rate and volatility would decrease the fair value.

Interrelationships between significant unobservable inputs

Except as noted above, there are no material interrelationships between the significant unobservable inputs for the financial instruments. As the significant unobservable inputs move independently, generally an increase or decrease in one significant unobservable input will have no impact on the other significant unobservable inputs.

Quantitative disclosures of valuation techniques

The following tables provide the representative range of minimum and maximum values and the associated weighted averages of each significant unobservable input for level 3 assets and liabilities by the related valuation technique most significant to the related financial instrument.

Quantitative information about level 3 assets at fair value

end of 2018	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Securities received as collateral	30	–	–	–	–	–
Trading assets	8,814					
of which debt securities	2,076					
of which foreign governments	232	Discounted cash flow	Credit spread in bp	140	140	140
of which corporates	1,260					
of which	441	Market comparable	Price, in %	0	118	94
of which	621	Option model	Correlation, in %	(60)	98	68
			Volatility, in %	0	178	30
of which RMBS	269	Discounted cash flow	Default rate, in %	0	11	3
			Discount rate, in %	1	26	7
			Loss severity, in %	0	100	63
			Prepayment rate, in %	1	22	8
of which equity securities	132					
of which	76	Market comparable	EBITDA multiple	2	9	6
			Price, in %	100	100	100
of which	49	Vendor price	Price, in actuals	0	355	1
of which derivatives	3,298					
of which interest rate products	507	Option model	Correlation, in %	0	100	69
			Prepayment rate, in %	1	26	9
			Volatility skew, in %	(4)	0	(2)
of which foreign exchange products	258					
of which	28	Discounted cash flow	Contingent probability, in %	95	95	95
of which	218	Option model	Correlation, in %	(23)	70	24
			Prepayment rate, in %	21	26	23
			Volatility, in %	80	90	85
	1,054			50	100	74

of which equity/index-related products		Option model	Buyback probability, in %			
			Correlation, in %	(40)	98	80
			Gap risk, in %[2]	0	4	1
			Volatility, in %	2	178	34
of which credit derivatives	673	Discounted cash flow	Correlation, in %	97	97	97
			Credit spread, in bp	3	2,147	269
			Default rate, in %	1	20	4
			Discount rate, in %	3	28	15
			Loss severity, in %	16	85	56
			Prepayment rate, in %	0	12	6
			Recovery rate, in %	0	68	8
of which other derivatives	806	Discounted cash flow	Market implied life expectancy, in years	2	16	5
			Mortality rate, in %	87	106	101
of which other trading assets	3,308					
of which	870	Discounted cash flow	Market implied life expectancy, in years	3	17	7
of which	2,119	Market comparable	Price, in %	0	110	30
of which	249	Option model	Mortality rate, in %	0	70	6

1
Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

2
Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

Quantitative information about level 3 assets at fair value (continued)

end of 2018	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Investment securities	166	–	–	–	–	–
Other investments	1,309					
of which life finance instruments	1,067	Discounted cash flow	Market implied life expectancy, in years	2	17	6
Loans	4,324					
of which real estate	515	Discounted cash flow	Credit spread, in bp	200	1,522	612
			Recovery rate, in %	25	40	39
of which commercial and industrial loans	1,949					
of which	1,531	Discounted cash flow	Credit spread, in bp	159	1,184	582
of which	306	Market comparable	Price, in %	0	99	65
of which financial institutions	1,391					
of which	1,157	Discounted cash flow	Credit spread, in bp	88	1,071	596
of which	73	Market comparable	Price, in %	1	100	74
Other intangible assets (mortgage servicing rights)	163	–	–	–	–	–
Other assets	1,543					
of which loans held-for-sale	1,235					
of which	422	Discounted cash flow	Credit spread, in bp	105	2,730	394
			Recovery rate, in %	25	87	56
of which	739	Market comparable	Price, in %	0	130	82
Total level 3 assets at fair value	**16,349**					

1 Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

Quantitative information about level 3 assets at fair value (continued)

end of 2017	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Securities received as collateral	46	–	–	–	–	–
Trading assets	8,754					
of which debt securities	2,292					
of which corporates	1,412					
of which	387	Option model	Correlation, in %	(60)	98	55
of which	545	Market comparable	Price, in %	0	139	84
of which	444	Discounted cash flow	Credit spread, in bp	37	952	230
of which RMBS	320	Discounted cash flow	Discount rate, in %	1	24	11
			Prepayment rate, in %	1	36	10
			Default rate, in %	0	12	4
			Loss severity, in %	0	100	57
of which CMBS	16	Discounted cash flow	Capitalization rate, in %	14	14	14
			Discount rate, in %	8	16	14
			Prepayment rate, in %	0	5	4
of which CDO	126	Discounted cash flow	Discount rate, in %	5	13	8
			Prepayment rate, in %	5	20	13
			Credit spread, in bp	464	669	553
			Default rate, in %	2	5	3
			Loss severity, in %	0	80	34
of which equity securities	163					
of which	67	Vendor price	Price, in actuals	0	2,080	10
of which	81	Market comparable	EBITDA multiple	2	9	7
			Price, in %	18	100	67
of which derivatives	3,289					
of which interest rate products	801	Option model	Correlation, in %	20	100	72
			Prepayment rate, in %	6	34	17

			Volatility skew, in %	(4)	1	(1)
of which equity/index-related products	833	Option model	Correlation, in %	(60)	98	65
			Volatility, in %	0	105	64
			Buyback probability, in %	50	100	90
			Gap risk, in %[2]	0	2	1
of which credit derivatives	634	Discounted cash flow	Credit spread, in bp	1	956	217
			Recovery rate, in %	0	45	20
			Discount rate, in %	3	50	16
			Default rate, in %	1	20	5
			Loss severity, in %	1	100	64
			Correlation, in %	97	97	97
			Prepayment rate, in %	0	14	6
of which other trading assets	3,010					
of which	1,605	Market comparable	Price, in %	0	110	23
of which	1,095	Discounted cash flow	Market implied life expectancy, in years	3	18	8

1
Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

2
Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

375

Quantitative information about level 3 assets at fair value (continued)

end of 2017	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Investment securities	42	–	–	–	–	–
Other investments	1,601					
of which private equity	29	–	–	–	–	–
of which other equity investments	271	–	–	–	–	–
of which life finance instruments	1,301	Discounted cash flow	Market implied life expectancy, in years	2	18	6
Loans	4,530					
of which commercial and industrial loans	2,207					
of which	1,924	Discounted cash flow	Credit spread, in bp	89	1,116	420
of which	250	Market comparable	Price, in %	0	99	56
of which financial institutions	1,480					
of which	1,426	Discounted cash flow	Credit spread, in bp	43	1,430	371
Other intangible assets (mortgage servicing rights)	158	–	–	–	–	–
Other assets	1,511					
of which loans held-for-sale	1,350					
of which	849	Discounted cash flow	Credit spread, in bp	117	973	292
			Recovery rate, in %	18	87	73
of which	280	Market comparable	Price, in %	0	102	88
Total level 3 assets at fair value	**16,642**					

1 Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

Quantitative information about level 3 liabilities at fair value

end of 2018	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Customer deposits	453	–	–	–	–	–
Obligation to return securities received as collateral	30	–	–	–	–	–
Trading liabilities	3,589					
of which debt securities	25	–	–	–	–	–
of which equity securities	37	Vendor price	Price, in actuals	0	3	0
of which derivatives	3,527					
of which interest rate derivatives	189	Option model	Basis spread, in bp	(20)	147	48
			Correlation, in %	1	100	41
			Prepayment rate, in %	1	26	7
of which foreign exchange derivatives	160					
of which	62	Discounted cash flow	Contingent probability, in %	95	95	95
			Credit spread, in bp	146	535	379
of which	37	Market comparable	Price, in %	100	100	100
of which	57	Option model	Correlation, in %	35	70	53
			Prepayment rate, in %	21	26	23
of which equity/index-related derivatives	1,500	Option model	Buyback probability, in %[2]	50	100	74
			Correlation, in %	(60)	98	74
			Volatility, in %	0	178	30
of which credit derivatives	1,140					
of which	566	Discounted cash flow	Correlation, in %	38	82	47
			Credit spread, in bp	3	2,937	262
			Default rate, in %	1	20	4
			Discount rate, in %	3	28	14
			Loss severity, in %	16	95	56

			Prepayment rate, in %	0	12	6
			Recovery rate, in %	0	80	14
of which	508	Market comparable	Price, in %	75	104	89
of which	20	Option model	Correlation, in %	50	50	50
			Credit spread, in bp	35	1,156	320
Short-term borrowings	784					
of which	61	Discounted cash flow	Credit spread, in bp	1,018	1,089	1,067
			Recovery rate, in %	40	40	40
of which	644	Option model	Buyback probability, in %	50	100	74
			Correlation, in %	(40)	98	64
			Fund gap risk, in %[3]	0	4	1
			Volatility, in %	2	178	32
Long-term debt	12,665					
of which structured notes over one year and up to two years	528					
of which	3	Discounted cash flow	Credit spread, in bp	112	112	112
of which	427	Option model	Correlation, in %	(40)	98	71
			Volatility, in %	2	178	31
of which structured notes over two years	11,800					
of which	1,570	Discounted cash flow	Credit spread, in bp	(11)	1,089	136
of which	43	Market comparable	Price, in %	0	46	30
of which	9,533	Option model	Buyback probability, in %[2]	50	100	74
			Correlation, in %	(60)	98	65
			Gap risk, in %[3]	0	4	1
			Mean reversion, in %[4]	(55)	(1)	(7)
			Volatility, in %	0	178	27

Other liabilities	1,341	–	–	–	–	–
Total level 3 liabilities at fair value	**18,862**					

1
Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.
2
Estimate of the probability of structured notes being put back to the Group at the option of the investor over the remaining life of the financial instruments.
3
Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.
4
Management's best estimate of the speed at which interest rates will revert to the long-term average.

Quantitative information about level 3 liabilities at fair value (continued)

end of 2017	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Customer deposits	455	–	–	–	–	–
Obligation to return securities received as collateral	46	–	–	–	–	–
Trading liabilities	3,226					
of which interest rate derivatives	317					
of which	205	Option model	Basis spread, in bp	(25)	52	19
			Correlation, in %	20	100	60
			Prepayment rate, in %	6	34	9
of which	81	Market comparable	Price, in %	1	102	44
of which foreign exchange derivatives	100					
of which	64	Option model	Correlation, in %	(10)	70	51
			Prepayment rate, in %	27	34	30
of which	7	Discounted cash flow	Contingent probability, in %	95	95	95
of which equity/index-related derivatives	1,301					
of which	947	Option model	Correlation, in %	(60)	98	55
			Volatility, in %	0	105	25
			Buyback probability, in %[2]	50	100	90
of which	62	Vendor price	Price, in actuals	0	53	18
of which credit derivatives	898	Discounted cash flow	Credit spread, in bp	2	973	172
			Discount rate, in %	3	50	16
			Default rate, in %	1	20	5
			Recovery rate, in %	10	60	38
			Loss severity, in %	25	100	67
				38	85	54

			Correlation, in %			
			Prepayment rate, in %	0	20	7
			Term TRS/repo spread, in bp	176	176	176
Short-term borrowings	845					
of which	288	Option model	Correlation, in %	(40)	98	60
			Volatility, in %	4	105	26
of which	527	Discounted cash flow	Credit spread, in bp	2	278	175
			Recovery rate, in %	25	40	29
of which	24	Market comparable	Price, in %	11	47	47
Long-term debt	12,501					
of which structured notes over two years	12,259					
of which	9,739	Option model	Correlation, in %	(60)	99	55
			Volatility, in %	0	105	21
			Buyback probability, in %[2]	50	100	90
			Gap risk, in %[3]	0	2	1
			Mean reversion, in %[4]	(14)	(1)	(6)
of which	1,571	Discounted cash flow	Credit spread, in bp	2	729	105
Other liabilities	1,478					
of which failed sales	223					
of which	122	Market comparable	Price, in %	0	100	51
of which	25	Discounted cash flow	Credit spread, in bp	1,430	1,430	1,430
Total level 3 liabilities at fair value	**18,551**					

1
Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

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Estimate of the probability of structured notes being put back to the Group at the option of the investor over the remaining life of the financial instruments.

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Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

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Management's best estimate of the speed at which interest rates will revert to the long-term average.
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Qualitative discussion of the ranges of significant unobservable inputs

The following sections provide further information about the ranges of significant unobservable inputs included in the tables above. The level of aggregation and diversity within the financial instruments disclosed in the tables above results in certain ranges of significant inputs being wide and unevenly distributed across asset and liability categories.

Basis spread

Basis spread is the primary significant unobservable input for non-callable constant maturity treasury-CMS products and is used to determine interest rate risk as a result of differing lending and borrowing rates.

Buyback probability

Buyback probability is the probability assigned to structured notes being unwound prior to their legal maturity.

Capitalization rate

Capitalization rate is the primary significant unobservable input for CMBS loans and is used to estimate the potential return on investment. This is done by dividing the yearly income by the total value of the property.

Contingent probability

Contingent probability is the primary significant unobservable input for contingent foreign exchange forward trades where the delivery or exercise and the premium payment are contingent on an event such as completion of an M&A deal or regulatory approval for a product.

Correlation

There are many different types of correlation inputs, including credit correlation, cross-asset correlation (such as equity-interest rate correlation) and same-asset correlation (such as interest rate-interest rate correlation). Correlation inputs are generally used to value hybrid and exotic instruments. Due to the complex and unique nature of these instruments, the ranges for correlation inputs can vary widely across portfolios.

Credit spread and recovery rate

For financial instruments where credit spread is the significant unobservable input, the wide range represents positions with varying levels of risk. The lower end of the credit spread range typically represents shorter-dated instruments and/or those with better perceived credit risk. The higher end of the range typically comprises longer-dated financial instruments or those referencing non-performing, distressed or impaired reference credits. Similarly, the spread between the reference credit and an index can vary significantly based on the risk of the instrument. The spread will be positive for instruments that have a higher risk of default than the index (which is based on a weighted average of its components) and negative for instruments that have a lower risk of default than the index.

Similarly, recovery rates can vary significantly depending upon the specific assets and terms of each transaction. Transactions with higher seniority or more valuable collateral will have higher recovery rates, while those transactions which are more subordinated or with less valuable collateral will have lower recovery rates.

Default rate and loss severity

For financial instruments backed by residential real estate or other assets, diversity in the portfolio is reflected in a wide range for loss severity due to varying levels of default. The lower end of the range represents high performing or government guaranteed collateral with a low PD or guaranteed timely payment of principal and interest, while the higher end of the range relates to collateral with a greater risk of default.

Discount rate

The discount rate is the rate of interest used to calculate the present value of the expected cash flows of a financial instrument. There are multiple factors that will impact the discount rate for any given financial instrument including the coupon on the instrument, the term and the underlying risk of the expected cash flows. Two instruments of similar term and expected cash flows may have significantly different discount rates because the coupons on the instruments are different.

EBITDA multiple

EBITDA multiple is a primary significant unobservable input for some equity deals which are benchmarked using industry comparables. The EBITDA multiple may be preferred over other measures because it is normalized for differences between the accounting policies of similar companies.

Funding spread

Funding spread is the primary significant unobservable input for special purpose vehicle funding facilities. Synthetic funding curves which represent the assets pledged as collateral are used to value structured financing transactions. The curves provide an estimate of where secured funding can be sourced and are expressed as a basis point spread in

relation to the referenced benchmark rate.
Gap risk
Gap risk is the primary significant unobservable input for fund-linked Constant Proportion Portfolio Insurance products and structures where the payoff may be sensitive to discontinuity in the hedging portfolio.
Market implied life expectancy
Market implied life expectancy is the primary significant unobservable input on such products as life settlement, premium finance and SPIA, and represents the estimated mortality rate for the underlying insured for each contract. This estimate may vary depending upon multiple factors including the age and specific health characteristics of the insured.

Mean reversion

Mean reversion is the primary significant unobservable input for callable constant maturity swap (CMS) spread exotics and represents the idea that prices and returns eventually move back towards the historical average.

Mortality rate

Mortality rate is the primary significant unobservable input for pension swaps. The expected present value of future cash flow of the trades depend on the mortality of individuals in the pension fund who are grouped into categories such as gender, age, pension amount and other factors. In some cases mortality rates include a “scaler” (also referred to as a loading or multiplier) that align mortality projections with historical experience and calibrate to exit level.

Prepayment rate

Prepayment rates may vary from collateral pool to collateral pool, and are driven by a variety of collateral-specific factors, including the type and location of the underlying borrower, the remaining tenor of the obligation and the level and type (e.g., fixed or floating) of interest rate being paid by the borrower.

Price

Bond equivalent price is a primary significant unobservable input for multiple products. Where market prices are not available for an instrument, benchmarking may be utilized to identify comparable issues (same industry and similar product mixes) while adjustments are considered for differences in deal terms and performance.

Term TRS/repo spread

For financial instruments where TRS/repo spread is the significant unobservable input, the range represents positions with varying levels of risk. The lower end of the spread range typically represents shorter-dated instruments and/or those with better perceived credit and funding risk. The higher end of the range typically comprises longer-dated financial instruments or those referencing collateral with lower liquidity or collateral correlated to the counterparty.

Volatility and volatility skew

Volatility and its skew are both impacted by the underlying risk, term and strike price of the derivative. In the case of interest rate derivatives, volatility may vary significantly between different underlying currencies and expiration dates on the options. Similarly, in the case of equity derivatives, the volatility attributed to a structure may vary depending upon the underlying reference name on the derivative.

Investment funds measured at NAV per share

Investments in funds held in trading assets and trading liabilities primarily include positions held in equity funds of funds as an economic hedge for structured notes and derivatives issued to clients that reference the same underlying risk and liquidity terms of the fund. A majority of these funds have limitations imposed on the amount of withdrawals from the fund during the redemption period due to illiquidity of the investments. In other instances, the withdrawal amounts may vary depending on the redemption notice period and are usually larger for the longer redemption notice periods. In addition, penalties may apply if redemption is within a certain time period from initial investment.

Investments in funds held in other investments principally involves private equity securities and, to a lesser extent, publicly traded securities and fund of funds. Several of these investments have redemption restrictions subject to the discretion of the board of directors of the fund and/or redemption is permitted without restriction, but is limited to a certain percentage of total assets or only after a certain date.

For those funds held in trading assets and trading liabilities and funds held in other investments that are nonredeemable, the underlying assets of such funds are expected to be liquidated over the life of the fund, which is generally up to ten years.

The following table pertains to investments in certain entities that calculate NAV per share or its equivalent, primarily private equity and hedge funds. These investments do not have a readily determinable fair value and are measured at fair value using NAV.

Fair value, unfunded commitments and term of redemption conditions of investment funds measured at NAV per share

	2018				2017			
end of	Non-redeemable	Redeemable	Total fair value	Unfunded commit-ments	Non-redeemable	Redeemable	Total fair value	Unfunded commit-ments
Fair value of investment funds and unfunded commitments (CHF million)								
Debt funds	12	0	12	0	0	0	0	0
Equity funds	103	1,011[1]	1,114	53	61	992[2]	1,053	0
Equity funds sold short	(8)	(2)	(10)	0	0	(9)	(9)	0
Funds held in trading assets and trading liabilities	107	1,009	1,116	53	61	983	1,044	0
Debt funds	1	0	1	0	1	0	1	0
Equity funds	130	0	130	43	141	0	141	64
Real estate funds	214	0	214	34	178	0	178	44
Other private equity funds	24	5	29	29	31	0	31	15
Private equity funds	369	5	374	106	351	0	351	123
Debt funds	68	34	102	0	164	75	239	0
Equity funds	14	14	28	0	2	53	55	0
Other hedge funds	2	24	26	0	2	95	97	9
Hedge funds	84	72[3]	156	0	168	223[4]	391	9
Equity method investment funds	52	522	574	21	71	1,051	1,122	5
Funds held in other investments	505	599	1,104	127	590	1,274	1,864	137
Total fair value of investment funds and unfunded commitments	**612**[5]	**1,608**	**2,220**	**180**[7]	**651**[5]	**2,257**[6]	**2,908**	**137**[7]

1
46% of the redeemable fair value amount of equity funds is redeemable on demand with a notice period primarily of less than 30 days, 40% is redeemable on a monthly basis with a notice period of primarily more than 30 days, 13% is redeemable on a quarterly basis with a notice period primarily of more than 45 days and 1% is redeemable on an annual basis with a notice period of less than 30 days.

2
54% of the redeemable fair value amount of equity funds is redeemable on demand with a notice period primarily of less than 30 days, 35% is redeemable on a monthly basis with a notice period primarily of less than 30 days, 9% is redeemable on a quarterly basis with a notice period primarily of more than 45 days and 2% is redeemable on an annual basis with a notice period of more than 60 days.

3

65% of the redeemable fair value amount of hedge funds is redeemable on a quarterly basis with a notice period primarily of more than 60 days and 35% is redeemable on demand with a notice period primarily of less than 30 days.

4

51% of the redeemable fair value amount of hedge funds is redeemable on a quarterly basis with a notice period primarily of more than 45 days, 43% is redeemable on a monthly basis with a notice period primarily of less than 30 days and 6% is redeemable on demand with a notice period primarily of less than 30 days.

5

Includes CHF 102 million and CHF 229 million attributable to noncontrolling interests as of the end of 2018 and 2017, respectively.

6

Includes CHF 167 million attributable to noncontrolling interests as of the end of 2017.

7

Includes CHF 23 million and CHF 53 million attributable to noncontrolling interests as of the end of 2018 and 2017, respectively.

Assets measured at fair value on a nonrecurring basis

Certain assets and liabilities are measured at fair value on a nonrecurring basis; that is, they are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances, for example, when there is evidence of impairment. Nonrecurring measurements are completed as of the end of the period unless otherwise stated.

Assets measured at fair value on a nonrecurring basis

end of	2018	2017
CHF billion		
Assets held-for-sale recorded at fair value on a nonrecurring basis	**0.0**	**0.1**
of which level 2	0.0	0.1

The Group typically uses nonfinancial assets measured at fair value on a recurring or nonrecurring basis in a manner that reflects their highest and best use.

Fair value option

The Group has availed itself of the simplification in accounting offered under the fair value option. This has been accomplished generally by electing the fair value option, both at initial adoption and for subsequent transactions, on items impacted by the hedge accounting requirements of US GAAP. For instruments for which hedge accounting could not be achieved but for which the Group is economically hedged, the Group has generally elected the fair value option. Where the Group manages an activity on a fair value basis but previously has been unable to achieve fair value accounting, the Group has generally utilized the fair value option to align its financial accounting to its risk management reporting.

The Group elected fair value for certain of its financial statement captions as follows:

Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions

The Group has elected to account for structured resale agreements and most matched book resale agreements at fair value. These activities are managed on a fair value basis; thus, fair value accounting is deemed more appropriate for reporting purposes. The Group did not elect the fair value option for firm financing resale agreements as these agreements are generally overnight agreements which approximate fair value, but which are not managed on a fair value basis.

Other investments

The Group has elected to account for certain equity method investments at fair value. These activities are managed on a fair value basis; thus, fair value accounting is deemed more appropriate for reporting purposes. Certain similar instruments, such as those relating to equity method investments in strategic relationships, for example, the Group's ownership interest in certain clearance organizations, which were eligible for the fair value option, were not elected due to the strategic relationship.

Loans

The Group has elected to account for substantially all commercial loans and loan commitments from the investment banking businesses and certain emerging market loans from the investment banking businesses at fair value. These activities are managed on a fair value basis and fair value accounting was deemed more appropriate for reporting purposes. Additionally, recognition on a fair value basis eliminates the mismatch that existed due to the economic hedging the Group employs to manage these loans. Certain similar loans, such as project finance, lease finance, cash collateralized and some bridge loans, which were eligible for the fair value option, were not elected due to the lack of currently available infrastructure to fair value such loans and/or the inability to economically hedge such loans. Additionally, the Group elected not to account for loans granted by its private, corporate and institutional banking businesses at fair value, such as domestic consumer lending, mortgages and corporate loans, as these loans are not managed on a fair value basis.

Other assets

The Group elected the fair value option for loans held-for-sale, due to the short period over which such loans are held and the intention to sell such loans in the near term. Other assets also include assets of VIEs and mortgage securitizations which do not meet the criteria for sale treatment under US GAAP. The Group did elect the fair value option for these types of transactions.

Due to banks and customer deposits

The Group elected the fair value option for certain time deposits associated with its emerging markets activities. The Group's customer deposits include fund-linked deposits. The Group elected the fair value option for these fund-linked deposits. Fund-linked products are managed on a fair value basis and fair value accounting was deemed more appropriate for reporting purposes.

Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions

The Group has elected to account for structured repurchase agreements and most matched book repurchase agreements at fair value. These activities are managed on a fair value basis and fair value accounting was deemed more appropriate for reporting purposes. The Group did not elect the fair value option for firm financing repurchase agreements as these agreements are generally overnight agreements which approximate fair value, but which are not managed on a fair value basis.

Short-term borrowings

The Group's short-term borrowings include hybrid debt instruments with embedded derivative features. Some of these embedded derivative features create bifurcatable debt instruments. The Group elected the fair value option for some of

these instruments as of January 1, 2006, in accordance with the provisions of US GAAP. New bifurcatable debt instruments which were entered into in 2006 are carried at fair value. Some hybrid debt instruments do not result in bifurcatable debt instruments. US GAAP permits the Group to elect fair value accounting for non-bifurcatable hybrid debt instruments. With the exception of certain bifurcatable hybrid debt instruments which the Group did not elect to account for at fair value, the Group has elected to account for all hybrid debt instruments held as of January 1, 2007, and hybrid debt instruments originated after January 1, 2007, at fair value. These activities are managed on a fair value basis and fair value accounting was deemed appropriate for reporting purposes. There are two main populations of similar instruments for which fair value accounting was not elected. The first relates to the lending business transacted by the Group's private, corporate and institutional banking businesses, which includes structured

deposits and similar investment products. These are managed on a bifurcated or accrual basis and fair value accounting was not considered appropriate. The second is where the instruments were or will be maturing in the near term and their fair value will be realized at that time.

Long-term debt

The Group's long-term debt includes hybrid debt instruments with embedded derivative features as described above in short-term borrowings. The Group's long-term debt also includes debt issuances managed by the Treasury department that do not contain derivative features (vanilla debt). The Group actively manages the interest rate risk on these instruments with derivatives. In particular, fixed-rate debt is hedged with receive-fixed, pay-floating interest rate swaps. The Group elected to fair value fixed-rate debt upon implementation of the fair value option on January 1, 2007, with changes in fair value recognized as a component of trading revenues. The Group did not elect to apply the fair value option to fixed-rate debt issued by the Group since January 1, 2008, but instead applies hedge accounting.

Other liabilities

Other liabilities include liabilities of VIEs and mortgage securitizations that do not meet the criteria for sale treatment under US GAAP. The Group elected the fair value option for these types of transactions.

Difference between the aggregate fair value and unpaid principal balances of fair value option-elected financial instruments

	2018			2017		
end of	Aggregate fair value	Aggregate unpaid principal	Difference	Aggregate fair value	Aggregate unpaid principal	Difference
Financial instruments (CHF million)						
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	81,818	81,637	181	77,498	76,643	855
Loans	14,873	15,441	(568)	15,307	15,372	(65)
Other assets [1]	6,706	9,240	(2,534)	8,468	10,910	(2,442)
Due to banks and customer deposits	(859)	(778)	(81)	(907)	(861)	(46)
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(14,828)	(14,827)	(1)	(15,262)	(15,180)	(82)
Short-term borrowings	(8,068)	(8,647)	579	(11,019)	(11,104)	85
Long-term debt	(63,935)	(70,883)	6,948	(63,628)	(63,759)	131
Other liabilities	(2,068)	(3,125)	1,057	(661)	(1,716)	1,055
Non-performing and non-interest-earning loans [2]	640	3,493	(2,853)	708	3,375	(2,667)

1 Primarily loans held-for-sale.

2 Included in loans or other assets.

Gains and losses on financial instruments

in	2018 Net gains/ (losses)	2017 Net gains/ (losses)	2016 Net gains/ (losses)
Financial instruments (CHF million)			
Interest-bearing deposits with banks	2[1]	13[1]	4[1]
of which related to credit risk	(10)	0	1
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	2,451[1]	2,206[1,4]	1,440[1]
Other investments	241[3]	216[2]	212[2]
of which related to credit risk	(1)	(4)	(3)
Loans	717[1]	1,542[1]	1,643[1]
of which related to credit risk	(296)	7	(16)
Other assets	770[1]	480[1]	(518)[2]
of which related to credit risk	61	96	(199)
Due to banks and customer deposits	(39)[2]	1[2]	(12)[1]
of which related to credit risk	(37)	5	(22)
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(890)[1]	(418)[1,4]	(112)[1]
Short-term borrowings	2,807[2]	(512)[2]	323[2]
of which related to credit risk	(5)	(23)	(4)
Long-term debt	4,206[2]	(6,857)[2]	(1,235)[2]
of which related to credit risk	7	(32)	22
Other liabilities	73[3]	183[3]	456[2]
of which related to credit risk	4	83	306

1
Primarily recognized in net interest income.
2
Primarily recognized in trading revenues.
3
Primarily recognized in other revenues.
4
Prior period has been corrected.

The impact of credit risk on assets presented in the table above has been calculated as the component of the total change in fair value, excluding the impact of changes in base or risk-free interest rates. The impact of changes in own credit risk on liabilities presented in the table above has been calculated as the difference between the fair values of those instruments as of the reporting date and the theoretical fair values of those instruments calculated by using the yield curve prevailing at the end of the reporting period, adjusted up or down for changes in the Group's own credit spreads from the transition date to the reporting date.

Interest income and expense, which are calculated based on contractual rates specified in the transactions, are recorded in the consolidated statements of operations depending on the nature of the instrument and its related market convention. When interest is included as a component of the change in the instrument's fair value, it is included in trading revenues. Otherwise, it is included in interest and dividend income or interest expense. Interest and dividend income is recognized separately from trading revenues.

Gains and losses attributable to changes in instrument-specific credit risk on fair value option elected liabilities

The following table provides additional information regarding the gains and losses attributable to changes in instrument-specific credit risk on fair value option elected liabilities, which have been recorded in AOCI. The table includes both the amount of change during the period and the cumulative amount that were attributable to the changes in instrument-specific credit risk. In addition, the table includes the gains and losses related to instrument-specific credit risk, which were previously recorded in AOCI but have been transferred to net income during the period.

Gains/(losses) attributable to changes in instrument-specific credit risk

	Gains/(losses) recorded into AOCI[1]			Gains/(losses) recorded in AOCI transferred to net income[1]	
in	2018	Cumulative	2017	2018	2017
Financial instruments (CHF million)					
Customer deposits	36	(21)	(15)	(6)	0
Short-term borrowings	6	(53)	(63)	2	0
Long-term debt	1,603	(924)	(1,957)	53	32
of which treasury debt over two years	759	84	(702)	0	0
of which structured notes over two years	774	(1,060)	(1,246)	53	27
Total	**1,645**	**(998)**	**(2,035)**	**49**	**32**

1 Amounts are reflected gross of tax.

Financial instruments not carried at fair value

The “Carrying value and fair value of financial instruments not carried at fair value” table provides the carrying value and fair value of financial instruments which are not carried at fair value in the consolidated balance sheet. The disclosure excludes all non-financial instruments such as lease transactions, real estate, premises and equipment, equity method investments and pension and benefit obligations.

Carrying value and fair value of financial instruments not carried at fair value

end of	Carrying value	Fair value Level 1	Level 2	Level 3	Total
2018 (CHF million)					
Financial assets					
Central banks funds sold, securities purchased under resale agreements and securities borrowing transactions	35,277	0	35,243	35	35,278
Loans	269,147	0	269,825	7,047	276,872
Other financial assets [1]	117,353	99,976	16,750	797	117,523
Financial liabilities					
Due to banks and customer deposits	375,403	196,674	178,755	0	375,429
Central banks funds purchased, securities sold under repurchase agreements and securities lending transactions	9,795	0	9,795	0	9,795
Short-term borrowings	13,857	0	13,859	0	13,859
Long-term debt	90,373	0	89,651	854	90,505
Other financial liabilities [2]	16,357	0	16,101	184	16,285
2017 (CHF million)					
Financial assets					
Central banks funds sold, securities purchased under resale agreements and securities borrowing transactions	37,848	0	37,848	0	37,848
Loans	260,093	0	264,290	3,212	267,502
Other financial assets [1,3]	170,870	109,645	60,469	1,109	171,223
Financial liabilities					
Due to banks and customer deposits	372,867	201,575	171,281	0	372,856
Central banks funds purchased, securities sold under repurchase agreements and securities lending transactions	11,233	0	11,233	0	11,233
Short-term borrowings	14,871	0	14,870	0	14,870
Long-term debt	109,403	0	112,488	235	112,723
Other financial liabilities [2,3]	61,316	0	61,131	172	61,303

1
Primarily includes cash and due from banks, interest-bearing deposits with banks, loans held-for-sale, cash collateral on derivative instruments, interest and fee receivables and non-marketable equity securities.

2
Primarily includes cash collateral on derivative instruments and interest and fee payables.

3
2017 balances included brokerage receivables and payables, which, effective January 1, 2018, were no longer included due to the adoption of ASU 2016-01.

36 Assets pledged and collateral

Assets pledged

The Group pledges assets mainly for repurchase agreements and other securities financing. Certain pledged assets may be encumbered, meaning they have the right to be sold or repledged. The encumbered assets are parenthetically disclosed on the consolidated balance sheet.

Assets pledged end of	2018	2017
CHF million		
Total assets pledged or assigned as collateral	117,895	130,038
of which encumbered	58,672	73,189

Collateral

The Group receives cash and securities in connection with resale agreements, securities borrowing and loans, derivative transactions and margined broker loans. A significant portion of the collateral and securities received by the Group was sold or repledged in connection with repurchase agreements, securities sold not yet purchased, securities borrowings and loans, pledges to clearing organizations, segregation requirements under securities laws and regulations, derivative transactions and bank loans.

Collateral end of	2018	2017
CHF million		
Fair value of collateral received with the right to sell or repledge	406,389	433,190
of which sold or repledged	193,267	212,155

Other information

end of	2018	2017
CHF million		
Swiss National Bank required minimum liquidity reserves	2,042	2,043
Other cash and securities restricted under Swiss and foreign regulations for financial institutions	25,139	26,969

37 Capital adequacy

The Group is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks (Swiss Requirements), which include capital, liquidity, leverage and large exposure requirements and rules for emergency plans designed to maintain systemically relevant functions in the event of threatened insolvency. The legislation implementing the Basel III framework in Switzerland in respect of capital requirements for systemically relevant banks, including the Group, goes beyond the Basel III minimum standards for systemically relevant banks. The Swiss total loss-absorbing capacity (TLAC) standards are being phased in from 2016 through 2019 and are fully effective on January 1, 2020. The Group, which is subject to regulation by FINMA, has based its capital adequacy calculations on US GAAP financial statements, as permitted by FINMA Circular 2013/1.

The Swiss regulation framework includes certain requirements for Swiss banks classified as systemically important banks operating internationally, such as the Group. It contains two different minimum requirements for loss-absorbing capacity: global systemically important banks must hold sufficient capital that absorbs losses to ensure continuity of service (going concern requirement), and they must issue sufficient debt instruments to fund an orderly resolution without recourse to public resources (gone concern requirement). Going concern capital and gone concern capital together form the Group's total loss-absorbing capacity. The going concern and gone concern requirements are generally aligned with the Financial Stability Board's total loss-absorbing capacity standard. The Swiss requirements are subject to phase-in and grandfathering provisions for certain outstanding instruments, and have to be fully applied by January 1, 2020. Banks that do not maintain the minimum requirements may be limited in their ability to pay dividends and make discretionary bonus payments and other earnings distributions.

The Group's balance sheet positions and off-balance sheet exposures translate into risk-weighted assets, which are categorized as credit, market and operational risk-weighted assets. When assessing risk-weighted assets, it is not the nominal size, but rather the nature (including risk mitigation such as collateral or hedges) of the balance sheet positions or off-balance sheet exposures that determines the risk-weighted assets.

Leverage exposure consists of period-end balance sheet assets and prescribed regulatory adjustments.

Capital ratios measure the Group's capital components against risk-weighted assets and leverage ratios measure them against the end-of-period leverage exposure.

As of December 31, 2018 and 2017, the Group's capital position exceeds its capital requirements under the regulatory provisions outlined under Swiss Requirements.

Broker-dealer operations

Certain of the Group's broker-dealer subsidiaries are also subject to capital adequacy requirements. As of December 31, 2018 and 2017, the Group and its subsidiaries complied with all applicable regulatory capital adequacy requirements.

Swiss metrics

end of	2018	Phase-in 2017
Swiss capital (CHF million)		
Swiss CET1 capital	35,719	36,567
Going concern capital	49,443	53,131
Gone concern capital	35,678	35,712
Total loss-absorbing capacity	85,121	88,843
Swiss risk-weighted assets and leverage exposure (CHF million)		
Swiss risk-weighted assets	285,193	273,436
Leverage exposure	881,386	919,053
Swiss capital ratios (%)		
Swiss CET1 ratio	12.5	13.4
Going concern capital ratio	17.3	19.4
Gone concern capital ratio	12.5	13.1
TLAC ratio	29.8	32.5

Swiss leverage ratios (%)		
Swiss CET1 leverage ratio	4.1	4.0
Going concern leverage ratio	5.6	5.8
Gone concern leverage ratio	4.0	3.9
TLAC leverage ratio	9.7	9.7
Swiss capital ratio requirements (%)		
Swiss CET1 ratio requirement	9.46	9.0
Going concern capital ratio requirement	12.86	12.0
Gone concern capital ratio requirement	8.9	6.2
TLAC ratio requirement	21.76	18.2
Swiss leverage ratio requirements (%)		
Swiss CET1 leverage ratio requirement	2.9	2.6
Going concern leverage ratio requirement	4.0	3.5
Gone concern leverage ratio requirement	3.0	2.0
TLAC leverage ratio requirement	7.0	5.5

Dividend restrictions

Certain of the Group's subsidiaries are subject to legal restrictions governing the amount of dividends they can pay (for example, pursuant to corporate law as defined by the Swiss Code of Obligations).

Under the Swiss Code of Obligations, dividends may be paid out only if and to the extent the corporation has distributable profits from previous business years, or if the free reserves of the corporation are sufficient to allow distribution of a dividend. In addition, at least 5% of the annual net profits must be retained and booked as general legal reserves for so long as these reserves amount to less than 20% of the paid-in share capital. The reserves currently exceed this 20% threshold. Furthermore, dividends may be paid out only after shareholder approval at the Annual General Meeting.

As of December 31, 2018 and 2017, Credit Suisse Group AG was not subject to restrictions on its ability to pay the proposed dividends.

38 Assets under management

The following disclosure provides information regarding client assets, assets under management and net new assets as regulated by FINMA.

Assets under management

Assets under management include assets for which the Group provides investment advisory or discretionary asset management services, investment fund assets and assets invested in other investment fund-like pooled investment vehicles managed by the Group. The classification of assets under management is conditional upon the nature of the services provided by the Group and the clients' intentions. Assets are individually assessed on the basis of each client's intentions and objectives and the nature of the banking services provided to that client. In order to be classified as assets under management, the Group must currently or in the foreseeable future expect to provide a service where the involvement of the Group's banking or investment expertise (e.g. as asset manager or investment advisor) is not purely executional or custodial in nature.

Assets under custody are client assets held mainly for execution-related or safekeeping/custody purposes only and therefore are not considered assets under management since the Group does not generally provide asset allocation or financial advice.

Assets of corporate clients and public institutions that are used primarily for cash management or transaction executional purposes for which no investment advice is provided are classified as commercial assets or assets under custody and therefore do not qualify as assets under management.

For the purpose of classifying assets under management, clients with multiple accounts are assessed from an overall relationship perspective. Accounts that are clearly separate from the remainder of the client relationship and represent assets held for custody purposes only are not included as assets under management.

The initial classification of the assets may not be permanent as the nature of the client relationship is reassessed on an on-going basis. If changes in client intent or activity warrant reclassification between client asset categories, the required reclassification adjustments are made immediately when the change in intent or activity occurs. Reclassifications between assets under management and assets held for transaction-related or custodial purposes result in corresponding net asset inflows or outflows. Effective as of January 1, 2019, the Group updated its assets under management policy primarily to introduce more specific criteria to evaluate whether client assets qualify as assets under management. The introduction of this updated policy is expected to result in a reclassification of approximately CHF 19 billion of assets under management to assets under custody which will be reflected as a structural effect in the first quarter of 2019.

A portion of the Group's assets under management results from double counting. Double counting arises when assets under management are subject to more than one level of asset management services. Each separate advisory or discretionary service provides additional benefits to the client and represents additional income for the Group. Specifically, double counting primarily results from the investment of assets under management in collective investment instruments managed by the Group. The extent of double counting is disclosed in the following table.

Assets under management

end of	2018	2017
CHF billion		
	186.4	185.2

Assets in collective investment instruments managed by Credit Suisse		
Assets with discretionary mandates	256.5	267.3
Other assets under management	904.4	923.6
Assets under management (including double counting)	**1,347.3**	**1,376.1**
of which double counting	44.2	46.2

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Changes in assets under management

	2018	2017
Assets under management (CHF billion)		
Balance at beginning of period [1]	**1,376.1**	**1,251.1**
Net new assets/(net asset outflows)	56.5	37.8
Market movements, interest, dividends and foreign exchange	(68.2)	86.7
of which market movements, interest and dividends [2]	(55.1)	88.9
of which foreign exchange	(13.1)	(2.2)
Other effects	(17.1)	0.5
Balance at end of period	**1,347.3**	**1,376.1**

1
Including double counting.
2
Net of commissions and other expenses and net of interest expenses charged.

Net new assets

Net new assets measure the degree of success in acquiring assets under management or changes in assets under management through warranted reclassifications. The calculation is based on the direct method, taking into account individual cash payments, security deliveries and cash flows resulting from loan increases or repayments.

Interest and dividend income credited to clients and commissions, interest and fees charged for banking services as well as changes in assets under management due to currency and market volatility are not taken into account when calculating net new assets, as such charges or market movements are not directly related to the Group's success in acquiring assets under management. Similarly other effects mainly relate to asset inflows and outflows due to acquisition or divestiture, exit from businesses or markets or exits due to new regulatory requirements and are not taken into account when calculating net new assets. The Group reviews relevant policies regarding client assets on a regular basis.

Divisional allocation

Assets under management and net new assets for the Private Clients business in the Swiss Universal Bank division, the Private Banking businesses in the International Wealth Management and Asia Pacific divisions, the Corporate & Institutional Banking business in the Swiss Universal Bank division and the Strategic Resolution Unit are allocated based on the management areas (business areas) that effectively manage the assets. The distribution of net new assets resulting from internal referral arrangements is governed under the net new asset referral framework, which includes preset percentages for the allocation of net new assets to the businesses.

The allocation of assets under management and net new assets for Asset Management in the Internal Wealth Management division reflects the location where the investment vehicles are managed and where the costs of managing the funds are incurred.

39 Litigation

The Group is involved in a number of judicial, regulatory and arbitration proceedings concerning matters arising in connection with the conduct of its businesses, including those disclosed below. Some of these proceedings have been brought on behalf of various classes of claimants and seek damages of material and/or indeterminate amounts.

The Group accrues loss contingency litigation provisions and takes a charge to income in connection with certain proceedings when losses, additional losses or ranges of loss are probable and reasonably estimable. The Group also accrues litigation provisions for the estimated fees and expenses of external lawyers and other service providers in relation to such proceedings, including in cases for which it has not accrued a loss contingency provision. The Group accrues these fee and expense litigation provisions and takes a charge to income in connection therewith when such fees and expenses are probable and reasonably estimable. The Group reviews its legal proceedings each quarter to determine the adequacy of its litigation provisions and may increase or release provisions based on management's judgment and the advice of counsel. The establishment of additional provisions or releases of litigation provisions may be necessary in the future as developments in such proceedings warrant.

The specific matters described below include (a) proceedings where the Group has accrued a loss contingency provision, given that it is probable that a loss may be incurred and such loss is reasonably estimable; and (b)

proceedings where the Group has not accrued such a loss contingency provision for various reasons, including, but not limited to, the fact that any related losses are not reasonably estimable. The description of certain of the matters below includes a statement that the Group has established a loss contingency provision and discloses the amount of such provision; for the other matters no such statement is made.

With respect to the matters for which no such statement is made, either (a) the Group has not established a loss contingency provision, in which case the matter is treated as a contingent liability under the applicable accounting standard, or (b) the Group has established such a provision but believes that disclosure of that fact would violate confidentiality obligations to which the Group is subject or otherwise compromise attorney-client privilege, work product protection or other protections against disclosure or compromise the Group's management of the matter. The future outflow of funds in respect of any matter for which the Group has accrued loss contingency provisions cannot be determined with certainty based on currently available information, and accordingly may ultimately prove to be substantially greater (or may be less) than the provision that is reflected on the Group's balance sheet.

It is inherently difficult to determine whether a loss is probable or even reasonably possible or to estimate the amount of any loss or loss range for many of the Group's legal proceedings. Estimates, by their nature, are based on judgment and currently available information and involve a variety of factors, including, but not limited to, the type and nature of the proceeding, the progress of the matter, the advice of counsel, the Group's defenses and its experience in similar matters, as well as its assessment of matters, including settlements, involving other defendants in similar or related cases or proceedings. Factual and legal determinations, many of which are complex, must be made before a loss, additional losses or ranges of loss can be reasonably estimated for any proceeding.

Most matters pending against the Group seek damages of an indeterminate amount. While certain matters specify the damages claimed, such claimed amount may not represent the Group's reasonably possible losses. For certain of the proceedings discussed below the Group has disclosed the amount of damages claimed and certain other quantifiable information that is publicly available.

The following table presents a roll forward of the Group's aggregate litigation provisions.

Litigation provisions

	2018
CHF million	
Balance at beginning of period	**749**
Increase in litigation accruals	503
Decrease in litigation accruals	(91)
Decrease for settlements and other cash payments	(481)
Foreign exchange translation	1
Balance at end of period	**681**

The Group's aggregate litigation provisions include estimates of losses, additional losses or ranges of loss for proceedings for which such losses are probable and can be reasonably estimated. The Group does not believe that it can estimate an aggregate range of reasonably possible losses for certain of its proceedings because of their complexity, the novelty of some of the claims, the early stage of the proceedings, the limited amount of discovery that has occurred and/or other factors. The Group's estimate of the aggregate range of reasonably possible losses that are not covered by existing provisions for the proceedings discussed below for which the Group believes an estimate is possible is zero to CHF 1.4 billion.

After taking into account its litigation provisions, the Group believes, based on currently available information and advice of counsel, that the results of its legal proceedings, in the aggregate, will not have a material adverse effect on the Group's financial condition. However, in light of the inherent uncertainties of such proceedings, including those brought by regulators or other governmental authorities, the ultimate cost to the Group of resolving such proceedings may exceed current litigation provisions and any excess may be material to its operating results for any particular period, depending, in part, upon the operating results for such period.

Enron-related litigation

Credit Suisse Securities (USA) LLC (CSS LLC) and certain of its affiliates, together with Deutsche Bank Securities Inc., Deutsche Bank AG, and Merrill Lynch & Co., Inc., were named as defendants in an Enron-related action, Silvercreek Management Inc. v. Citigroup, Inc., et al., in the US District Court for the Southern District of New York (SDNY). In this action, plaintiffs asserted they relied on Enron's financial statements, and sought to hold the defendants responsible for any inaccuracies in Enron's financial statements. The plaintiffs sought to assert federal and state law claims relating to its alleged USD 280 million in losses relating to its Enron investments. On November 10, 2017, the defendants filed motions for summary judgment. On September 28, 2018, the SDNY granted in part and

denied in part the defendants' motions for summary judgment, dismissing certain claims. On December 28, 2018, CSS LLC and its affiliates, together with Deutsche Bank Securities Inc., Deutsche Bank AG, and Merrill Lynch & Co., Inc. executed an agreement with the plaintiffs to settle this litigation. On January 10, 2019, the SDNY entered an order of final judgment dismissing with prejudice all claims against those defendants. This ends the last of CSS LLC and its affiliates' Enron-related litigation.

Mortgage-related matters

Government and regulatory related matters

Various financial institutions, including CSS LLC and certain of its affiliates, have received requests for information from, and/or have been defending civil actions by, certain regulators and/or government entities, including the US Department of Justice (DOJ) and other members of the Residential Mortgage-Backed Securities (RMBS) Working Group of the US Financial Fraud Enforcement Task Force, regarding the origination, purchase, securitization, servicing and trading of subprime and non-subprime residential and commercial mortgages and related issues. CSS LLC and its affiliates are cooperating with such requests for information.

DOJ RMBS settlement

As previously disclosed, on January 18, 2017, CSS LLC and its current and former US subsidiaries and US affiliates reached a settlement with the DOJ related to its legacy RMBS business, a business conducted through 2007. The settlement resolved potential civil claims by the DOJ related to certain of those Credit Suisse entities' packaging, marketing, structuring, arrangement, underwriting, issuance and sale of RMBS. Pursuant to the terms of the settlement a civil monetary penalty was paid to the DOJ in January 2017. The settlement also required the above-mentioned entities to provide a specified amount of consumer relief measures, including affordable housing payments and loan forgiveness, within five years of the settlement, and the DOJ and Credit Suisse agreed to the appointment of an independent monitor to oversee the completion of the consumer relief requirements of the settlement. The monitor has published reports on October 27, 2017, February 20, 2018 and August 31, 2018 noting Credit Suisse's cooperation and progress toward satisfaction of the consumer relief requirements.

NYAG and NJAG litigation

Following an investigation, on November 20, 2012, the New York Attorney General (NYAG), on behalf of the State of New York, filed a civil action in the Supreme Court for the State of New York, New York County (SCNY) against CSS LLC and affiliated entities in their roles as issuer, sponsor, depositor and/or underwriter of RMBS transactions prior to 2008. The complaint, which referenced 64 RMBS issued, sponsored, deposited and underwritten by CSS LLC and its affiliates in 2006 and 2007, alleged that CSS LLC and its affiliates misled investors regarding the due diligence and quality control performed on the mortgage loans underlying the RMBS at issue, and sought an unspecified amount of damages. On June 12, 2018, the New York State Court of Appeals ordered the partial dismissal of the NYAG's complaint, holding that the NYAG's claim pursuant to New York's Martin Act was time-barred and remanding the action to the SCNY for further proceedings on the NYAG's claim pursuant to New York's Executive Law. On December 31, 2018, pursuant to a settlement that resolved all claims by the NYAG against CSS LLC and its affiliates, the NYAG filed with the SCNY a stipulation dismissing its action with prejudice. The settlement required the Credit Suisse defendants to pay USD 10 million to the State of New York. This ends the action with the NYAG against CSS LLC and its affiliates. On December 18, 2013, the New Jersey Attorney General (NJAG), on behalf of the State of New Jersey, filed a civil action in the Superior Court of New Jersey, Chancery Division, Mercer County (SCNJ), against CSS LLC and affiliated entities in their roles as issuer, sponsor, depositor and/or underwriter of RMBS transactions prior to 2008. The original complaint, which referenced 13 RMBS issued, sponsored, deposited and underwritten by CSS LLC and its affiliates in 2006 and 2007, alleges that CSS LLC and its affiliates misled investors and engaged in fraud or deceit in connection with the offer and sale of RMBS, and seeks an unspecified amount of damages. On August 21, 2014, the SCNJ dismissed without prejudice the action brought against CSS LLC and its affiliates by the NJAG. On September 4, 2014, the NJAG filed an amended complaint against CSS LLC and its affiliates, asserting additional allegations but not expanding the number of claims or RMBS referenced in the original complaint. The NJAG action is at an intermediate procedural stage.

Civil litigation

CSS LLC and/or certain of its affiliates have also been named as defendants in various civil litigation matters related to their roles as issuer, sponsor, depositor, underwriter and/or servicer of RMBS transactions. These cases include or have included class action lawsuits, actions by individual investors in RMBS, actions by monoline insurance companies that guaranteed payments of principal and interest for certain RMBS, and repurchase actions by RMBS trusts, trustees and/or investors. Although the allegations vary by lawsuit, plaintiffs in the class actions and individual investor actions have generally alleged that the offering documents of securities issued by various RMBS securitization trusts contained material misrepresentations and omissions, including statements regarding the underwriting standards pursuant to which the underlying mortgage loans were issued; monoline insurers allege that loans that collateralize RMBS they insured breached representations and warranties made with respect to the loans at the time of securitization and that they were fraudulently induced to enter into the transactions; and repurchase action plaintiffs generally allege breached representations and warranties in respect of mortgage loans and failure to repurchase such mortgage loans as required under the applicable agreements. The amounts disclosed below do not reflect actual realized plaintiff losses to date or anticipated future litigation exposure. Rather, unless otherwise stated, these amounts reflect the original unpaid principal balance amounts as alleged in these actions and do not include any reduction in principal amounts since issuance. Further, unless otherwise stated, amounts attributable to an "operative pleading" for the individual investor actions are not altered for settlements, dismissals or other occurrences, if any, that

may have caused the amounts to change subsequent to the operative pleading. In addition to the mortgage-related actions discussed below, a number of other entities have threatened to assert claims against CSS LLC and/or its affiliates in connection with various RMBS issuances.

Individual investor actions

CSS LLC and, in some instances, its affiliates, as an RMBS issuer, underwriter and/or other participant, along with other defendants, have been named as defendants in: (i) one action brought by the Federal Deposit Insurance Corporation (FDIC), as receiver for Citizens National Bank and Strategic Capital Bank, in the SDNY, in which claims against CSS LLC and its affiliates relate to approximately USD 28 million of the RMBS at issue (approximately 20% of the USD 141 million at issue against all defendants in the operative pleading); (ii) two actions brought by the FDIC, as receiver for Colonial Bank: one action in the SDNY, in which claims against CSS LLC relate to approximately USD 92 million of the RMBS at issue (approximately 23% of the USD 394 million at issue against all defendants in the operative pleading); and one action in the Circuit Court of Montgomery County, Alabama, in which claims against CSS LLC and its affiliates relate to approximately USD 139 million of the RMBS at issue (approximately 45% of the USD 311 million at issue against all defendants in the operative pleading), reduced from

approximately USD 153 million following the February 14, 2017 dismissal with prejudice of claims pertaining to one RMBS offering on which CSS LLC and its affiliates were sued, and which has a trial scheduled to begin in April 2019; (iii) one action brought by the Federal Home Loan Bank of Seattle (FHLB Seattle) in Washington state court, in which claims against CSS LLC and its affiliates currently on appeal relate to approximately USD 145 million of the RMBS at issue, reduced from approximately USD 249 million of RMBS at issue; these claims were dismissed with prejudice in the trial court's May 4, 2016 summary judgment order; on May 3, 2018, the Washington State Supreme Court granted FHLB Seattle's petition for review of the Washington State Court of Appeals' decision affirming the trial court's dismissal of FHLB Seattle's claims; and (iv) one action brought by the Federal Home Loan Bank of Boston in Massachusetts state court, in which claims against CSS LLC and its affiliates relate to approximately USD 333 million of the RMBS at issue, reduced from USD 373 million (approximately 6% of the USD 5.7 billion at issue against all defendants in the operative pleading) following the October 27, 2015 stipulation of voluntary dismissal with prejudice of claims pertaining to a certain RMBS offering on which CSS LLC and its affiliates were sued. These actions are at various procedural stages.

CSS LLC and certain of its affiliates are the only defendants named in an action brought by IKB Deutsche Industriebank AG and affiliated entities in the SCNY, in which claims against CSS LLC and its affiliates relate to approximately USD 97 million of RMBS at issue; this action is at an intermediate procedural stage. CSS LLC and an affiliate were defendants in an action brought by Royal Park Investments SA/NV (Royal Park) in the SCNY, in which claims against CSS LLC and its affiliate related to approximately USD 360 million of RMBS at issue; on October 9, 2018, the Appellate Division First Department of the SCNY (First Department) affirmed the trial court's dismissal with prejudice of all claims against CSS LLC and its affiliate and, on January 15, 2019, the New York State Court of Appeals denied Royal Park's request to further appeal.

As disclosed in Credit Suisse's quarterly Financial Reports for 2018, individual investor actions discontinued during the course of 2018 included the following: (i) on July 19, 2018, following a settlement, the Tennessee state court presiding in the action brought by the Tennessee Consolidated Retirement System dismissed with prejudice all claims against CSS LLC relating to approximately USD 24 million of RMBS at issue; and (ii) on July 27, 2018, following a settlement, the SCNY presiding in the action brought by Phoenix Light SF Ltd. and affiliated entities dismissed with prejudice all claims against CSS LLC and its affiliates related to approximately USD 281 million of RMBS at issue.

Monoline insurer disputes

CSS LLC and certain of its affiliates are defendants in one monoline insurer action pending in the SCNY, commenced by MBIA Insurance Corp. (MBIA) as guarantor for payments of principal and interest related to approximately USD 770 million of RMBS issued in an offering sponsored by the Credit Suisse defendants. One theory of liability advanced by MBIA is that an affiliate of CSS LLC must repurchase certain mortgage loans from the trusts at issue. MBIA claims that the vast majority of the underlying mortgage loans breach certain representations and warranties, and that the affiliate has failed to repurchase the allegedly defective loans. In addition, MBIA brought claims for fraudulent inducement, material misrepresentations, breaches of warranties, repurchase obligations, and reimbursement. MBIA submitted repurchase demands for loans with an original principal balance of approximately USD 549 million. On March 31, 2017, the SCNY granted in part and denied in part both parties' respective summary judgment motions, which resulted, among other things, in the dismissal of MBIA's fraudulent inducement claim with prejudice. On September 13, 2018, the First Department issued a decision that, among other things, affirmed the dismissal of MBIA's fraudulent inducement claim with prejudice. The First Department also ruled in favor of CSS LLC and certain of its affiliates on their cross-appeal, reversing the trial court's interpretation of certain representations and warranties and ruling that their meaning should be decided at trial. Following its decision, the First Department remanded the action to the trial court for further proceedings. Trial in this action is scheduled to begin in July 2019.

Repurchase litigations

DLJ Mortgage Capital, Inc. (DLJ) is a defendant in: (i) one action brought by Asset Backed Securities Corporation Home Equity Loan Trust, Series 2006-HE7, in which plaintiff alleges damages of not less than USD 341 million, which will proceed in the SCNY following the resolution of a previously pending appeal; (ii) one action brought by Home Equity Asset Trust, Series 2006-8, in which plaintiff alleges damages of not less than USD 436 million; (iii) one action brought by Home Equity Asset Trust 2007-1, in which plaintiff alleges damages of not less than USD 420 million; (iv) one action brought by Home Equity Asset Trust Series 2007-3, in which plaintiff alleges damages of not less than USD 206 million, which was dismissed without prejudice by order of the SCNY on December 21, 2015 with

leave to restore within one year and which plaintiff moved to restore on December 20, 2016, which the court granted on March 15, 2017 by restoring the case to active status; (v) one action brought by Home Equity Asset Trust 2007-2, in which plaintiff alleges damages of not less than USD 495 million; and (vi) one action brought by CSMC Asset-Backed Trust 2007-NC1, in which no damages amount is alleged. DLJ and its affiliate, Select Portfolio Servicing, Inc. (SPS), are defendants in: one action brought by Home Equity Mortgage Trust Series 2006-1, Home Equity Mortgage Trust Series 2006-3 and Home Equity Mortgage Trust Series 2006-4, in which plaintiffs allege damages of not less than USD 730 million, and allege that SPS obstructed the investigation into the full extent of the defects in the mortgage pools by refusing to afford the trustee reasonable access to certain origination files; and one action brought by Home Equity Mortgage Trust Series 2006-5, in which plaintiff alleges damages of not less than USD 500 million, and alleges that SPS likely discovered DLJ's alleged breaches of representations and warranties but did not notify the trustee of such breaches, in alleged violation of its contractual obligations. These actions are brought in the SCNY and are at various procedural stages.

As disclosed in Credit Suisse's fourth quarter Financial Report of 2013, the following repurchase actions were dismissed with prejudice in 2013: the three consolidated actions brought by Home Equity Asset Trust 2006-5, Home Equity Asset Trust 2006-6 and Home Equity Asset Trust 2006-7 against DLJ. Those dismissals were upheld by the New York State Court of Appeals on February 19, 2019. Separately, a notice of appeal has been filed before the First Department in these consolidated actions from the SCNY's April 2017 denial of plaintiffs' request that its 2013 dismissal decision be modified to allow plaintiffs to assert new claims not previously included in plaintiffs' consolidated complaint.

Bank loan litigation

On January 3, 2010, Credit Suisse AG and certain of its affiliates were named as defendants in a lawsuit filed in the US District Court for the District of Idaho by current or former homeowners in four real estate developments, Tamarack Resort, Yellowstone Club, Lake Las Vegas and Ginn Sur Mer. Credit Suisse defendants in this matter arranged, and acted as the agent bank for, syndicated loans provided to borrowers affiliated with all four developments, and who have been or are now in bankruptcy or foreclosure. Plaintiffs generally allege that Credit Suisse defendants committed fraud by using an unaccepted appraisal method to overvalue the properties with the intention of having the borrowers take out loans they could not repay because it would allow Credit Suisse defendants to later push the borrowers into bankruptcy and take ownership of the properties. Plaintiffs demanded USD 24 billion in damages. Cushman & Wakefield, the appraiser for the properties at issue, was also named as a defendant. After the filing of amended complaints and motions to dismiss, the claims were significantly reduced. On September 24, 2013, the court denied the plaintiffs' motion for class certification so the case could not proceed as a class action. On February 5, 2015, the court granted plaintiffs' motion for leave to file an amended complaint, adding additional individual plaintiffs. On April 13, 2015, the court granted plaintiffs' motion for leave to add a claim for punitive damages. On November 20, 2015, the plaintiffs moved for partial summary judgment, which the defendants opposed on December 14, 2015. On December 18, 2015, the defendants filed motions for summary judgment. On July 27, 2016, the US District Court for the District of Idaho granted the defendants' motions for summary judgment, dismissing the case with prejudice. On April 26, 2018, the United States Court of Appeals for the Ninth Circuit affirmed the granting of summary judgment for Credit Suisse AG and certain of its affiliates.

CSS LLC and certain of its affiliates are the subject of certain other related litigation regarding certain of these loans as well as other similar real estate developments. Such litigation includes two cases brought in Texas and New York state courts by entities related to Highland Capital Management LP (Highland). In the case in Texas state court, a jury trial was held in December 2014 on Highland's claim for fraudulent inducement by affirmative misrepresentation and omission. A verdict was issued for the plaintiff on its claim for fraudulent inducement by affirmative misrepresentation, but the jury rejected its claim that CSS LLC and an affiliate had committed fraudulent inducement by omission. The Texas judge held a bench trial on Highland's remaining claims in May and June 2015, and entered judgment in the amount of USD 287 million (including prejudgment interest) for the plaintiff on September 4, 2015. Both parties appealed and on February 21, 2018 the appeals court affirmed the lower court's decision. On March 7, 2018, the defendants filed a motion for rehearing with the appeals court. On April 2, 2018, the motion for rehearing with the appeals court was denied. On July 18, 2018, the defendants filed a request for review by the Texas Supreme Court. On December 14, 2018, the court issued an order requiring briefs on the merits in the request for review. In the case in New York state court, the court granted in part and denied in part CSS LLC and certain of its affiliates' summary judgment motion. Both parties appealed that decision, but the appellate court affirmed the decision in full. CSS LLC and certain of its affiliates separately sued Highland-managed funds on related trades and received a favorable judgment awarding both principal owed and prejudgment interest. Highland appealed the portion of the judgment awarding prejudgment interest, however the original decision was affirmed in its entirety. The parties subsequently agreed to settle the amount owed by the Highland-managed funds under the judgment.

Tax and securities law matters

On May 19, 2014, Credit Suisse AG entered into settlement agreements with several US regulators regarding its US cross-border matters. As part of the agreements, Credit Suisse AG, among other things, engaged an independent corporate monitor that reports to the New York State Department of Financial Services. As of July 31, 2018, the monitor has concluded both his review and his assignment.

Rates-related matters

Regulatory matters

Regulatory authorities in a number of jurisdictions, including the US, UK, EU and Switzerland, have for an extended period of time been conducting investigations into the setting of LIBOR and other reference rates with respect to a number of currencies, as well as the pricing of certain related derivatives. These ongoing investigations have included information requests from regulators regarding LIBOR-setting practices and reviews of the activities of various financial institutions, including Credit Suisse Group AG, which is a member of three LIBOR rate-setting panels (US Dollar LIBOR, Swiss Franc LIBOR and Euro LIBOR). Credit Suisse is cooperating fully with these investigations. In particular, it has been reported that regulators are investigating whether financial institutions engaged in an effort to manipulate LIBOR, either individually or in concert with other institutions, in order to improve market perception of these institutions' financial health and/or to increase the value of their proprietary trading positions. In response to regulatory inquiries, Credit Suisse commissioned a review of these issues. To date, Credit Suisse has seen no evidence to suggest that it is likely to have any material exposure in connection with these issues.

Regulatory authorities in a number of jurisdictions, including the Swiss Competition Commission (COMCO), the European Commission (Commission), the South African Competition Commission, and the Brazilian Competition Authority have been conducting investigations into the trading activities, information sharing and the setting of benchmark rates in the foreign exchange (including electronic trading) markets.
On March 31, 2014, COMCO announced its formal investigation of numerous Swiss and international financial institutions, including Credit Suisse Group AG, in relation to the setting of exchange rates in foreign exchange trading. Credit Suisse continues to cooperate with this ongoing investigation.
On July 26, 2018, Credit Suisse Group AG and certain affiliates received a Statement of Objections from the Commission, alleging that Credit Suisse entities engaged in anticompetitive practices in connection with their foreign exchange trading business. The Statement of Objections sets out the Commission's preliminary views and does not prejudge the final outcome of its investigation.
The reference rates investigations have also included information requests from regulators concerning supranational, sub-sovereign and agency (SSA) bonds and commodities (including precious metals) markets. Credit Suisse is cooperating fully with these investigations.
On December 20, 2018, Credit Suisse Group AG and Credit Suisse (Securities) Europe Limited received a Statement of Objections from the Commission, alleging that Credit Suisse entities engaged in anticompetitive practices in connection with its supranational, sub-sovereign, and agency (SSA) bonds trading business. The Statement of Objections sets out the Commission's preliminary views and does not prejudge the final outcome of its investigation.
The investigations are ongoing and it is too soon to predict the final outcome of the investigations.
Civil litigation
USD LIBOR litigation
Beginning in 2011, certain Credit Suisse entities were named in various civil lawsuits filed in the US, alleging banks on the US dollar LIBOR panel manipulated US dollar LIBOR to benefit their reputation and increase profits. All but one of these matters have been consolidated for pre-trial purposes into a multi-district litigation in the SDNY. The majority of the actions have been stayed since their outset, while a handful of individual actions and putative class actions have been proceeding. The Credit Suisse entities have been dismissed from all non-stayed putative class actions.
In a series of rulings between 2013 and 2018 on motions to dismiss, the SDNY (i) narrowed the claims against the Credit Suisse entities and the other defendants (dismissing antitrust, Racketeer Influenced and Corrupt Organizations Act (RICO), Commodity Exchange Act, and state law claims), (ii) narrowed the set of plaintiffs who may bring claims, and (iii) narrowed the set of defendants in the LIBOR actions (including the dismissal of several Credit Suisse entities from various cases on personal jurisdiction grounds). The plaintiffs have appealed several of the SDNY's rulings to the United States Court of Appeals for the Second Circuit (Second Circuit). On February 23, 2018, the Second Circuit issued a decision in an appeal of one individual (non-class) action that largely affirmed the SDNY's rulings, including upholding the dismissal of certain state law and securities law claims as to Credit Suisse Group AG, but vacated certain rulings and remanded the case for further proceedings. Another consolidated Second Circuit appeal is still pending.
Separately, on May 4, 2017, the plaintiffs in the three non-stayed putative class actions moved for class certification. On February 28, 2018, the SDNY denied certification in two of the actions and granted certification over a single antitrust claim in an action brought by over-the-counter purchasers of LIBOR-linked derivatives. In the same decision, the court dismissed Credit Suisse AG, the only remaining Credit Suisse entity in the action, from the over-the-counter action. All parties moved for immediate appellate review of the class-certification decisions, and the Second Circuit denied their petitions for review.
On June 15, 2018, plaintiffs in several non-class actions filed amended complaints or filed for leave to amend their currently operative complaints. On July 13, 2018, defendants moved to dismiss the amended complaints and opposed leave to amend.
In the one matter that is not consolidated in the multi-district litigation, the SDNY granted the defendants' motion to dismiss on March 31, 2015. On June 1, 2015, plaintiff filed a motion for leave to file a second amended complaint in the SDNY; defendants' opposition brief was filed on July 15, 2015. On March 20, 2018, the SDNY denied the plaintiff's request for leave to file an amended pleading and dismissed the case on the merits. Plaintiff appealed to the Second Circuit.

USD ICE LIBOR litigation

In January 2019, members of the US dollar Intercontinental Exchange (ICE) LIBOR panel, including Credit Suisse Group AG and certain of its affiliates, were named in three civil putative class action lawsuits alleging that panel banks suppressed US dollar ICE LIBOR to benefit defendants' trading positions. These actions have been consolidated in the SDNY.

CHF LIBOR litigation

In February 2015, various banks that served on the Swiss franc LIBOR panel, including Credit Suisse Group AG, were named in a civil putative class action lawsuit filed in the SDNY, alleging manipulation of Swiss franc LIBOR to benefit defendants' trading positions. On September 25, 2017, the SDNY granted defendants' motion to dismiss all claims, but permitted the plaintiffs to file an amended complaint. Defendants filed motions to dismiss the amended complaint on February 7, 2018.

SIBOR/SOR litigation

In July 2016, various banks that served on the Singapore Interbank Offered Rate (SIBOR) and Singapore Swap Offer Rate (SOR) panels, including Credit Suisse Group AG and affiliates, were named in a civil putative class action lawsuit filed in the SDNY, alleging manipulation of SIBOR and SOR to benefit defendants' trading positions. On August 18, 2017, the SDNY dismissed all claims against Credit Suisse Group AG and affiliates (and various other defendants) but granted the plaintiffs leave to amend their complaint. On October 4, 2018, the SDNY granted in part and denied in part defendants' motion to dismiss plaintiffs' second amended complaint, upholding antitrust claims against Credit Suisse AG and other panel bank defendants, but narrowing the claims to those related to Singapore Dollar SIBOR and dismissing all but one plaintiff from the action. The court also dismissed the RICO claims without leave to amend. On October 25, 2018, the remaining plaintiff filed a third amended complaint. The remaining defendants moved to dismiss on November 15, 2018.

Foreign exchange litigation

Credit Suisse Group AG and affiliates as well as other financial institutions are named in five pending civil lawsuits in the SDNY relating to the alleged manipulation of foreign exchange rates.

The first pending matter is a putative consolidated class action. On January 28, 2015, the court denied defendants' motion to dismiss the original consolidated complaint brought by US-based investors and foreign plaintiffs who transacted in the US, but granted their motion to dismiss the claims of foreign-based investors for transactions outside of the US. In July 2015, plaintiffs filed a second consolidated amended complaint, adding additional defendants and asserting additional claims on behalf of a second putative class of exchange investors. On September 20, 2016, the SDNY granted in part and denied in part a motion to dismiss filed by the Group and affiliates, along with other financial institutions, which reduced the size of the putative class, but allowed the primary antitrust and Commodity Exchange Act claims to survive. On May 31, 2018, plaintiffs served a motion for class certification, which the Group and affiliates opposed on October 25, 2018.

The second pending matter names Credit Suisse AG and affiliates, as well as other financial institutions in a putative class action filed in the SDNY on June 3, 2015. This action is based on the same alleged conduct as the consolidated class action and alleges violations of the US Employee Retirement Income Security Act of 1974 (ERISA). On August 23, 2016, the SDNY granted a motion to dismiss filed by affiliates of Credit Suisse AG, along with other financial institutions. Plaintiffs appealed that decision, and on July 10, 2018, the Second Circuit issued an order affirming in full the SDNY's decision to dismiss the putative ERISA class action against Credit Suisse AG and affiliates as well as other defendant financial institutions and denying plaintiffs' request for leave to amend their complaint.

The third pending matter names Credit Suisse Group AG and affiliates, as well as other financial institutions, in a consolidated putative class action filed in the SDNY, alleging manipulation of the foreign exchange market on behalf of indirect purchasers of foreign exchange instruments. On March 15, 2018, the court issued a decision granting defendants' joint motion to dismiss and dismissing the consolidated complaint in its entirety. On October 25, 2018, the SDNY granted in substantial part plaintiffs' motion for leave to file a proposed second consolidated class action complaint, which plaintiffs filed on November 28, 2018. On December 20, 2018, the Group, together with other financial institutions, filed a motion to dismiss on the basis of personal jurisdiction.

The fourth pending matter names Credit Suisse Group AG and affiliates in a putative class action filed in the SDNY on July 12, 2017, alleging improper practices in connection with electronic foreign exchange trading. On April 12, 2018, the SDNY granted defendants' motion to compel arbitration.

The fifth pending matter names Credit Suisse Group AG and affiliates, as well as other financial institutions, in a civil action filed in the SDNY on November 13, 2018. This action is based on the same alleged conduct as the consolidated class action. On March 1, 2019, plaintiffs filed an amended complaint.

Credit Suisse Group AG and certain of its affiliates, together with other financial institutions, have also been named in two Canadian putative class actions, which make allegations similar to the consolidated class action. Further, Credit Suisse Group AG and certain of its affiliates, together with other financial institutions, have also been named in two putative class actions in Israel, which makes allegations similar to the consolidated class action.

ISDAFIX litigation

Credit Suisse AG, New York Branch, and other financial institutions were also named in a consolidated civil class action lawsuit relating to the alleged manipulation of the ISDAFIX rate for US dollars in the SDNY. On April 11, 2016, Credit Suisse AG, New York Branch entered into a settlement agreement with plaintiffs. On June 1, 2018, the

SDNY approved plaintiffs' settlement agreement with Credit Suisse AG, New York Branch, and several other financial institutions. The settlement provides for dismissal of the case with prejudice and a settlement payment of USD 50 million.

Treasury markets litigation

CSS LLC, along with over 20 other primary dealers of US treasury securities, has been named in a number of putative civil class action complaints in the US relating to the US treasury markets. These complaints generally allege that defendants colluded to manipulate US treasury auctions, as well as the pricing of US treasury securities in the when-issued market, with impacts upon related futures and options. These actions have been consolidated into a multi-district litigation in the SDNY. On August 23, 2017, the SDNY appointed lead counsel, and on August 25, 2017, three purported class representatives re-filed their complaints as a collective individual action. On November 15, 2017, plaintiffs filed a consolidated amended class action complaint naming CSS LLC, Credit Suisse Group AG, and Credit Suisse International (CSI), along with

a narrower group of other defendants. The consolidated complaint contains previously-asserted allegations as well as new allegations concerning a group boycott to prevent the emergence of anonymous, all-to-all trading in the secondary market for treasury securities. On February 23, 2018, defendants served motions to dismiss on plaintiffs and the SDNY entered a stipulation voluntarily dismissing Credit Suisse Group AG and other defendant holding companies. On March 26, 2018, the SDNY entered a stipulation voluntarily dismissing CSI for lack of personal jurisdiction.

SSA bonds litigation

Credit Suisse Group AG and affiliates, along with other financial institutions and individuals, have been named in several putative class action complaints filed in the SDNY relating to SSA bonds. The complaints generally allege that defendants conspired to fix the prices of SSA bonds sold to and purchased from investors in the secondary market. These actions have been consolidated in the SDNY. On April 7, 2017, plaintiffs filed a consolidated class action complaint. Plaintiffs filed a consolidated amended class action complaint on November 3, 2017, which defendants moved to dismiss on December 12, 2017. On August 24, 2018, the SDNY granted defendants' motion to dismiss for failure to state a claim, but granted plaintiffs leave to amend. On November 6, 2018, plaintiffs filed a second consolidated amended class action complaint, which defendants moved to dismiss on December 21, 2018.

Separately, on February 7, 2019, Credit Suisse AG and certain of its affiliates, together with other financial institutions and individuals, were named in a putative class action filed in the SDNY, which makes allegations similar to the consolidated class action, but seeks to represent a putative class of indirect purchasers of US dollar SSA bonds where the purchase was made in or connected to New York.

Credit Suisse Group AG and certain of its affiliates, together with other financial institutions, have also been named in two Canadian putative class actions, which make allegations similar to the consolidated class action.

Bank Bill Swap litigation

On August 16, 2016, Credit Suisse Group AG and Credit Suisse AG, along with other financial institutions, were named in a putative class action brought in the SDNY, alleging manipulation of the Australian Bank Bill Swap reference rate. Plaintiffs filed an amended complaint on December 16, 2016, which defendants moved to dismiss on February 24, 2017. On November 26, 2018, the SDNY granted in part and denied in part defendants' motions to dismiss, including dismissing the complaint in its entirety against Credit Suisse Group AG and Credit Suisse AG. On March 4, 2019, plaintiffs were granted leave to file a second amended complaint.

Mexican government bonds litigation

Credit Suisse AG and affiliates have been named in multiple putative class actions in US federal court alleging a conspiracy among Credit Suisse entities and other dealer banks to manipulate the Mexican government bond market. These actions have been consolidated in the SDNY and on July 18, 2018, plaintiffs filed their consolidated amended complaint. On September 17, 2018, defendants filed motions to dismiss the consolidated amended complaint.

Freddie Mac and Fannie Mae bonds litigation

Since February 22, 2019, Credit Suisse AG and CSS LLC, together with other financial institutions, have been named in multiple putative class action complaints filed in the SDNY, alleging a conspiracy among the financial institutions to fix prices for unsecured bonds issued by Freddie Mac and Fannie Mae.

OTC trading cases

Credit Suisse Group AG and affiliates, along with other financial institutions, have been named in one consolidated putative civil class action complaint and one consolidated complaint filed by individual plaintiffs relating to interest rate swaps, alleging that dealer defendants conspired with trading platforms to prevent the development of interest rate swap exchanges. The individual lawsuits were brought by TeraExchange LLC, a swap execution facility, and affiliates, and Javelin Capital Markets LLC, a swap execution facility, and an affiliate, which claim to have suffered lost profits as a result of defendants' alleged conspiracy. All interest rate swap actions have been consolidated in a multi-district litigation in the SDNY. Both class and individual plaintiffs filed second amended consolidated complaints on December 9, 2016, which defendants moved to dismiss on January 20, 2017. On July 28, 2017, the SDNY granted in part and denied in part defendants' motions to dismiss. On February 21, 2018, class plaintiffs moved for leave to amend and file a proposed third amended consolidated class action complaint. On May 10, 2018, the SDNY issued an order granting in part and denying in part class plaintiffs' motion for leave to amend and file a third amended consolidated class action complaint. The SDNY granted plaintiffs' motion to add a new plaintiff and factual allegations relating to the claims that survived the motion to dismiss, but denied plaintiffs' attempt to revive the

dismissed claims. On May 30, 2018, plaintiffs filed the third amended complaint.

On June 14, 2018, a new direct action complaint was filed by swap execution facility trueEX LLC. On June 20, 2018, the trueEX LLC complaint was added to the existing multi-district litigation. On August 9, 2018, trueEX LLC filed an amended complaint against Credit Suisse Group AG and affiliates, along with other financial institutions, which defendants moved to dismiss on August 28, 2018. On November 20, 2018, the SDNY issued an order granting in part and denying in part defendants' motion to dismiss the trueEX LLC amended complaint. The SDNY granted defendants' motion to dismiss trueEX LLC's state law claims, but denied the motion as to trueEX LLC's antitrust claims. On October 25, 2018, class plaintiffs moved for leave to file a fourth amended consolidated complaint. On February 20, 2019, class plaintiffs filed motions for class certification. On March 13, 2019, the SDNY issued an order granting in part and denying in part class plaintiffs' motion for leave to amend and file a fourth amended consolidated class action complaint.

On June 8, 2017, Credit Suisse Group AG and affiliates, along with other financial institutions, were named in a civil action filed in the SDNY by Tera Group, Inc. and related entities (collectively "Tera"), alleging violations of antitrust law in connection with the allegation that credit default swap (CDS) dealers conspired to block Tera's electronic CDS trading platform from successfully entering the market. On September 11, 2017, defendants filed motions to dismiss. Credit Suisse Group AG and certain of its affiliates, as well as other financial institutions, have been defending against a number of civil lawsuits in the SDNY, certain of which are brought by class action plaintiffs alleging that the defendants conspired to keep stock-loan trading in an over-the-counter market and collectively boycotted certain trading platforms that sought to enter the market, and certain of which are brought by trading platforms that sought to enter the market alleging that the defendants collectively boycotted the platforms. The SDNY denied defendants' motions to dismiss in the putative class action. In each of the lawsuits, the court entered a stipulation voluntarily dismissing Credit Suisse Group AG and other defendant holding companies, although certain Credit Suisse Group AG affiliates remain part of the ongoing action.

ATA litigation

A lawsuit was filed on November 10, 2014 in the US District Court for the Eastern District of New York (EDNY) against a number of banks, including Credit Suisse AG, alleging claims under the United States Anti-Terrorism Act (ATA). The action alleges a conspiracy between Iran and various international financial institutions, including the defendants, in which they agreed to alter, falsify or omit information from payment messages that involved Iranian parties for the express purpose of concealing the Iranian parties' financial activities and transactions from detection by US authorities. The complaint, brought by approximately 200 plaintiffs, alleges that this conspiracy has made it possible for Iran to transfer funds to Hezbollah and other terrorist organizations actively engaged in harming US military personnel and civilians. On July 12, 2016, plaintiffs filed a second amended complaint in the EDNY against a number of banks, including Credit Suisse AG, alleging claims under the ATA. On September 14, 2016, Credit Suisse AG and the other defendants filed motions to dismiss the plaintiffs' second amended complaint in the EDNY. Another lawsuit was filed on November 9, 2017, in the SDNY against a number of banks, including Credit Suisse AG, alleging claims under the ATA. On March 2, 2018, Credit Suisse AG and other defendants filed motions to dismiss the plaintiffs' complaint. This action and the separate lawsuit that was filed on November 10, 2014 in the EDNY, remain pending.

In December 2018, five additional lawsuits were filed in the EDNY or SDNY against a number of banks, including Credit Suisse AG and, in two instances, Credit Suisse AG, New York Branch. alleging claims under the ATA and the Justice Against Sponsors of Terrorism Act. These actions similarly allege a conspiracy between Iran and various international financial institutions, including the defendants, in which they agreed to alter, falsify or omit information from payment messages that involved Iranian parties, and that this conspiracy made it possible for Iran to transfer funds to terrorist organizations actively engaged in harming US military personnel and civilians.

MPS

In late 2014, the Monte dei Paschi di Siena Foundation (Foundation) filed a lawsuit in the Civil Court of Milan, Italy seeking EUR 3 billion in damages jointly from Credit Suisse Securities (Europe) Limited (CSSEL), Banca Leonardo & Co S.p.A. and former members of the Foundation's management committee. The lawsuit relates to the fairness opinions CSSEL and Banca Leonardo & Co S.p.A. delivered to the Foundation in connection with the EUR 9 billion acquisition of Banca Antonveneta S.p.A. by Banca Monte dei Paschi di Siena S.p.A. (BMPS) in 2008. BMPS funded the acquisition by a EUR 5 billion rights offer and the issuance of unredeemable securities convertible into BMPS shares, in which the Foundation invested EUR 2.9 billion and EUR 490 million, respectively. The Foundation alleges that the fairness opinions were issued in the absence of key financial information. CSSEL believes that the claim lacks merit and is not supported by the available evidence. In November 2017, the Civil Court of Milan rejected the Foundation's claims, ruling in favor of CSSEL. In January 2018, the Foundation filed an appeal against this ruling.

Customer account matters

Several clients have claimed that a former relationship manager in Switzerland had exceeded his investment authority in the management of their portfolios, resulting in excessive concentrations of certain exposures and investment losses. Credit Suisse AG is investigating the claims, as well as transactions among the clients. Credit Suisse AG filed a criminal complaint against the former relationship manager with the Geneva Prosecutor's Office upon which the prosecutor initiated a criminal investigation. Several clients of the former relationship manager also filed criminal complaints with the Geneva Prosecutor's Office. On February 9, 2018, the former relationship manager was sentenced

to five years in prison by the Geneva criminal court for fraud, forgery and criminal mismanagement and ordered to pay damages of approximately USD 130 million. Several parties have appealed the judgement. Civil lawsuits were initiated on August 25, 2017 in the High Court of Singapore, the High Court of New Zealand and the Supreme Court of Bermuda against Credit Suisse AG and certain affiliates, based on the findings established in the criminal proceedings against the former relationship manager. On July 17, 2018, the High Court of New Zealand dismissed the civil lawsuit brought against Credit Suisse AG and stayed the same lawsuit against a New Zealand incorporated affiliate. On August 31, 2018, the civil lawsuit was stayed by an Assistant Registrar of the High Court of Singapore. Plaintiffs in both the New Zealand and Singapore civil proceedings have appealed these decisions. On January 18, 2019 the Singapore High Court dismissed the plaintiffs' appeal and upheld the Assistant Registrar's decision to stay the civil proceedings in Singapore; the plaintiffs have appealed this decision.

FIFA-related matters

In connection with investigations by US and Swiss government authorities into the involvement of financial institutions in the alleged bribery and corruption surrounding the Fédération Internationale de Football Association (FIFA), Credit Suisse received inquiries from these authorities regarding its banking relationships with certain individuals and entities associated with FIFA, including but not limited to certain persons and entities named and/or described in the May 20, 2015 indictment and the November 25, 2015 superseding indictment filed by the Eastern District of New York US Attorney's Office. The US and Swiss investigations encompassed whether multiple financial institutions, including Credit Suisse, permitted the processing of suspicious or otherwise improper transactions, or failed to observe anti-money laundering laws and regulations, with respect to the accounts of certain persons and entities associated with FIFA. Credit Suisse continues to cooperate with US authorities on this matter. As previously disclosed, the Swiss Financial Market Supervisory Authority FINMA has announced the conclusion of its investigation.

External asset manager matter

Several clients have claimed that an external asset manager based in Geneva misappropriated funds, forged bank statements, transferred assets between client accounts at Credit Suisse AG as custodian to conceal losses and made investments without the authorization of those clients. Credit Suisse AG is investigating the claims. The Geneva Prosecutor's Office initiated a criminal investigation against representatives of the external asset manager and two former Credit Suisse AG employees. This investigation was expanded in November 2018 to also include one former and one current Credit Suisse AG employee and Credit Suisse AG itself in order to assess the sufficiency of Credit Suisse AG's controls and supervision. Credit Suisse AG, in March 2019, reached a tentative settlement with the affected clients.

Mossack Fonseca/Israel Desk matters

Credit Suisse, along with many financial institutions, has received inquiries from governmental and regulatory authorities concerning banking relationships between financial institutions, their clients and the Panama-based law firm of Mossack Fonseca. Credit Suisse has also received governmental and regulatory inquiries concerning cross-border services provided by Credit Suisse's Switzerland-based Israel Desk. Credit Suisse is conducting a review of these issues and has been cooperating with the authorities.

Mozambique matter

Credit Suisse is responding to requests from regulatory and enforcement authorities related to certain Credit Suisse entities' arrangement of loan financing to Mozambique state enterprises, Proindicus S.A. and Empresa Mocambiacana de Atum S.A. (EMATUM), a distribution to private investors of loan participation notes (LPN) related to the EMATUM financing in September 2013, and certain Credit Suisse entities' subsequent role in arranging the exchange of those LPNs for Eurobonds issued by the Republic of Mozambique. On January 3, 2019, the United States Attorney for the Eastern District of New York unsealed an indictment against several individuals in connection with the matter, including three former Credit Suisse employees. Credit Suisse is cooperating with the authorities on this matter. On February 27, 2019, certain Credit Suisse entities, the same three former employees, and several other unrelated entities were sued in the English High Court by the Republic of Mozambique. Credit Suisse has not yet been served. Credit Suisse is aware of statements made by the Attorney General of Mozambique and notes that it had no involvement in the transaction with Mozambique Asset Management S.A.

Cross-border private banking matters

Credit Suisse offices in various locations, including the UK, the Netherlands and France, have been contacted by regulatory and law enforcement authorities that are seeking records and information concerning investigations into our historical private banking services on a cross-border basis and in part through our local branches and banks. Credit Suisse has conducted a review of these issues and is cooperating with the authorities. Credit Suisse applies a strict zero tolerance policy on tax evasion.

Hiring practices investigation

On May 30, 2018, Credit Suisse (Hong Kong) Limited (CSHKL) entered into a non-prosecution agreement to resolve the investigation of past hiring practices between 2007 and 2013 in the Asia Pacific region by the US Department of Justice (DOJ), under which CSHKL paid a penalty of USD 47 million. No criminal charges were filed and no monitor was required. As part of the agreement, Credit Suisse AG will continue to cooperate with the DOJ, will maintain prescribed standards in its compliance programs and will report to the DOJ on the functioning of its enhanced

compliance programs. On July 5, 2018, Credit Suisse Group AG reached a settlement with the US Securities and Exchange Commission to resolve the parallel investigation of the same conduct for USD 29.8 million.

Write-downs litigation

On December 22, 2017, Credit Suisse Group AG and certain current and former executives were named in a class action complaint filed in the SDNY on behalf of a putative class of purchasers of Credit Suisse Group AG American Depositary Receipts (ADRs), asserting claims for violations of Sections 10(b) and 20(a) of the US Securities Exchange Act of 1934 and Rule 10b-5 thereunder, alleging that defendants sanctioned increases to trading limits that ultimately led to write-downs in the fourth quarter of 2015 and the first quarter of 2016 and a decline in the market value of the ADRs. On April 18, 2018, plaintiffs filed an amended complaint, which asserts substantially the same claims as the original complaint. On February 19, 2019, the SDNY granted in part and denied in part, defendants' motion to dismiss the amended

complaint. The decision narrows the scope of the action to claims related to statements concerning Credit Suisse's risk limits and controls. On March 6, 2019, defendants filed a motion for reconsideration. Discovery is ongoing.
ETN-related litigation
Since March 14, 2018, three class action complaints were filed in the SDNY on behalf of a putative class of purchasers of VelocityShares Daily Inverse VIX Short Term Exchange Traded Notes linked to the S&P 500 VIX Short-Term Futures Index due December 4, 2030 (XIV ETNs). On August 20, 2018, plaintiffs filed a consolidated amended complaint, naming Credit Suisse Group AG and certain affiliates and executives, along with Janus Index & Calculation Services LLC and affiliates, which asserts claims for violations of Sections 9(a)(4), 9(f), 10(b) and 20(a) of the US Securities Exchange Act of 1934 and Rule 10b-5 thereunder and Sections 11 and 15 of the US Securities Act of 1933 and alleges that the defendants are responsible for losses to investors following a decline in the value of XIV ETNs on February 5, 2018. Defendants moved to dismiss the amended complaint on November 2, 2018.
On April 17, 2018, Credit Suisse AG, along with Janus Index & Calculation Services, LLC, was named in an individual civil action in the Northern District of Alabama that makes allegations similar to those alleged in the consolidated New York action. On August 10, 2018, defendants filed a motion to transfer the action to the SDNY, which was denied on December 17, 2018. On September 26, 2018, defendants filed a motion to dismiss the Alabama complaint. On December 4, 2018, plaintiffs filed an amended complaint, which defendants moved to dismiss on January 11, 2019.
On February 4, 2019, Credit Suisse Group AG and certain affiliates and executives, along with Janus Index & Calculation Services LLC and affiliates, were named in a separate individual action brought in the EDNY, which asserts claims substantially similar to those brought in the consolidated action.
On February 4, 2019, Credit Suisse Group AG and certain affiliates and executives, along with Janus Index & Calculation Services LLC and affiliates, were named in a class action complaint filed in the SDNY brought on behalf of a putative class of purchasers of VelocityShares Daily Inverse VIX Medium Term Exchange Traded Notes linked to the S&P 500 VIX Mid-Term Futures Index due December 4, 2030 (ZIV ETNs). The complaint asserts claims for violations of Sections 9(a)(4), 9(f), 10(b) and 20(a) of the US Securities Exchange Act of 1934 and Rule 10b-5 thereunder and Sections 11 and 15 of the US Securities Act of 1933 and alleges that the defendants are responsible for losses to investors following a decline in the value of ZIV ETNs in February 2018.
TWINT
On November 13, 2018, COMCO announced an investigation into several Swiss financial institutions, including UBS Switzerland AG, Credit Suisse (Schweiz) AG, Aduno Holding AG, PostFinance AG, and Swisscard AECS GmbH. According to COMCO, its investigation is focused on whether these institutions entered into an agreement to boycott mobile payment solutions of international providers, including Apple Pay and Samsung Pay, in order to protect TWINT, their own Swiss payment solution.
SWM
CSI is the defendant in a lawsuit brought by the German public utility company Stadtwerke München GmbH in a German court, in connection with a series of interest rate swaps entered into between 2008 and 2012. The claimant alleges breach of an advisory duty to provide both investor- and investment-specific advice, including in particular a duty to disclose the initial mark-to-market value of the trades at inception.

40 Significant subsidiaries and equity method investments
Significant subsidiaries

Company name	Domicile	Currency	Nominal capital in million	Equity interest in %
End of 2018				
Credit Suisse Group AG				
Credit Suisse AG	Zurich, Switzerland	CHF	4,399.7	100
Credit Suisse Insurance Linked Strategies Ltd	Zurich, Switzerland	CHF	0.2	100
Credit Suisse (Poland) SP. z o.o	Warsaw, Poland	PLN	20.0	100
Credit Suisse Services AG	Zurich, Switzerland	CHF	1.0	100
Credit Suisse Trust AG	Zurich, Switzerland	CHF	5.0	100
Credit Suisse Trust Holdings Limited	St. Peter Port, Guernsey	GBP	2.0	100
CS LP Holding AG	Zug, Switzerland	CHF	0.1	100
Inreska Limited	St. Peter Port, Guernsey	GBP	3.0	100
Savoy Hotel Baur en Ville AG	Zurich, Switzerland	CHF	7.5	88
Credit Suisse AG				
Alpine Securitization LTD	George Town, Cayman Islands	USD	0.0	100
Asset Management Finance LLC	Wilmington, United States	USD	167.8	100
Banco Credit Suisse (Brasil) S.A.	São Paulo, Brazil	BRL	53.6	100
Banco Credit Suisse (México), S.A.	Mexico City, Mexico	MXN	1,716.7	100
Banco de Investimentos Credit Suisse (Brasil) S.A.	São Paulo, Brazil	BRL	164.8	100
BANK-now AG	Horgen, Switzerland	CHF	30.0	100
Boston Re Ltd.	Hamilton, Bermuda	USD	2.0	100
Casa de Bolsa Credit Suisse (México), S.A. de C.V.	Mexico City, Mexico	MXN	274.0	100
Column Financial, Inc.	Wilmington, United States	USD	0.0	100
Credit Suisse (Australia) Limited	Sydney, Australia	AUD	34.1	100
Credit Suisse (Brasil) S.A. Corretora de Titulos e Valores Mobiliários	São Paulo, Brazil	BRL	98.4	100
Credit Suisse (Deutschland) Aktiengesellschaft	Frankfurt, Germany	EUR	130.0	100
Credit Suisse (Hong Kong) Limited	Hong Kong, China	HKD	13,758.0	100
Credit Suisse (Italy) S.p.A.	Milan, Italy	EUR	170.0	100
Credit Suisse (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	230.9	100
Credit Suisse (Qatar) LLC	Doha, Qatar	USD	29.0	100
Credit Suisse (Schweiz) AG	Zurich, Switzerland	CHF	100.0	100
Credit Suisse (Singapore) Limited	Singapore, Singapore	SGD	743.3	100
Credit Suisse (UK) Limited	London, United Kingdom	GBP	245.2	100
Credit Suisse (USA), Inc.	Wilmington, United States	USD	0.0	100
Credit Suisse Asset Management (UK) Holding Limited	London, United Kingdom	GBP	144.2	100
Credit Suisse Asset Management Immobilien Kapitalanlagegesellschaft mbH	Frankfurt, Germany	EUR	6.1	100
Credit Suisse Asset Management International Holding Ltd	Zurich, Switzerland	CHF	20.0	100
Credit Suisse Asset Management Investments Ltd	Zurich, Switzerland	CHF	0.1	100

Credit Suisse Asset Management Limited	London, United Kingdom	GBP	45.0	100
Credit Suisse Asset Management, LLC	Wilmington, United States	USD	1,086.8	100
Credit Suisse Atlas I Investments (Luxembourg) S.à.r.l.	Luxembourg, Luxembourg	USD	0.0	100
Credit Suisse Brazil (Bahamas) Limited	Nassau, Bahamas	USD	70.0	100
Credit Suisse Business Analytics (India) Private Limited	Mumbai, India	INR	40.0	100
Credit Suisse Capital LLC	Wilmington, United States	USD	937.6	100
Credit Suisse Energy LLC	Wilmington, United States	USD	0.0	100
Credit Suisse Equities (Australia) Limited	Sydney, Australia	AUD	62.5	100
Credit Suisse Finance (India) Private Limited	Mumbai, India	INR	1,050.1	100
Credit Suisse First Boston (Latam Holdings) LLC	George Town, Cayman Islands	USD	23.8	100
Credit Suisse First Boston Finance B.V.	Amsterdam, The Netherlands	EUR	0.0	100

Significant subsidiaries (continued)

Company name	Domicile	Currency	Nominal capital in million	Equity interest in %
Credit Suisse First Boston Mortgage Capital LLC	Wilmington, United States	USD	356.6	100
Credit Suisse First Boston Next Fund, Inc.	Wilmington, United States	USD	10.0	100
Credit Suisse Fund Management S.A.	Luxembourg, Luxembourg	CHF	0.3	100
Credit Suisse Fund Services (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	1.5	100
Credit Suisse Funds AG	Zurich, Switzerland	CHF	7.0	100
Credit Suisse Group Finance (U.S.) Inc.	Wilmington, United States	USD	100.0	100
Credit Suisse Hedging-Griffo Corretora de Valores S.A.	São Paulo, Brazil	BRL	29.6	100
Credit Suisse Holding Europe (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	32.6	100
Credit Suisse Holdings (Australia) Limited	Sydney, Australia	AUD	3.0	100
Credit Suisse Holdings (USA), Inc.	Wilmington, United States	USD	550.0	100
Credit Suisse International	London, United Kingdom	USD	12,366.1	100[1]
Credit Suisse InvestLab AG	Zurich, Switzerland	CHF	1.0	100
Credit Suisse Istanbul Menkul Degerler A.S.	Istanbul, Turkey	TRY	6.8	100
Credit Suisse Leasing 92A, L.P.	Wilmington, United States	USD	43.9	100
Credit Suisse Life & Pensions AG	Vaduz, Liechtenstein	CHF	15.0	100
Credit Suisse Life (Bermuda) Ltd.	Hamilton, Bermuda	USD	1.0	100
Credit Suisse Loan Funding LLC	Wilmington, United States	USD	0.0	100
Credit Suisse Management LLC	Wilmington, United States	USD	896.4	100
Credit Suisse Prime Securities Services (USA) LLC	Wilmington, United States	USD	263.3	100
Credit Suisse Private Equity, LLC	Wilmington, United States	USD	42.2	100
Credit Suisse PSL GmbH	Zurich, Switzerland	CHF	0.0	100
Credit Suisse Saudi Arabia	Riyadh, Saudi Arabia	SAR	625.0	100
Credit Suisse Securities (Canada), Inc.	Toronto, Canada	CAD	3.4	100
Credit Suisse Securities (Europe) Limited	London, United Kingdom	USD	3,859.3	100
Credit Suisse Securities (Hong Kong) Limited	Hong Kong, China	HKD	2,080.9	100
Credit Suisse Securities (India) Private Limited	Mumbai, India	INR	2,214.7	100
Credit Suisse Securities (Japan) Limited	Tokyo, Japan	JPY	78,100.0	100
Credit Suisse Securities (Johannesburg) Proprietary Limited	Johannesburg, South Africa	ZAR	0.0	100
Credit Suisse Securities (Malaysia) Sdn. Bhd.	Kuala Lumpur, Malaysia	MYR	100.0	100
Credit Suisse Securities (Moscow)	Moscow, Russia	RUB	97.1	100
Credit Suisse Securities (Singapore) Pte Limited	Singapore, Singapore	SGD	30.0	100
Credit Suisse Securities (Thailand) Limited	Bangkok, Thailand	THB	500.0	100
Credit Suisse Securities (USA) LLC	Wilmington, United States	USD	1,131.7	100
Credit Suisse Services (India) Private Limited	Pune, India	INR	0.1	100
Credit Suisse Services (USA) LLC	Wilmington, United States	USD	0.0	100
CS Non-Traditional Products Ltd.	Nassau, Bahamas	USD	0.1	100
CSAM Americas Holding Corp.	Wilmington, United States	USD	0.0	100
DLJ Merchant Banking Funding, Inc	Wilmington, United States	USD	0.0	100
DLJ Mortgage Capital, Inc.	Wilmington, United States	USD	0.0	100
Fides Treasury Services AG	Zurich, Switzerland	CHF	2.0	100
JSC "Bank Credit Suisse (Moscow)"	Moscow, Russia	USD	37.8	100
Lime Residential Ltd	Nassau, Bahamas	USD	100.0	100
Merban Equity AG	Zug, Switzerland	CHF	0.1	100
Merchant Holding, LLC	Wilmington, United States	USD	0.0	100
Neue Aargauer Bank AG	Aarau, Switzerland	CHF	134.1	100

Solar Investco II Ltd.	George Town, Cayman Islands	USD	0.0	100
SPS Holding Corporation	Wilmington, United States	USD	0.0	100
SVC - AG für KMU Risikokapital	Zurich, Switzerland	CHF	15.0	100
PT Credit Suisse Sekuritas Indonesia	Jakarta, Indonesia	IDR	235,000.0	99
Credit Suisse Hypotheken AG	Zurich, Switzerland	CHF	0.1	98

1
98% of voting rights and 98% of equity interest held by Credit Suisse AG.

Significant equity method investments

Company name	Domicile	Equity interest in %
Credit Suisse Group AG		
Credit Suisse Group Finance (Guernsey) Limited	St. Peter Port, Guernsey	100[1]
Credit Suisse Group Funding (Guernsey) Limited	St. Peter Port, Guernsey	100[1]
SECB Swiss Euro Clearing Bank GmbH [2]	Frankfurt, Germany	25
Credit Suisse AG		
Swisscard AECS GmbH	Horgen, Switzerland	50
Credit Suisse Founder Securities Limited	Beijing, China	33
E.L. & C. Baillieu Stockbroking (Holdings) Pty Ltd	Melbourne, Australia	23
ICBC Credit Suisse Asset Management Co., Ltd.	Beijing, China	20
York Capital Management Global Advisors, LLC	New York, United States	5[3]
Holding Verde Empreendimentos e Participações S.A.	São Paulo, Brazil	0[3]

1
Deconsolidated under US GAAP as the Group is not the primary beneficiary.
2
Sold on January 31, 2019.
3
The Group holds a significant noncontrolling interest.

41 Subsidiary guarantee information

Certain wholly owned finance subsidiaries of the Group, including Credit Suisse Group Funding (Guernsey) Limited, which is a Guernsey incorporated non-cellular company limited by shares, have issued securities fully and unconditionally guaranteed by the Group. There are various legal and regulatory requirements, including the satisfaction of a solvency test under Guernsey law for the Guernsey subsidiary, applicable to some of the Group's subsidiaries that may limit their ability to pay dividends or distributions and make loans and advances to the Group. The Group and the Bank have issued full, unconditional and several guarantees of Credit Suisse (USA), Inc.'s outstanding SEC-registered debt securities. In accordance with the guarantees, if Credit Suisse (USA), Inc. fails to make any timely payment under the agreements governing such debt securities, the holders of the debt securities may demand payment from either the Group or the Bank, without first proceeding against Credit Suisse (USA), Inc. The guarantee from the Group is subordinated to senior liabilities. Credit Suisse (USA), Inc. is an indirect, wholly owned subsidiary of the Group.

Condensed consolidating statements of operations

in 2018	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Condensed consolidating statements of operations (CHF million)						
Interest and dividend income	4,086	15,537	19,623	932	(942)	19,613
Interest expense	(4,210)	(8,288)	(12,498)	(983)	877	(12,604)
Net interest income	(124)	7,249	7,125	(51)	(65)	7,009
Commissions and fees	3,725	8,017	11,742	26	122	11,890
Trading revenues	474	(18)	456	88	80	624
Other revenues	2,006	(509)	1,497	2,020[2]	(2,120)	1,397
Net revenues	**6,081**	**14,739**	**20,820**	**2,083**	**(1,983)**	**20,920**
Provision for credit losses	**(1)**	**246**	**245**	**0**	**0**	**245**
Compensation and benefits	2,653	6,211	8,864	58	698	9,620
General and administrative expenses	1,944	5,124	7,068	0	(1,270)	5,798
Commission expenses	229	1,030	1,259	0	0	1,259
Restructuring expenses	237	291	528	0	98	626
Total other operating expenses	2,410	6,445	8,855	0	(1,172)	7,683
Total operating expenses	**5,063**	**12,656**	**17,719**	**58**	**(474)**	**17,303**
Income/(loss) before taxes	**1,019**	**1,837**	**2,856**	**2,025**	**(1,509)**	**3,372**
Income tax expense	261	873	1,134	1	226	1,361
Net income/(loss)	**758**	**964**	**1,722**	**2,024**	**(1,735)**	**2,011**
Net income/(loss) attributable to noncontrolling interests	6	(13)	(7)	0	(6)	(13)
Net income/(loss) attributable to shareholders	**752**	**977**	**1,729**	**2,024**	**(1,729)**	**2,024**

1
Includes eliminations and consolidation adjustments.

2
Primarily consists of revenues from investments in Group companies accounted for under the equity method.

Condensed consolidating statements of comprehensive income

in 2018	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Comprehensive income (CHF million)						
Net income/(loss)	758	964	1,722	2,024	(1,735)	2,011
Gains/(losses) on cash flow hedges	0	(7)	(7)	(3)	0	(10)
Foreign currency translation	142	(463)	(321)	(11)	7	(325)
Unrealized gains/(losses) on securities	0	(18)	(18)	0	1	(17)
Actuarial gains/(losses)	22	9	31	0	(422)	(391)
Net prior service credit/(cost)	0	(10)	(10)	0	(125)	(135)
Gains/(losses) on liabilities related to credit risk	28	1,414	1,442	83	129	1,654

Other comprehensive income/(loss), net of tax	192	925	1,117	69	(410)	776
Comprehensive income/(loss)	**950**	**1,889**	**2,839**	**2,093**	**(2,145)**	**2,787**
Comprehensive income/(loss) attributable to noncontrolling interests	6	(9)	(3)	0	(12)	(15)
Comprehensive income/(loss) attributable to shareholders	**944**	**1,898**	**2,842**	**2,093**	**(2,133)**	**2,802**

1 Includes eliminations and consolidation adjustments.

Condensed consolidating statements of operations (continued)

in 2017	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Condensed consolidating statements of operations (CHF million)						
Interest and dividend income	5,294	11,767	17,061	577	(581)	17,057
Interest expense	(4,437)	(5,932)	(10,369)	(632)	501	(10,500)
Net interest income	857	5,835	6,692	(55)	(80)	6,557
Commissions and fees	3,756	7,916	11,672	28	117	11,817
Trading revenues	(23)	1,323	1,300	(55)	72	1,317
Other revenues	942	359	1,301	(911)[2]	819	1,209
Net revenues	**5,532**	**15,433**	**20,965**	**(993)**	**928**	**20,900**
Provision for credit losses	**4**	**206**	**210**	**0**	**0**	**210**
Compensation and benefits	3,066	6,898	9,964	74	329	10,367
General and administrative expenses	1,929	5,484	7,413	(80)	(688)	6,645
Commission expenses	255	1,174	1,429	3	(2)	1,430
Restructuring expenses	173	223	396	0	59	455
Total other operating expenses	2,357	6,881	9,238	(77)	(631)	8,530
Total operating expenses	**5,423**	**13,779**	**19,202**	**(3)**	**(302)**	**18,897**
Income/(loss) before taxes	**105**	**1,448**	**1,553**	**(990)**	**1,230**	**1,793**
Income tax expense/(benefit)	(42)	2,823	2,781	(7)	(33)	2,741
Net income/(loss)	**147**	**(1,375)**	**(1,228)**	**(983)**	**1,263**	**(948)**
Net income attributable to noncontrolling interests	11	16	27	0	8	35
Net income/(loss) attributable to shareholders	**136**	**(1,391)**	**(1,255)**	**(983)**	**1,255**	**(983)**

1
Includes eliminations and consolidation adjustments.

2
Primarily consists of revenues from investments in Group companies accounted for under the equity method.

Condensed consolidating statements of comprehensive income (continued)

in 2017	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Comprehensive income (CHF million)						
Net income/(loss)	147	(1,375)	(1,228)	(983)	1,263	(948)
Gains/(losses) on cash flow hedges	0	(35)	(35)	8	0	(27)
Foreign currency translation	(756)	(259)	(1,015)	1	(17)	(1,031)
Unrealized gains/(losses) on securities	0	(13)	(13)	0	0	(13)
Actuarial gains/(losses)	(7)	28	21	0	674	695
Net prior service credit/(cost)	0	0	0	0	(121)	(121)
Gains/(losses) on liabilities related to credit risk	(33)	(1,651)	(1,684)	(188)	(104)	(1,976)

Other comprehensive income/(loss), net of tax	(796)	(1,930)	(2,726)	(179)	432	(2,473)
Comprehensive income/(loss)	**(649)**	**(3,305)**	**(3,954)**	**(1,162)**	**1,695**	**(3,421)**
Comprehensive income/(loss) attributable to noncontrolling interests	24	(33)	(9)	0	37	28
Comprehensive income/(loss) attributable to shareholders	**(673)**	**(3,272)**	**(3,945)**	**(1,162)**	**1,658**	**(3,449)**

1 Includes eliminations and consolidation adjustments.

Condensed consolidating statements of operations (continued)

in 2016	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Condensed consolidating statements of operations (CHF million)						
Interest and dividend income	5,697	11,678	17,375	284	(285)	17,374
Interest expense	(3,750)	(6,031)	(9,781)	(338)	307	(9,812)
Net interest income	1,947	5,647	7,594	(54)	22	7,562
Commissions and fees	3,582	7,356	10,938	27	127	11,092
Trading revenues	(1,192)	1,563	371	(21)	(37)	313
Other revenues	830	660	1,490	(2,684)[2]	2,550	1,356
Net revenues	**5,167**	**15,226**	**20,393**	**(2,732)**	**2,662**	**20,323**
Provision for credit losses	**(5)**	**257**	**252**	**0**	**0**	**252**
Compensation and benefits	3,235	7,542	10,777	57	(182)	10,652
General and administrative expenses	4,474	5,411	9,885	(88)	(107)	9,690
Commission expenses	259	1,196	1,455	1	(1)	1,455
Restructuring expenses	209	304	513	0	27	540
Total other operating expenses	4,942	6,911	11,853	(87)	(81)	11,685
Total operating expenses	**8,177**	**14,453**	**22,630**	**(30)**	**(263)**	**22,337**
Income/(loss) before taxes	**(3,005)**	**516**	**(2,489)**	**(2,702)**	**2,925**	**(2,266)**
Income tax expense/(benefit)	(228)	628	400	8	33	441
Net income/(loss)	**(2,777)**	**(112)**	**(2,889)**	**(2,710)**	**2,892**	**(2,707)**
Net income/(loss) attributable to noncontrolling interests	157	(163)	(6)	0	9	3
Net income/(loss) attributable to shareholders	**(2,934)**	**51**	**(2,883)**	**(2,710)**	**2,883**	**(2,710)**

1
Includes eliminations and consolidation adjustments.

2
Primarily consists of revenues from investments in Group companies accounted for under the equity method.

Condensed consolidating statements of comprehensive income (continued)

in 2016	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Comprehensive income (CHF million)						
Net income/(loss)	(2,777)	(112)	(2,889)	(2,710)	2,892	(2,707)
Gains/(losses) on cash flow hedges	0	(22)	(22)	2	0	(20)
Foreign currency translation	604	(106)	498	7	10	515
Unrealized gains/(losses) on securities	0	1	1	0	0	1
Actuarial gains/(losses)	49	161	210	0	184	394
Net prior service credit/(cost)	0	0	0	0	36	36
	(64)	(1,018)	(1,082)	67	(28)	(1,043)

Gains/(losses) on liabilities related to credit risk						
Other comprehensive income/(loss), net of tax	589	(984)	(395)	76	202	(117)
Comprehensive income/(loss)	**(2,188)**	**(1,096)**	**(3,284)**	**(2,634)**	**3,094**	**(2,824)**
Comprehensive income/(loss) attributable to noncontrolling interests	151	(140)	11	0	(13)	(2)
Comprehensive income/(loss) attributable to shareholders	**(2,339)**	**(956)**	**(3,295)**	**(2,634)**	**3,107**	**(2,822)**

1 Includes eliminations and consolidation adjustments.

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Condensed consolidating balance sheets

end of 2018	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Assets (CHF million)						
Cash and due from banks	2,540	96,774	99,314	324	409	100,047
Interest-bearing deposits with banks	22	1,052	1,074	498	(430)	1,142
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	35,640	81,455	117,095	0	0	117,095
Securities received as collateral	4,751	36,945	41,696	0	0	41,696
Trading assets	28,034	104,393	132,427	0	(224)	132,203
Investment securities	1,307	1,602	2,909	23,456	(23,454)	2,911
Other investments	826	3,998	4,824	48,030	(47,964)	4,890
Net loans	12,263	280,612	292,875	0	(5,294)	287,581
Premises and equipment	1,072	3,458	4,530	0	308	4,838
Goodwill	727	3,329	4,056	0	710	4,766
Other intangible assets	200	19	219	0	0	219
Brokerage receivables	20,772	18,135	38,907	0	0	38,907
Other assets	11,895	20,248	32,143	547	(69)	32,621
Total assets	**120,049**	**652,020**	**772,069**	**72,855**	**(76,008)**	**768,916**
Liabilities and equity (CHF million)						
Due to banks	59	15,161	15,220	1,364	(1,364)	15,220
Customer deposits	0	365,263	365,263	0	(1,338)	363,925
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	6,296	18,327	24,623	0	0	24,623
Obligation to return securities received as collateral	4,751	36,945	41,696	0	0	41,696
Trading liabilities	8,693	33,478	42,171	0	(2)	42,169
Short-term borrowings	9,679	12,740	22,419	0	(493)	21,926
Long-term debt	47,074	106,359	153,433	27,112	(26,237)	154,308
Brokerage payables	17,452	13,471	30,923	0	0	30,923
Other liabilities	9,995	20,332	30,327	457	(677)	30,107
Total liabilities	**103,999**	**622,076**	**726,075**	**28,933**	**(30,111)**	**724,897**
Total shareholders' equity	**15,971**	**29,325**	**45,296**	**43,922**	**(45,296)**	**43,922**
Noncontrolling interests	79	619	698	0	(601)	97
Total equity	**16,050**	**29,944**	**45,994**	**43,922**	**(45,897)**	**44,019**
Total liabilities and equity	**120,049**	**652,020**	**772,069**	**72,855**	**(76,008)**	**768,916**

1 Includes eliminations and consolidation adjustments.

Condensed consolidating balance sheets (continued)

end of 2017	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Assets (CHF million)						
Cash and due from banks	3,058	106,452	109,510	516	(211)	109,815
Interest-bearing deposits with banks	32	689	721	493	(488)	726
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	58,212	57,134	115,346	0	0	115,346
Securities received as collateral	5,422	32,652	38,074	0	0	38,074
Trading assets	24,602	132,172	156,774	0	(440)	156,334
Investment securities	245	1,944	2,189	15,612	(15,610)	2,191
Other investments	902	4,991	5,893	45,517	(45,446)	5,964
Net loans	12,456	270,781	283,237	0	(4,088)	279,149
Premises and equipment	1,001	3,444	4,445	0	241	4,686
Goodwill	722	3,314	4,036	0	706	4,742
Other intangible assets	195	28	223	0	0	223
Brokerage receivables	19,717	27,251	46,968	0	0	46,968
Other assets	11,217	19,739	30,956	389	726	32,071
Total assets	**137,781**	**660,591**	**798,372**	**62,527**	**(64,610)**	**796,289**
Liabilities and equity (CHF million)						
Due to banks	270	15,141	15,411	755	(753)	15,413
Customer deposits	1	362,302	362,303	0	(1,141)	361,162
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	15,352	11,144	26,496	0	0	26,496
Obligation to return securities received as collateral	5,422	32,652	38,074	0	0	38,074
Trading liabilities	6,549	32,583	39,132	0	(13)	39,119
Short-term borrowings	12,224	14,154	26,378	0	(489)	25,889
Long-term debt	50,396	121,646	172,042	19,357	(18,367)	173,032
Brokerage payables	21,585	21,718	43,303	0	0	43,303
Other liabilities	10,454	21,229	31,683	513	(584)	31,612
Total liabilities	**122,253**	**632,569**	**754,822**	**20,625**	**(21,347)**	**754,100**
Total shareholders' equity	**15,409**	**27,261**	**42,670**	**41,902**	**(42,670)**	**41,902**
Noncontrolling interests	119	761	880	0	(593)	287
Total equity	**15,528**	**28,022**	**43,550**	**41,902**	**(43,263)**	**42,189**
Total liabilities and equity	**137,781**	**660,591**	**798,372**	**62,527**	**(64,610)**	**796,289**

1 Includes eliminations and consolidation adjustments.

Condensed consolidating statements of cash flows

in 2018	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Operating activities (CHF million)						
Net cash provided by/(used in) operating activities	**(8,424)**	**20,835**	**12,411**	**(215)**[2]	**564**	**12,760**
Investing activities (CHF million)						
(Increase)/decrease in interest-bearing deposits with banks	11	(375)	(364)	(5)	(58)	(427)
(Increase)/decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	22,936	(24,308)	(1,372)	0	0	(1,372)
Purchase of investment securities	0	(683)	(683)	(8,793)	8,793	(683)
Proceeds from sale of investment securities	0	255	255	0	0	255
Maturities of investment securities	278	575	853	290	(290)	853
Investments in subsidiaries and other investments	(99)	(447)	(546)	(10)	9	(547)
Proceeds from sale of other investments	540	1,230	1,770	4	(2)	1,772
(Increase)/decrease in loans	310	(14,011)	(13,701)	0	1,201	(12,500)
Proceeds from sales of loans	0	5,981	5,981	0	(1)	5,980
Capital expenditures for premises and equipment and other intangible assets	(307)	(682)	(989)	0	(106)	(1,095)
Proceeds from sale of premises and equipment and other intangible assets	0	80	80	0	(50)	30
Other, net	5	337	342	0	0	342
Net cash provided by/(used in) investing activities	**23,674**	**(32,048)**	**(8,374)**	**(8,514)**	**9,496**	**(7,392)**
Financing activities (CHF million)						
Increase/(decrease) in due to banks and customer deposits	(213)	2,219	2,006	609	(807)	1,808
Increase/(decrease) in short-term borrowings	(1,298)	(1,687)	(2,985)	0	(5)	(2,990)
Increase/(decrease) in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(9,127)	7,075	(2,052)	0	0	(2,052)

Issuances of long-term debt	119,547	(86,239)	33,308	8,805	(8,941)	33,172
Repayments of long-term debt	(124,405)	80,547	(43,858)	(290)	297	(43,851)
Sale of treasury shares	0	0	0	0	11,693	11,693
Repurchase of treasury shares	0	0	0	(757)	(11,684)	(12,441)
Dividends paid	(2)	(13)	(15)	(661)	10	(666)
Other, net	(300)	(357)	(657)	829	9	181
Net cash provided by/(used in) financing activities	**(15,798)**	**1,545**	**(14,253)**	**8,535**	**(9,428)**	**(15,146)**
Effect of exchange rate changes on cash and due from banks (CHF million)						
Effect of exchange rate changes on cash and due from banks	**30**	**(10)**	**20**	**2**	**(12)**	**10**
Net increase/(decrease) in cash and due from banks (CHF million)						
Net increase/(decrease) in cash and due from banks	**(518)**	**(9,678)**	**(10,196)**	**(192)**	**620**	**(9,768)**
Cash and due from banks at beginning of period [3]	3,058	106,452	109,510	516	(211)	109,815
Cash and due from banks at end of period [3]	**2,540**	**96,774**	**99,314**	**324**	**409**	**100,047**

1
Includes eliminations and consolidation adjustments.
2
Consists of dividend payments from Group companies of CHF 10 million and CHF 6 million from bank and non-bank subsidiaries, respectively, and other cash items from parent company operations such as Group financing.
3
Includes restricted cash.
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Condensed consolidating statements of cash flows (continued)

in 2017	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Operating activities (CHF million)						
Net cash provided by/(used in) operating activities	**7,840**	**(16,330)**	**(8,490)**	**(142)**[2]	**90**	**(8,542)**
Investing activities (CHF million)						
(Increase)/decrease in interest-bearing deposits with banks	0	40	40	(488)	488	40
(Increase)/decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	20,626	(6,340)	14,286	0	0	14,286
Purchase of investment securities	0	(86)	(86)	(5,673)	5,673	(86)
Proceeds from sale of investment securities	0	14	14	0	0	14
Maturities of investment securities	104	318	422	0	0	422
Investments in subsidiaries and other investments	(206)	(888)	(1,094)	(4,101)	4,101	(1,094)
Proceeds from sale of other investments	488	1,479	1,967	0	3	1,970
(Increase)/decrease in loans	3,131	(17,910)	(14,779)	(5,336)	6,441	(13,674)
Proceeds from sales of loans	0	9,938	9,938	0	0	9,938
Capital expenditures for premises and equipment and other intangible assets	(295)	(655)	(950)	0	(118)	(1,068)
Proceeds from sale of premises and equipment and other intangible assets	2	58	60	0	(59)	1
Other, net	41	24	65	0	0	65
Net cash provided by/(used in) investing activities	**23,891**	**(14,008)**	**9,883**	**(15,598)**	**16,529**	**10,814**
Financing activities (CHF million)						
Increase/(decrease) in due to banks and customer deposits	191	2,996	3,187	(2,189)	2,425	3,423
Increase/(decrease) in short-term borrowings	(4,113)	9,620	5,507	0	(489)	5,018
Increase/(decrease) in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(37,382)	32,131	(5,251)	0	0	(5,251)

Issuances of long-term debt	30,223	13,344	43,567	14,035	(14,046)	43,556
Repayments of long-term debt	(19,174)	(43,470)	(62,644)	0	90	(62,554)
Issuances of common shares	0	0	0	4,253	0	4,253
Sale of treasury shares	0	0	0	0	12,034	12,034
Repurchase of treasury shares	0	0	0	(630)	(12,127)	(12,757)
Dividends paid	(9)	(4)	(13)	(584)	7	(590)
Other, net	(780)	4,315	3,535	433	(3,891)	77
Net cash provided by/(used in) financing activities	**(31,044)**	**18,932**	**(12,112)**	**15,318**	**(15,997)**	**(12,791)**
Effect of exchange rate changes on cash and due from banks (CHF million)						
Effect of exchange rate changes on cash and due from banks	**(120)**	**(717)**	**(837)**	**0**	**10**	**(827)**
Net increase/(decrease) in cash and due from banks (CHF million)						
Net increase/(decrease) in cash and due from banks	**567**	**(12,123)**	**(11,556)**	**(422)**	**632**	**(11,346)**
Cash and due from banks at beginning of period [3]	2,491	118,575	121,066	938	(843)	121,161
Cash and due from banks at end of period [3]	**3,058**	**106,452**	**109,510**	**516**	**(211)**	**109,815**

1
Includes eliminations and consolidation adjustments.
2
Consists of dividend payments from Group companies of CHF 10 million and CHF 14 million from bank and non-bank subsidiaries, respectively, and other cash items from parent company operations such as Group financing.
3
Includes restricted cash.
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Condensed consolidating statements of cash flows (continued)

in 2016	Credit Suisse (USA), Inc. consolidated	Bank parent company and other subsidiaries[1]	Bank	Group parent company	Eliminations and consolidation adjustments	Credit Suisse Group
Operating activities (CHF million)						
Net cash provided by/(used in) operating activities	**9,618**	**17,390**	**27,008**	**(22)**[2]	**(211)**	**26,775**
Investing activities (CHF million)						
(Increase)/decrease in interest-bearing deposits with banks	(3,320)	3,437	117	0	0	117
(Increase)/decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	18,365	(25,421)	(7,056)	0	0	(7,056)
Purchase of investment securities	0	(88)	(88)	0	0	(88)
Proceeds from sale of investment securities	0	14	14	0	0	14
Maturities of investment securities	199	164	363	0	0	363
Investments in subsidiaries and other investments	(355)	(1,002)	(1,357)	(710)	664	(1,403)
Proceeds from sale of other investments	2,067	(374)	1,693	0	44	1,737
(Increase)/decrease in loans	3,038	(7,259)	(4,221)	15	461	(3,745)
Proceeds from sales of loans	0	2,468	2,468	0	0	2,468
Capital expenditures for premises and equipment and other intangible assets	(329)	(835)	(1,164)	0	0	(1,164)
Proceeds from sale of premises and equipment and other intangible assets	50	5	55	0	0	55
Other, net	27	723	750	0	(1)	749
Net cash provided by/(used in) investing activities	**19,742**	**(28,168)**	**(8,426)**	**(695)**	**1,168**	**(7,953)**
Financing activities (CHF million)						
Increase/(decrease) in due to banks and customer deposits	20	10,217	10,237	792	(762)	10,267
Increase/(decrease) in short-term borrowings	(5,781)	12,375	6,594	(300)	300	6,594
Increase/(decrease) in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(23,838)	9,313	(14,525)	0	0	(14,525)

Issuances of long-term debt	1	52,943	52,944	0	40	52,984
Repayments of long-term debt	(2,993)	(44,139)	(47,132)	0	0	(47,132)
Issuances of common shares	0	0	0	725	0	725
Sale of treasury shares	0	0	0	323	15,844	16,167
Repurchase of treasury shares	0	0	0	(455)	(15,742)	(16,197)
Dividends paid	(1)	(144)	(145)	(493)	145	(493)
Other, net	(143)	1,187	1,044	93	(760)	377
Net cash provided by/(used in) financing activities	**(32,735)**	**41,752**	**9,017**	**685**	**(935)**	**8,767**
Effect of exchange rate changes on cash and due from banks (CHF million)						
Effect of exchange rate changes on cash and due from banks	**67**	**1,146**	**1,213**	**28**	**3**	**1,244**
Net increase/(decrease) in cash and due from banks (CHF million)						
Net increase/(decrease) in cash and due from banks	**(3,308)**	**32,120**	**28,812**	**(4)**	**25**	**28,833**
Cash and due from banks at beginning of period [3]	5,799	86,455	92,254	942	(868)	92,328
Cash and due from banks at end of period [3]	**2,491**	**118,575**	**121,066**	**938**	**(843)**	**121,161**

1
Includes eliminations and consolidation adjustments.
2
Consists of dividend payments from Group companies of CHF 145 million and CHF 41 million from bank and non-bank subsidiaries, respectively, and other cash items from parent company operations such as Group financing.
3
Includes restricted cash.

42 Credit Suisse Group parent company

> Refer to “Note 41 – Subsidiary guarantee information” for the condensed Credit Suisse Group parent company financial information.

43 Significant valuation and income recognition differences between US GAAP and Swiss GAAP banking law (true and fair view)

The Group's consolidated financial statements have been prepared in accordance with US GAAP.

FINMA requires Swiss-domiciled banks which present their financial statements under either US GAAP or International Financial Reporting Standards (IFRS) to provide a narrative explanation of the major differences between Swiss GAAP banking law (true and fair view) and its primary accounting standard.

The principal provisions of the Swiss Ordinance on Banks and Savings Banks (Banking Ordinance) and the FINMA Circular 2015/1, "Accounting – banks", governing financial reporting for banks (Swiss GAAP) differ in certain aspects from US GAAP. The following are the major differences:

> Refer to "Note 1 – Summary of significant accounting policies" for a detailed description of the Group's accounting policies.

Scope of consolidation

Under Swiss GAAP, majority-owned subsidiaries that are not considered long-term investments or do not operate in the core business of the Group are either accounted for as financial investments or as equity method investments. US GAAP has no such exception relating to the consolidation of majority-owned subsidiaries.

Foreign currency translations

Under US GAAP, foreign currency translation adjustments resulting from the consolidation of branches with functional currencies other than the Swiss franc are included in AOCI in shareholders' equity. Under Swiss GAAP, foreign currency translation adjustments from the consolidation of foreign branches are recognized in net income/(loss) from trading activities and fair value option.

Under US GAAP, foreign currency measurement adjustments for available-for-sale securities are reported in AOCI, which is part of total shareholder's equity, whereas for Swiss GAAP statutory purposes they are included in the statements of income.

Investments in securities

Under Swiss GAAP, classification and measurement of investments in securities depends on the nature of the investment.

Non-consolidated participations

Under US GAAP, investments in equity securities where a company has the ability to significantly influence the operating and financial policies of an investee are accounted for under the equity method of accounting or the fair value option. Under the equity method of accounting, a company's share of the profit or loss as well as any impairment on the participation are reported in other revenues.

Under Swiss GAAP, investments in equity securities which are held with the intention of a permanent investment or which are investments in financial industry infrastructure are included in participations irrespective of the percentage ownership of voting shares held. Other participating interests are initially recognized at historical cost and tested for impairment at least annually. The fair value option is not allowed for participations.

For the purpose of testing a company's participating interests for impairment, the portfolio method is applied. Impairment is recorded if the carrying value of a portfolio of participating interests exceeds its fair value. Should the fair value of the portfolio recover subsequently after an impairment and such recovery is considered sustainable, the impairment from prior periods can be reversed up to fair value but not exceeding the historical cost basis. A reversal of the impairment is recorded as extraordinary income in the statements of income.

Available-for-sale debt securities

Under US GAAP, available-for-sale debt securities are valued at fair value. Unrealized gains and losses due to fluctuations in fair value (including foreign exchange) are not recorded in the consolidated statements of operations but included net of tax in AOCI, which is part of total shareholders' equity. Declines in fair value below cost deemed to be other-than-temporary are recognized as impairments in the consolidated statements of operations, except for amounts relating to factors other than credit loss on debt securities with no intent or requirement to sell that continue to be included in AOCI. The new cost basis will not be changed for subsequent recoveries in fair value.

Under Swiss GAAP, available-for-sale securities are accounted for at the lower of amortized cost or market with valuation reductions and recoveries due to market fluctuations recorded in other ordinary expenses and income, respectively. Foreign exchange gains and losses are recognized in net income/(loss) from trading activities and fair value option.

Non-marketable equity securities

Under US GAAP, equity securities which do not have a readily determinable fair value are measured in accordance with the NAV practical expedient by using the measurement alternative or at fair value.

Under Swiss GAAP, non-marketable equity securities are carried at the lower of cost or market.

Impairments on held-to-maturity securities

Under US GAAP, declines in fair value of held-to-maturity securities below cost deemed to be other-than-temporary are recognized as impairments in the consolidated statements of operations except for amounts relating to factors other than credit loss on debt securities held with no intent or requirement to sell that are included in AOCI. The impairment cannot be reversed in future periods.

Under Swiss GAAP, all impairments are recognized in the consolidated statements of income. Impairments recognized on held-to-maturity securities are reversed up to the amortized cost if the fair value of the instrument subsequently recovers. A reversal is recorded in the consolidated statements of income.

Fair value option

Unlike US GAAP, Swiss GAAP generally does not allow the fair value option concept that creates an optional alternative measurement treatment for certain non-trading financial assets and liabilities, guarantees and commitments. The fair value option permits the use of fair value for initial and subsequent measurement with changes in fair value recorded in the consolidated statements of operations.

For issued structured products that meet certain conditions, fair value measurement can be applied. The related changes in fair value of both the embedded derivative and the host contract are recorded in trading revenues, except for fair value adjustments relating to own credit that cannot be recognized in the consolidated statements of income. Impacts of changes in own credit spreads are recognized in the compensation accounts which are either recorded in other assets or other liabilities.

Derivative financial instruments used for fair value hedging

Under US GAAP, the full amount of unrealized gains or losses on derivatives classified as hedging instruments and the corresponding losses or gains on the hedged items are recognized in income. Hedging ineffectiveness is recorded in trading income.

Under Swiss GAAP, the carrying value of hedged items is not adjusted. The amount representing the change in fair value of the hedged item due to the risk being hedged is recorded in the compensation account included in other assets or other liabilities. Hedging ineffectiveness is recorded in net income/(loss) from trading activities and fair value option.

Derivative financial instruments used for cash flow hedging

Under US GAAP, the effective portion of a cash flow hedge is reported in AOCI.

Under Swiss GAAP, the effective portion of a cash flow hedge is recorded in the compensation account included in other assets or other liabilities.

Derecognition of financial instruments

Under US GAAP, financial instruments are only derecognized if the transaction meets the following criteria: (i) the financial asset has been legally isolated from the transferor, (ii) the transferee has the right to repledge or resell the transferred asset, and (iii) the transferor does not maintain effective control over the transferred asset.

Under Swiss GAAP, a financial instrument is derecognized when the economic control has been transferred from the seller to the buyer. A party which has the controlling ability to receive the future returns from the financial instrument and the obligation to absorb the risk of the financial instrument is deemed to have economic control over a financial instrument.

Debt issuance costs

Under US GAAP, debt issuance costs are presented as a direct deduction from the carrying amount of the related debt.

Under Swiss GAAP, debt issuance costs are reported as a balance sheet asset in accrued income and prepaid expenses.

Goodwill amortization

Under US GAAP, goodwill is not amortized but must be tested for impairment annually or more frequently if an event or change in circumstances indicates that the goodwill may be impaired.

Under Swiss GAAP, goodwill is amortized over its useful life, generally not exceeding five years, except for justified cases where a maximum useful life of up to ten years is acceptable. In addition, goodwill is tested at least annually for impairment.

Amortization of intangible assets

Under US GAAP, intangible assets with indefinite lives are not amortized but are tested for impairment annually or more frequently if an event or change in circumstances indicates that the asset may be impaired.

Under Swiss GAAP, intangible assets are amortized over a useful life, up to a maximum of five years, in justified cases up to a maximum of ten years. In addition, these assets are tested at least annually for impairment.

Guarantees

US GAAP requires all guarantees to be initially recognized at fair value. Upon issuance of a guarantee, the guarantor is required to recognize a liability that reflects the initial fair value;

simultaneously, a receivable is recorded to reflect the future guarantee fee income over the entire life of the guarantee. Under Swiss GAAP, only accrued or prepaid guarantee fees are recorded on the balance sheet. No guarantee liability and receivable for future guarantee fees are recorded upon issuance of a guarantee.
Loan origination fees and costs
US GAAP requires the deferral of fees received upfront and direct costs incurred in connection with the origination of loans not held under the fair value option.
Under Swiss GAAP, only upfront payments or fees that are considered interest-related components are deferred (e.g., premiums and discounts). Fees received from the borrower which are considered service-related fees such as commitment fees, structuring fees and arrangement fees are immediately recognized in commission income.
Sale and leaseback transactions
Under US GAAP, gains from the sale of property subject to a sale and leaseback arrangement are deferred and amortized over the leaseback period.
Under Swiss GAAP, gains from the sale of property subject to a sale and leaseback arrangement are only deferred if the provisions of the leaseback contract indicate that the leaseback is a capital lease; if the leaseback contract meets the requirements of an operating lease, such gains are immediately recognized upon sale of the property.
Extraordinary income and expenses
Unlike US GAAP, Swiss GAAP does report certain expenses or revenues as extraordinary if the recorded income or expense is non-operating and non-recurring.
Pensions and post-retirement benefits
Under US GAAP, the liability and related pension expense is determined based on the projected unit credit actuarial calculation of the benefit obligation.
Under Swiss GAAP, the liability and related pension expense is primarily determined based on the pension plan valuation in accordance with Swiss GAAP FER 26. A pension asset is recorded if a statutory overfunding of a pension plan leads to a future economic benefit, and a pension liability is recorded if a statutory underfunding of a pension plan leads to a future economic obligation. Employer contribution reserves must be capitalized if they represent a future economic benefit. A future economic benefit exists if the employer can reduce its future statutory annual contribution to the pension plan by releasing employer contribution reserves. Pension expenses include the required contributions defined by Swiss law, any additional contribution mandated by the pension fund trustees and any change in value of the pension asset or liability between two measurement dates as determined on the basis of the annual year-end pension plan valuation.
Discontinued operations
Under US GAAP, the assets and liabilities of a discontinued operation are separated from the ordinary captions of the consolidated balance sheets and are reported as discontinued operations measured at the lower of the carrying value or fair value less cost to sell. Accordingly, income and expense from discontinued operations are reported in a separate line item of the consolidated statements of operations.
Under Swiss GAAP, these positions remain in their initial balance sheet captions until disposed of and continue to be valued according to the respective captions.
Security collateral received in securities lending transactions
Under US GAAP, security collateral received in securities lending transactions are recorded as assets and a corresponding liability to return the collateral is recognized.
Under Swiss GAAP, security collateral received and the obligation to return collateral of securities lending transactions are not recognized on the balance sheet.
Loan commitments
Under US GAAP, loan commitments include all commitments to extend loans, unfunded commitments under commercial lines of credit, revolving credit lines, credit guarantees in the future and overdraft protection agreements, except for commitments that can be revoked by the Group at any time at the Group’s sole discretion without prior notice.
Under Swiss GAAP, loan commitments include all commitments to extend loans, unfunded commitments under commercial lines of credit, revolving credit lines, credit guarantees in the future and overdraft protection agreements, except for commitments that can be revoked by the Group at any time at the Group’s sole discretion with a notice period not exceeding six weeks.

Controls and procedures

Evaluation of disclosure controls and procedures

The Group has evaluated the effectiveness of the design and operation of its disclosure controls and procedures as of the end of the period covered by this report under the supervision and with the participation of management, including the Group Chief Executive Officer (CEO) and Chief Financial Officer (CFO), pursuant to Rule 13(a)-15(a) under the Securities Exchange Act of 1934 (the Exchange Act). There are inherent limitations to the effectiveness of any system of controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective controls and procedures can only provide reasonable assurance of achieving their control objectives.

The CEO and CFO concluded that, as of December 31, 2018, the design and operation of the Group's disclosure controls and procedures were effective, in all material respects, to ensure that information required to be disclosed in reports filed and submitted under the Exchange Act is recorded, processed, summarized and reported as and when required.

Management report on internal control over financial reporting

The management of the Group is responsible for establishing and maintaining adequate internal control over financial reporting. The Group's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with US GAAP. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

Management has made an evaluation and assessment of the Group's internal control over financial reporting as of December 31, 2018 using the criteria issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in "Internal Control – Integrated Framework".

Based upon its review and evaluation, management, including the Group CEO and CFO, has concluded that the Group's internal control over financial reporting is effective as of December 31, 2018.

The Group's independent auditors, KPMG AG, have issued an unqualified opinion on the effectiveness of the Group's internal control over financial reporting as of December 31, 2018, as stated in their report, which follows.

Changes in internal control over financial reporting

There were no changes in the Group's internal control over financial reporting during the period covered by this report that have materially affected, or are reasonably likely to materially affect, the Group's internal control over financial reporting.

Report of the Independent Registered Public Accounting Firm

Report of the Independent Registered Public Accounting FirmTo the shareholders and Board of DirectorsCredit Suisse Group AG,
Zurich_____Opinion on Internal Control Over Financial ReportingWe have audited Credit Suisse Group AG and subsidiaries' (the "Group") internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Group maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) ("PCAOB"), the consolidated balance sheets of the Group as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows for each of the years in the three year period ended December 31, 2018, and the related notes (collectively, the "consolidated financial statements"), and our report dated March 22, 2019 expressed an unqualified opinion on those consolidated financial statements.Basis for Opinion The Group's Board of Directors and management are responsible for maintaining effective internal control over financial reporting and the Group's management is responsible for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Group's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Group in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.Definition and Limitations of Internal Control Over Financial ReportingA company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.KPMG AGNicholas EdmondsAnthony AnzevinoLicensed Audit ExpertGlobal Lead PartnerAuditor in ChargeZurich, SwitzerlandMarch 22, 2019

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Report of the Statutory Auditor

Report of the Statutory AuditorTo the General Meeting of Credit Suisse Group AG, ZurichReport of the Statutory Auditor on the Financial StatementsAs statutory auditor, we have audited the accompanying financial statements of Credit Suisse Group AG, which comprise the balance sheet, statement of income and notes for the year ended December 31, 2018.Board of Directors' ResponsibilityThe Board of Directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law and Credit Suisse Group AG's articles of association. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.Auditor's ResponsibilityOur responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance whether the financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.OpinionIn our opinion, the financial statements for the year ended December 31, 2018, comply with Swiss law and Credit Suisse Group AG's articles of association.Report on Key Audit Matters based on the circular 1/2015 of the Federal Audit Oversight AuthorityValuation of participationsKey audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.Valuation of participationsKey Audit MatterOur responseCredit Suisse Group AG reports participations of CHF 52.1 billion as of December 31, 2018. The participations portfolio consists of investments in subsidiary entities mainly operating in the banking and finance industry.Participations are valued at acquisition cost less impairment. For the purpose of impairment testing, the portfolio valuation method is applied for economically closely related participations. All other participations are valued individually. The valuation of participations involves judgment in the projections and assumptions used, which are sensitive to the expected future market developments that could affect the profitability of these entities.We assessed and tested the design and implementation of the key controls over financial reporting with respect to the valuation of participations. This included controls over the identification and measurement of impairments, the evaluation of the valuation methodology, key inputs and assumptions used in the determination of the participation value, and management's annual comparison of legal entity plans to past performance.For a sample of participations, we evaluated key assumptions applied in performing the valuation. We used our own valuation specialists to critically examine and challenge the key assumptions applied by benchmarking them against independent data.For further information on the valuation of participations refer to the following:Note 2 Accounting and valuation principles, "Participations"Note 11 ParticipationsReport on Other Legal Requirements We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO and article 11 AOA) and that there are no circumstances incompatible with our independence. In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.We further confirm that the proposed appropriation of available earnings complies with Swiss law and Credit Suisse Group AG's articles of association. We recommend that the financial statements submitted to you be approved.KPMG AGNicholas EdmondsRalph DichtLicensed Audit ExpertLicensed Audit ExpertAuditor in ChargeZurich, SwitzerlandMarch 22, 2019

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Parent company financial statements

Statements of income

in	Note	2018	2017
Statements of income (CHF million)			
Dividend income from participations		19	25
Other financial income	3	1,132	685
Other operating income	4	147	171
Total operating income		**1,298**	**881**
Financial expenses	5	1,172	704
Personnel expenses	6	57	78
Other operating expenses	7	104	116
Amortization, depreciation and impairment losses on noncurrent assets		0	3
Total operating expenses		**1,333**	**901**
Net profit/(loss) before taxes		**(35)**	**(20)**
Direct tax expenses		16	17
Net profit/(loss)		**(51)**	**(37)**

Balance sheets

end of	Note	2018	2017
Assets (CHF million)			
Cash and cash equivalents		822	1,009
Other short-term receivables	8	258	509
Derivative financial instruments		89	211
Accrued income and prepaid expenses	9	482	269
Total current assets		**1,651**	**1,998**
Financial investments	10	23,906	14,915
Participations	11	52,117	52,112
Total noncurrent assets		**76,023**	**67,027**
Total assets		**77,674**	**69,025**
Liabilities and shareholders' equity (CHF million)			
Short-term interest-bearing liabilities	12	1,482	1,345
Other short-term liabilities		6	17
Accrued expenses and deferred income	13	530	323
Total short-term liabilities		**2,018**	**1,685**
Long-term interest-bearing liabilities	14	27,591	18,591
Provisions		311	311
Total long-term liabilities		**27,902**	**18,902**
Total liabilities		**29,920**	**20,587**
Share capital	15	**102**	**102**
Capital contribution reserves		26,321	26,959
Other capital reserves		1,800	1,800
Legal capital reserves		**28,121**	**28,759**
Reserves for treasury shares	16	3,929	3,929
Legal income reserves		**3,929**	**3,929**
Statutory and discretionary reserves		10,500	10,500
Retained earnings carried forward		5,160	5,197
Net profit/(loss)		(51)	(37)
Voluntary retained earnings		**15,609**	**15,660**
Treasury shares against other capital reserves	17	(7)	(12)

Treasury shares	**(7)**	**(12)**
Total shareholders' equity	**47,754**	**48,438**
Total liabilities and shareholders' equity	**77,674**	**69,025**

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Notes to the financial statements

1 General information and subsequent events

Company

Credit Suisse Group AG is a Swiss holding company incorporated as a joint stock corporation (public limited company) with its registered office in Zurich, Switzerland. The financial statements of Credit Suisse Group AG are prepared in accordance with the regulations of the Swiss Code of Obligations and are stated in Swiss francs (CHF). The financial year ends on December 31.

Number of employees

The average number of employees (full-time equivalents) for the current year, as well as for the previous year, did not exceed 50.

Subsequent events

There were no subsequent events from the balance sheet date until March 22, 2019, the publishing date of these financial statements.

2 Accounting and valuation principles

These financial statements were prepared in accordance with the provisions of the Swiss Law on Accounting and Financial Reporting (32nd title of the Swiss Code of Obligations).

Cash and cash equivalents

Cash and cash equivalents are carried at nominal value.

Derivative financial instruments

Derivative financial instruments reported in this balance sheet line item are carried at the lower of cost or market. Realized gains are recorded in other financial income, realized and unrealized losses are recognized in financial expenses.

Financial investments

Financial investments include debt securities with a remaining maturity of more than 12 months after the balance sheet date. These securities are carried at cost. No valuation adjustments or impairment losses were required.

Participations

Participations are valued at historical cost less impairment. For the purpose of impairment testing, with a clearly defined sub-portfolio of economically closely related participations, the portfolio valuation method is applied. Impairment is assessed at each balance sheet date or at any point in time when facts and circumstances would indicate that an event has occurred which triggers an impairment review. The amount of impairment, if any, is assessed on the level of this sub-portfolio and not individually for each participation. All other participations are valued individually. An impairment is recorded if the carrying value exceeds the fair value of the participation sub-portfolio. If the fair value of participations recovers significantly and is considered sustainable, a prior period impairment can be reversed up to the historical cost value of the participations.

Interest-bearing liabilities

Short-term and long-term interest-bearing liabilities are carried at nominal value.

Treasury shares

Own shares are recorded at cost and reported as treasury shares, resulting in a reduction to total shareholders' equity. Realized gains and losses on the sale of own shares are recognized through the statements of income as other financial income or financial expenses.

Revenue recognition

Revenues are recognized when they are realized or realizable, and are earned. Dividend income is recorded in the reporting period in which the dividend is declared.

Foreign currency translations

Assets and liabilities of foreign branches are translated into Swiss francs at the exchange rates prevailing at year-end. Income and expense items are translated at weighted average exchange rates for the period. All currency translation effects are recognized in other financial income or financial expense.

Foreign currency translation rates

End of	2018	2017
1 USD / 1 CHF	0.99	0.98

3 Other financial income

in	2018	2017
Other financial income (CHF million)		
Interest income	942	587
Realized and unrealized gains on derivative financial instruments	169	75
Gains on sale of treasury shares	21	18
Foreign exchange gains	0	5
Other financial income	**1,132**	**685**

4 Other operating income

in	2018	2017
Other operating income (CHF million)		
Trademark fees	63	69
Management fees	57	73
Guarantee fees	26	29
Other	1	0
Other operating income	**147**	**171**

5 Financial expenses

in	2018	2017
Financial expenses (CHF million)		
Interest expenses	988	623
Realized and unrealized losses on derivative financial instruments	172	78
Losses on sale of treasury shares	11	0
Foreign exchange losses	1	0
Other	0	3
Financial expenses	**1,172**	**704**

6 Personnel expenses

in	2018	2017
Personnel expenses (CHF million)		
Salaries	34	36
Variable compensation expenses	16	34
Other	7	8
Personnel expenses	**57**	**78**

7 Other operating expenses

in	2018	2017
Other operating expenses (CHF million)		
Branding expenses	63	69
Other general and administrative expenses	41	47
Other operating expenses	**104**	**116**

8 Other short-term receivables

end of	2018	2017
Other short-term receivables (CHF million)		
Receivables for trademark fees	223	207
Debt securities	0	290
Other	35	12
Other short-term receivables	**258**	**509**

9 Accrued income and prepaid expenses

end of	2018	2017
Accrued income and prepaid expenses (CHF million)		
Accrued interest income	328	161
Deferred debt issuance costs	139	86
Unamortized discount on notes issued	11	12
Other	4	10
Accrued income and prepaid expenses	**482**	**269**

Credit Suisse Group AG hedges an open interest rate risk exposure from a fixed rate liability with a nominal amount of USD 1.0 billion with a fixed receiver interest rate swap with equivalent notional. This hedge is considered to be highly effective over the entire maturity of the hedge relationship and no replacement values and no valuation changes, i.e. change of clean replacement values, are recorded on the balance sheet and in the statement of income of the company. The interest coupons received and paid from the interest rate swap are recorded in the statement of income as an adjustment to the interest expense of the hedged exposure.

10 Financial investments

end of	2018	2017
Financial investments (CHF million)		
Debt securities [1]	23,905	14,914
Equity securities	1	1
Financial investments	**23,906**	**14,915**

1 Reflects notes issued by Credit Suisse AG which substantially mirror the terms of the notes issued by Credit Suisse Group AG. Refer to "Note 14 – Long-term interest-bearing liabilities" for further information.

11 Participations

Direct participations

Company name	Domicile	Currency	Nominal capital in million	Voting interest in %	Equity interest in %
as of December 31, 2018					
Capital Union Bank B.S.C. (closed) (under liquidation)	Manama, Kingdom of Bahrain	USD	50.0	26	26
Credit Suisse AG	Zurich, Switzerland	CHF	4,399.7	100	100
Credit Suisse Group (Guernsey) II Limited (in Guernsey members' voluntary liquidation)	St. Peter Port, Guernsey	USD	0.0	100	100
Credit Suisse Group Finance (Guernsey) Limited	St. Peter Port, Guernsey	USD	0.0	100	100
Credit Suisse Group Funding (Guernsey) Limited	St. Peter Port, Guernsey	USD	0.1	100	100
Credit Suisse Insurance Linked Strategies Ltd	Zurich, Switzerland	CHF	0.2	100	100
Credit Suisse International	London, United Kingdom	USD	12,366.1	2[1]	2[1]
Credit Suisse IP GmbH	Zurich, Switzerland	CHF	0.0	100	100
Credit Suisse Services AG	Zurich, Switzerland	CHF	1.0	100	100
Credit Suisse Trust AG	Zurich, Switzerland	CHF	5.0	100	100
Credit Suisse Trust Holdings Limited	St. Peter Port, Guernsey	GBP	2.0	100	100
CS LP Holding AG	Zug, Switzerland	CHF	0.1	100	100
Inreska Limited	St. Peter Port, Guernsey	GBP	3.0	100	100
Savoy Hotel Baur en Ville AG	Zurich, Switzerland	CHF	7.5	88	88
SECB Swiss Euro Clearing Bank GmbH [2]	Frankfurt, Germany	EUR	30.0	25	25

1
98% held by other group companies.

2
Sold on January 31, 2019.

Indirect participations

The company’s principal indirect participations are shown in Note 40 – Significant subsidiaries and equity method investments in VI – Consolidated financial statements – Credit Suisse Group.

12 Short-term interest-bearing liabilities

end of	2018	2017
Short-term interest-bearing liabilities (CHF million)		
Due to banks	1,364	755
Cash collateral received	118	300
Low-trigger tier 1 capital notes	0	290
Short-term interest-bearing liabilities	**1,482**	**1,345**

13 Accrued expenses and deferred income

end of	2018	2017
Accrued expenses and deferred income (CHF million)		
Accrued interest expenses	332	164
Deferred fees on acquired debt securities	130	75
Accrued personnel and other operating expenses	56	69
Unamortized discount on debt securities	11	12

Other	1	3
Accrued expenses and deferred income	**530**	**323**
425		

14 Long-term interest-bearing liabilities

Currency	Notional (million)	Interest rate	Issue date	First call date	Maturity date	2018 Carrying value (CHF million)	2017 Carrying value (CHF million)
High-trigger tier 1 capital notes							
USD	1,500	7.125%[1]	January 30, 2017	July 29, 2022	Perpetual	1,479	1,466
USD	2,000	7.500%[1]	July 16, 2018	July 17, 2023	Perpetual	1,973	–
CHF	200	3.875%[1]	March 22, 2017	September 22, 2023	Perpetual	200	200
CHF	300	3.500%[1]	September 4, 2018	September 4, 2024	Perpetual	300	–
USD	1,500	7.250%[1]	September 12, 2018	September 12, 2025	Perpetual	1,479	–
Low-trigger tier 1 capital notes							
USD	2,250	7.500%[1]	December 11, 2013	December 11, 2023	Perpetual	2,219	2,198
USD	2,500	6.250%[1]	June 18, 2014	December 18, 2024	Perpetual	2,466	2,443
Senior unsecured notes							
USD	1,000	3 Month USD LIBOR +0.55%[2]	October 6, 2017	October 6, 2021	October 6, 2022	986	977
USD	1,750	3.574%	January 9, 2017	January 9, 2022	January 9, 2023	1,726	1,710
AUD	176	5.000%[3]	February 8, 2018	February 8, 2022	February 8, 2038	123	–
JPY	38,700	0.553%[1]	October 27, 2017	October 27, 2022	October 27, 2023	346	336
USD	1,000	2.997%[1]	September 14, 2017	December 14, 2022	December 14, 2023	986	977
USD	500	3 Month USD LIBOR +1.2%	September 14, 2017	December 14, 2022	December 14, 2023	493	488
AUD	125	3.500%[1]	March 8, 2018	March 8, 2023	March 8, 2024	87	–
AUD	175	3 Month USD BBSW +1.25%	March 8, 2018	March 8, 2023	March 8, 2024	122	–
USD	305	4.600%[3]	March 29, 2018	March 29, 2023	March 29, 2048	301	–
USD	1,250	4.207%[1]	June 12, 2018	June 12, 2023	June 12, 2024	1,233	–
USD	750	3 Month USD LIBOR +1.24%	June 12, 2018	June 12, 2023	June 12, 2024	740	–
USD	145	5.000%[3]	June 29, 2018	June 29, 2023	June 29, 2048	143	–
USD	190	5.000%[3]	August 31, 2018	August 31, 2023	August 31, 2048	187	–
USD	100	5.350%[3]	October 26, 2018	October 26, 2023	October 26, 2048	99	–
USD	100	5.400%[3]	December 27, 2018	December 27, 2023	December 27, 2048	99	–

EUR	1,500	1.250%[1]	July 17, 2017	July 17, 2024	July 17, 2025	1,693	1,752
GBP	750	2.125%[1]	September 12, 2017	September 12, 2024	September 12, 2025	943	987
JPY	8,300	0.904%[1]	October 27, 2017	October 27, 2026	October 27, 2027	74	72
USD	2,250	4.282%	January 9, 2017	January 9, 2027	January 9, 2028	2,219	2,198
USD	2,000	3.869%[1]	January 12, 2018	January 12, 2028	January 12, 2029	1,973	–
EUR	100	2.455%	July 11, 2018	July 11, 2028	July 4, 2034	113	–
JPY	10,000	1.269%[1]	October 27, 2017	October 27, 2032	October 27, 2033	89	87
Time deposit							
CHF						2,700	2,700
Total						**27,591**	**18,591**

1
Interest rate reset at first call date and on every reset date thereafter.
2
Minimum rate 0.55% / Maximum rate 3.55%.
3
The interest rate of these zero coupon accreting senior callable notes reflects the yield rate of the notes.
The high-trigger and low-trigger tier 1 capital notes issued by Credit Suisse Group AG are perpetual securities and have no fixed or final maturity date. Subject to the satisfaction of certain conditions, they may be redeemed, at the option of the issuer, on the first call date or on any interest rate reset date thereafter.
The high-trigger tier 1 capital notes mandatorily either convert into ordinary shares of Credit Suisse Group AG or are permanently written-down to zero, as provided in the terms of the respective instrument, upon the occurrence of certain specified triggering events. These events include the Group's consolidated common equity tier 1 (CET1) ratio falling below 7%, or a determination by the Swiss Financial Market Supervisory Authority FINMA (FINMA) that conversion or write-down is necessary, or that Credit Suisse Group AG requires extraordinary public sector capital support, to prevent Credit Suisse Group AG from becoming insolvent, bankrupt or unable to pay a material amount of its debt, or other similar circumstances. Conversion or write-down can only be prevented if FINMA, at Credit Suisse Group AG's request, is satisfied that certain conditions exist and determines that a conversion or write-down is not required. High-trigger instruments are designed to absorb losses before other capital instruments, including the low-trigger capital instruments.
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The low-trigger tier 1 capital notes have a write-down feature, which means that interest on the notes shall cease to accrue and the full principal amount of the notes will be permanently written down to zero upon the occurrence of certain specified triggering events, also called write-down events. A write-down event will occur if the sum of the Group's consolidated CET1 ratio and the Higher Trigger Capital Ratio (i.e., the ratio of Higher Trigger Capital Amount to the aggregate of all risk-weighted assets of the Group) as of any quarterly balance sheet date or interim capital report date is below 5.125%. A write-down event will also occur if FINMA determines that a write-down of the notes is necessary, or that Credit Suisse Group AG requires, extraordinary public sector capital support to prevent Credit Suisse Group AG from becoming insolvent, bankrupt or unable to pay a material part of its debts, or other similar circumstances. Write-down can only be prevented if FINMA, at the Group's request, is satisfied that certain conditions exist and determines that a conversion or write-down is not required.

In addition to the high-trigger and low-trigger tier 1 capital notes, Credit Suisse Group AG has issued senior unsecured notes, which qualify as total loss-absorbing capacity (TLAC). The senior unsecured notes have a fixed maturity date and can be redeemed, at the option of the issuer, at the call date. The senior unsecured notes are bail-in debt instruments that are designed to absorb losses after the cancellation of Credit Suisse Group AG's equity instruments and after the write-down or conversion into equity of regulatory capital (including high-trigger and low-trigger tier 1 capital notes) in restructuring proceedings with respect to Credit Suisse Group AG. Bail-in debt instruments do not feature capital triggers that may lead to a write-down and/or a conversion into equity outside of restructuring, but only begin to bear losses once Credit Suisse Group AG is formally in restructuring proceedings and FINMA orders capital measures (i.e., a write-down and/or a conversion into equity) in the restructuring plan.

15 Share capital, conditional, conversion and authorized capital

	No. of registered shares	Par value in CHF	No. of registered shares	Par value in CHF
Share capital as of December 31, 2017			**2,556,011,720**	**102,240,469**
Conditional capital				
Warrants and convertible bonds				
Capital as of December 31, 2017	400,000,000	16,000,000		
Capital as of December 31, 2018	**400,000,000**[1]	**16,000,000**		
Conversion capital				
Capital as of December 31, 2017	150,000,000	6,000,000		
Capital as of December 31, 2018	**150,000,000**[2]	**6,000,000**		
Authorized capital				
Capital as of December 31, 2017	165,118,230	6,604,729		
Capital as of December 31, 2018	**165,118,230**	**6,604,729**		
Share capital as of December 31, 2018			**2,556,011,720**	**102,240,469**

1
72.2 million registered shares reserved for the USD 1,500 million 7.125% high-trigger tier 1 capital notes.

2
39.0 million registered shares reserved for the USD 1,500 million 7.125% high-trigger tier 1 capital notes.

16 Credit Suisse Group shares held by subsidiaries

	Share equivalents	2018 Market value (CHF million)	Share equivalents	2017 Market value (CHF million)
Balance at end of financial year				
Physical holdings	5,022,410[1]	54	5,012,413	87

Holdings, net of pending obligations	(1,334,536)	(14)	(607,300)	(11)

1
Representing 0.2% of issued shares as of December 31, 2018.

17 Purchases and sales of treasury shares

	Net gain/(loss) on sale (CHF million)	Treasury shares, at cost (CHF million)	Number of shares	Average price per share (CHF)
2018				
Balance as of December 31, 2017		**12**	**745,253**	**15.64**
Sale of treasury shares [1]	10	(762)	(46,612,198)	16.55
Purchase of treasury shares		757	46,272,226	16.36
Change in 2018	10	(5)	(339,972)	
Balance as of December 31, 2018		**7**	**405,281**	**16.38**
2017				
Balance as of December 31, 2016		**2**	**142,534**	**13.12**
Sale of treasury shares [1]	18	(620)	(41,984,328)	15.22
Purchase of treasury shares		630	42,587,047	14.80
Change in 2017	18	10	602,719	
Balance as of December 31, 2017		**12**	**745,253**	**15.64**

2018: Highest price CHF 18.63, paid on January 24 and lowest price CHF 15.46, paid on April 4 in a market transaction.
2017: Highest price CHF 16.40, paid on November 22 and lowest price CHF 14.31, paid on July 3 in a market transaction.
1
Representing share award settlements with Group employees.

18 Significant shareholders

	2018			2017		
end of	Number of shares (million)	Total nominal value (CHF million)	Share-holding (%)	Number of shares (million)	Total nominal value (CHF million)	Share-holding (%)
Direct shareholders [1]						
Chase Nominees Ltd. [2]	388	16	15.19	329	13	12.88
Nortrust Nominees Ltd. [2]	149	6	5.84	140	6	5.49

1
As registered in the share register of the Group on December 31 of the reporting period; includes shareholders registered as nominees.
2
Nominee holdings exceeding 2% are registered with a right to vote only if the nominee confirms that no individual shareholder holds more than 0.5% of the outstanding share capital or if the nominee discloses the identity of any beneficial owner holding more than 0.5% of the outstanding capital.

> Refer to “Note 3 – Business developments, significant shareholders and subsequent events” in VI – Consolidated financial statements – Credit Suisse Group for information received from shareholders not registered in the share register of Credit Suisse Group AG.

19 Contingent liabilities

end of	2018	2017
Contingent liabilities (CHF million)		
	24,026	30,422[2]

Aggregate indemnity liabilities, guarantees and other contingent liabilities (net of exposures recorded as liabilities)		
of which have been entered into on behalf of subsidiaries [1]	24,026	30,422

1
Includes senior unsecured notes issued by subsidiaries of CHF 22,165 million and CHF 22,179 million as of December 31, 2018 and 2017, respectively, which qualify as TLAC.

2
The prior year balance has been changed to conform to the current year's presentation. This change had no impact on net loss or total shareholders' equity.

Contingent liabilities include guarantees for obligations, performance-related guarantees and letters of comfort issued to third parties. Contingencies with a stated amount are included in the above table. In some instances, however, the exposure of Credit Suisse Group AG is not defined as an amount but relates to specific circumstances such as the solvency of subsidiaries.

Value-added tax

The company belongs to the Swiss value-added tax group of Credit Suisse Group, and thus carries joint liability to the Swiss federal tax authority for value-added tax debts of the entire Group.

Swiss pension plan

The employees of Credit Suisse Group AG are covered by the pension plan of the "Pensionskasse der Credit Suisse Group (Schweiz)" (the Swiss pension plan). Most of the Swiss subsidiaries of Credit Suisse Group AG and a few companies that have close business and financial ties with Credit Suisse Group AG participate in this plan. The Swiss pension plan is an independent self-insured pension plan set up as a trust and qualifies as a defined contribution plan (savings plan) under Swiss law.

The Swiss pension plan's annual financial statements are prepared in accordance with Swiss GAAP FER 26 based on the full population of covered employees. Individual annual financial statements for each participating company are not prepared. As a multi-employer plan with unrestricted joint liability for all participating companies, the economic interest in the Swiss pension plan's over- or underfunding is allocated to each participating company based on an allocation key determined by the plan.

20 Assets and liabilities with related parties

end of	2018	2017
Assets (CHF million)		
Cash and cash equivalents	817	1,004
Other short-term receivables	243	502
Derivative financial instruments	89	211
Accrued income and prepaid expenses	481	268
Total current assets – related parties	**1,630**	**1,985**
Financial investments	23,905	14,914
Participations	52,117	52,112
Total noncurrent assets – related parties	**76,022**	**67,026**
Total assets – related parties	**77,652**	**69,011**
Liabilities (CHF million)		
Short-term interest-bearing liabilities	1,482	1,055
Other short-term liabilities	5	16
Accrued expenses and deferred income [1]	170	124
Total short-term liabilities – related parties	**1,657**	**1,195**
Long-term interest-bearing liabilities	2,700	2,700
Total long-term liabilities – related parties	**2,700**	**2,700**
Total liabilities – related parties	**4,357**	**3,895**

The assets and liabilities represent the amounts due from and due to group companies, except where indicated.

1 Includes amounts due to management bodies of CHF 28 million at December 31, 2018 and CHF 34 million at December 31, 2017, respectively.

21 Subordinated assets and liabilities

end of	2018	2017
Subordinated assets and liabilities (CHF million)		
Subordinated assets	9,292	5,682
Subordinated liabilities	10,282	6,663

22 Shareholdings

Executive Board shareholdings

The shareholdings of the Executive Board members, their immediate family and companies in which they have a controlling interest as well as the value of the unvested share-based compensation awards held by Executive Board members as of December 31, 2018 and 2017, are disclosed in the table below.

Executive Board holdings and values of deferred share-based awards by individual

end of	Number of owned shares[1]	Number of unvested awards (at maximum opportunity)[2]	Number of owned shares and unvested awards (at maximum opportunity)	Value (CHF) of unvested awards at grant date (at maximum opportunity)	Value (CHF) of unvested awards at year end (at fair value)[3]
2018					
Tidjane Thiam	64,302	990,706	1,055,008	16,430,736	6,923,084
James L. Amine	426,726	1,046,190	1,472,916	17,300,812	7,049,362
Pierre-Olivier Bouée	74,079	512,085	586,164	8,287,028	4,019,900
Romeo Cerutti	269,373	389,685	659,058	6,423,655	2,734,410
Brian Chin	431,274	1,137,731	1,569,005	18,494,683	8,600,260
Peter Goerke	21,953	342,324	364,277	5,655,877	2,438,237
Thomas Gottstein	118,976	402,042	521,018	6,752,150	2,831,436
Iqbal Khan	70,060	519,389	589,449	8,757,970	3,530,037
David R. Mathers	84,360	793,632	877,992	13,180,647	5,973,132
Joachim Oechslin	61,092	406,852	467,944	6,771,566	2,779,441
Helman Sitohang	264,737	822,060	1,086,797	13,497,946	5,857,016
Lara Warner	2,036	469,641	471,677	7,989,249	3,102,330
Total	**1,888,968**	**7,832,337**	**9,721,305**	**129,542,319**	**55,838,645**
2017					
Tidjane Thiam	1,967	1,132,835	1,134,802	20,298,771	13,941,708
James L. Amine	382,106	1,098,488	1,480,594	18,110,327	11,694,777
Pierre-Olivier Bouée	38,204	439,832	478,036	7,200,011	5,345,214
Romeo Cerutti	199,630	410,871	610,501	6,945,908	4,389,711
Brian Chin	234,328	1,098,757	1,333,085	17,798,557	16,800,518
Peter Goerke	21,953	282,112	304,065	4,750,031	2,985,514
Thomas Gottstein	–	354,275	354,275	6,009,654	3,639,767
Iqbal Khan	25,135	379,846	404,981	6,412,346	4,016,413
David R. Mathers	52,672	704,359	757,031	11,723,886	7,726,820
Joachim Oechslin	–	386,390	386,390	6,627,551	4,027,112
Helman Sitohang	394,737	826,572	1,221,309	13,516,027	9,278,836
Lara Warner	2,036	325,449	327,485	5,501,327	3,445,577
Total	**1,352,768**	**7,439,786**	**8,792,554**	**124,894,396**	**87,291,967**

1

Includes shares that were initially granted as deferred compensation and have vested.

2

Includes unvested shares originating from LTI awards calculated on the basis of maximum opportunity for awards that have not reached the end of their three-year performance period, given that the actual achievement level and associated number of unvested shares cannot be determined until the end of the performance period.

3

Includes the value of unvested LTI awards, which was determined based on the number of shares at fair value at the time of grant, multiplied by the share price at the end of the year.

Board of Directors shareholdings

The shareholdings of the Board of Directors members, their immediate family and companies in which they have a controlling interest are disclosed in the table below. As of December 31, 2018 and 2017, there were no Board of Directors members with outstanding options.

Board of Directors shareholdings by individual

end of	2018	2017
December 31 (shares) [1]		
Urs Rohner	268,250	189,956
Iris Bohnet	61,311	49,451
Andreas Gottschling	19,210	5,432
Alexander Gut	37,707	24,152
Michael Klein [2]	6,713	–
Andreas N. Koopmann	131,231	117,900
Seraina Macia	49,827	37,231
Kai S. Nargolwala	299,872	280,883
Ana Paula Pessoa [2]	7,672	–
Joaquin J. Ribeiro	37,705	24,150
Severin Schwan	129,957	116,402
John Tiner	244,317	216,645
Alexandre Zeller	79,763	6,208
Total	**1,373,535**	**1,068,410** [3]

1 Includes Group shares that are subject to a blocking period of up to four years; includes shareholdings of immediate family members.

2 Michael Klein and Ana Paula Pessoa were newly elected at the 2018 AGM.

3 Excludes 196,766 shares held by Richard E. Thornburgh as of December 31, 2017, who did not stand for re-election to the Board as of April 27, 2018.

Share awards outstanding

	2018		2017	
end of	Number of share-awards outstanding in million	Fair value in CHF million	Number of share-awards outstanding in million	Fair value in CHF million
Share awards [1]				
Employees	138	1,490	148	2,575
Total share awards	**138**	**1,490**	**148**	**2,575**

1 In the interests of transparency also share awards granted to employees of subsidiaries of Credit Suisse Group AG are considered in this disclosure table.

Proposed appropriation of retained earnings and capital distribution

Proposed appropriation of retained earnings

	2018
Retained earnings (CHF million)	
Retained earnings carried forward	5,160
Net profit/(loss)	(51)
Retained earnings available for appropriation	**5,109**
To be carried forward	5,109
Total	**5,109**

Proposed distribution out of capital contribution reserves

	2018
Capital contribution reserves (CHF million)	
Balance at beginning of year	**26,959**
Capital distribution for the financial year 2017	(638)
Balance at end of year	**26,321**
Proposed distribution of CHF 0.2625 per registered share for the financial year 2018 [1]	(671)
Balance after distribution	**25,650**

Distributions out of capital contribution reserves are free of Swiss withholding tax and are not subject to income tax for Swiss resident individuals holding the shares as a private investment.

1

2,555,606,439 registered shares - net of own shares held by the company - as of December 31, 2018. The number of registered shares eligible for distribution may change due to the issuance of new registered shares and transactions in own shares.

VIII – Consolidated financial statements – Credit Suisse (Bank)
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Report of the Independent Registered Public Accounting Firm

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Report of the Independent Registered Public Accounting Firm

Report of the Independent Registered Public Accounting FirmTo the shareholders and Board of Directors Credit Suisse AG, Zurich _____Opinion on the Consolidated Financial Statements We have audited the accompanying consolidated balance sheets of Credit Suisse AG and subsidiaries (the “Bank”) as of December31, 2018 and 2017, and the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows for each of the years in the threeyear period ended December31, 2018, and the related notes (collectively, the “consolidated financial statements”). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Bank as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles. We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the Bank’s internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated March 22, 2019 expressed an unqualified opinion on the effectiveness of the Bank’s internal control over financial reporting. Basis for Opinion These consolidated financial statements are the responsibility of the Bank’s management and the Board of Directors. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Bank in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion. KPMG AG Nicholas Edmonds Anthony AnzevinoLicensed Audit Expert Global Lead Partner Auditor in Charge We have served as the Bank’s auditor since 1989. Zurich, Switzerland March 22, 2019

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Consolidated financial statements
Consolidated statements of operations

in	Note	2018	2017	2016
Consolidated statements of operations (CHF million)				
Interest and dividend income	5	19,623	17,061	17,375
Interest expense	5	(12,498)	(10,369)	(9,781)
Net interest income	5	7,125	6,692	7,594
Commissions and fees	6	11,742	11,672	10,938
Trading revenues	7	456	1,300	371
Other revenues	8	1,497	1,301	1,490
Net revenues		**20,820**	**20,965**	**20,393**
Provision for credit losses	9	**245**	**210**	**252**
Compensation and benefits	10	8,864	9,964	10,777
General and administrative expenses	11	7,068	7,413	9,885
Commission expenses		1,259	1,429	1,455
Restructuring expenses	12	528	396	513
Total other operating expenses		8,855	9,238	11,853
Total operating expenses		**17,719**	**19,202**	**22,630**
Income/(loss) before taxes		**2,856**	**1,553**	**(2,489)**
Income tax expense	27	1,134	2,781	400
Net income/(loss)		**1,722**	**(1,228)**	**(2,889)**
Net income/(loss) attributable to noncontrolling interests		(7)	27	(6)
Net income/(loss) attributable to shareholders		**1,729**	**(1,255)**	**(2,883)**

Consolidated statements of comprehensive income

in	2018	2017	2016
Comprehensive income/(loss) (CHF million)			
Net income/(loss)	1,722	(1,228)	(2,889)
Gains/(losses) on cash flow hedges	(7)	(35)	(22)
Foreign currency translation	(321)	(1,015)	498
Unrealized gains/(losses) on securities	(18)	(13)	1
Actuarial gains/(losses)	31	21	210
Net prior service credit/(cost)	(10)	0	0
Gains/(losses) on liabilities related to credit risk	1,442	(1,684)	(1,082)
Other comprehensive income/(loss), net of tax	1,117	(2,726)	(395)
Comprehensive income/(loss)	**2,839**	**(3,954)**	**(3,284)**
Comprehensive income/(loss) attributable to noncontrolling interests	(3)	(9)	11
Comprehensive income/(loss) attributable to shareholders	**2,842**	**(3,945)**	**(3,295)**

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated balance sheets end of	Note	2018	2017
Assets (CHF million)			
Cash and due from banks		99,314	109,510
of which reported at fair value		115	212
of which reported from consolidated VIEs		173	232
Interest-bearing deposits with banks		1,074	721
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	14	117,095	115,346
of which reported at fair value		81,818	77,498
Securities received as collateral, at fair value		41,696	38,074
of which encumbered		25,711	23,632
Trading assets, at fair value	15	132,427	156,774
of which encumbered		32,452	49,237
of which reported from consolidated VIEs		1,616	1,348
Investment securities	16	2,909	2,189
of which reported at fair value		2,909	2,189
of which reported from consolidated VIEs		1,432	381
Other investments	17	4,824	5,893
of which reported at fair value		2,430	3,497
of which reported from consolidated VIEs		1,505	1,833
Net loans	18	292,875	283,237
of which reported at fair value		14,873	15,307
of which encumbered		230	186
of which reported from consolidated VIEs		387	267
allowance for loan losses		(901)	(881)
Premises and equipment	19	4,530	4,445
of which reported from consolidated VIEs		18	128
Goodwill	20	4,056	4,036
Other intangible assets	21	219	223
of which reported at fair value		163	158
Brokerage receivables		38,907	46,968
Other assets	22	32,143	30,956
of which reported at fair value		7,263	9,018
of which encumbered		279	134
of which reported from consolidated VIEs		2,009	2,396
Total assets		**772,069**	**798,372**

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated balance sheets (continued)

end of	Note	2018	2017
Liabilities and equity (CHF million)			
Due to banks	23	15,220	15,411
of which reported at fair value		406	197
Customer deposits	23	365,263	362,303
of which reported at fair value		3,292	3,511
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	14	24,623	26,496
of which reported at fair value		14,828	15,262
Obligation to return securities received as collateral, at fair value		41,696	38,074
Trading liabilities, at fair value	15	42,171	39,132
of which reported from consolidated VIEs		3	3
Short-term borrowings		22,419	26,378
of which reported at fair value		8,068	11,019
of which reported from consolidated VIEs		5,465	6,672
Long-term debt	24	153,433	172,042
of which reported at fair value		63,027	62,622
of which reported from consolidated VIEs		1,764	863
Brokerage payables		30,923	43,303
Other liabilities	22	30,327	31,683
of which reported at fair value		8,983	8,590
of which reported from consolidated VIEs		277	441
Total liabilities		**726,075**	**754,822**
Common shares		4,400	4,400
Additional paid-in capital		45,557	45,718
Retained earnings		10,179	8,484
Accumulated other comprehensive income/(loss)	25	(14,840)	(15,932)
Total shareholders' equity		**45,296**	**42,670**
Noncontrolling interests		698	880
Total equity		**45,994**	**43,550**
Total liabilities and equity		**772,069**	**798,372**

end of	2018	2017
Additional share information		
Par value (CHF)	1.00	1.00
Issued shares	4,399,680,200	4,399,680,200
Shares outstanding	4,399,680,200	4,399,680,200

The Bank's total share capital is fully paid and consists of 4,399,680,200 registered shares as of December 31, 2018. Each share is entitled to one vote. The Bank has no warrants on its own shares outstanding.

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of changes in equity

	Attributable to shareholders							
	Common shares	Additional paid-in capital	Retained earnings	Treasury shares, at cost[1]	AOCI	Total share-holders' equity	Non-controlling interests	Total equity
2018 (CHF million)								
Balance at beginning of period	**4,400**	**45,718**	**8,484**	**0**	**(15,932)**	**42,670**	**880**	**43,550**
Purchase of subsidiary shares from non- controlling interests, changing ownership	–	(1)	–	–	–	(1)	(4)	(5)
Purchase of subsidiary shares from non- controlling interests, not changing ownership [2, 3]	–	–	–	–	–	–	(70)	(70)
Sale of subsidiary shares to noncontrolling interests, changing ownership	–	2	–	–	–	2	(2)	–
Sale of subsidiary shares to noncontrolling interests, not changing ownership [3]	–	–	–	–	–	–	30	30
Net income/(loss)	–	–	1,729	–	–	1,729	(7)	1,722
Cumulative effect of accounting changes, net of tax	–	–	(24)	–	(21)	(45)	–	(45)
Total other comprehensive income/(loss), net of tax	–	–	–	–	1,113	1,113	4	1,117
Share-based compensation, net of tax	–	(140)	–	–	–	(140)	–	(140)
Dividends on share-based compensation, net of tax	–	(22)	–	–	–	(22)	–	(22)
Dividends paid	–	–	(10)	–	–	(10)	(5)	(15)
Changes in scope of consolidation, net	–	–	–	–	–	–	(128)	(128)
Balance at end of period	**4,400**	**45,557**	**10,179**	**0**	**(14,840)**	**45,296**	**698**	**45,994**
2017 (CHF million)								

Balance at beginning of period	**4,400**	**41,817**	**9,814**	**0**	**(13,242)**	**42,789**	**1,069**	**43,858**
Purchase of subsidiary shares from non- controlling interests, not changing ownership	–	–	–	–	–	–	(189)	(189)
Sale of subsidiary shares to noncontrolling interests, not changing ownership	–	–	–	–	–	–	65	65
Net income/(loss)	–	–	(1,255)	–	–	(1,255)	27	(1,228)
Cumulative effect of accounting changes, net of tax	–	–	(25)	–	–	(25)	–	(25)
Total other comprehensive income/(loss), net of tax	–	–	–	–	(2,690)	(2,690)	(36)	(2,726)
Share-based compensation, net of tax	–	6	–	–	–	6	–	6
Dividends on share-based compensation, net of tax	–	(79)	–	–	–	(79)	–	(79)
Dividends paid	–	–	(10)	–	–	(10)	(3)	(13)
Changes in scope of consolidation, net	–	–	–	–	–	–	(41)	(41)
Other	–	3,974	(40)	–	–	3,934	(12)	3,922
Balance at end of period	**4,400**	**45,718**	**8,484**	**0**	**(15,932)**	**42,670**	**880**	**43,550**

1
Reflects Credit Suisse Group shares which are reported as treasury shares. Those shares are held to economically hedge share award obligations.
2
Distributions to owners in funds include the return of original capital invested and any related dividends.
3
Transactions with and without ownership changes related to fund activity are all displayed under "not changing ownership".
The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of changes in equity (continued)

	Attributable to shareholders							
	Common shares/ participa-tion secu-rities	Additional paid-in capital	Retained earnings	Treasury shares, at cost	AOCI	Total share-holders' equity	Non-controlling interests	Total equity
2016 (CHF million)								
Balance at beginning of period	**4,400**	**40,999**	**13,307**	**0**	**(13,294)**	**45,412**	**1,284**	**46,696**
Purchase of subsidiary shares from non- controlling interests, changing ownership	–	(13)	–	–	–	(13)	(6)	(19)
Purchase of subsidiary shares from non- controlling interests, not changing ownership	–	–	–	–	–	–	(118)	(118)
Sale of subsidiary shares to noncontrolling interests, not changing ownership	–	–	–	–	–	–	120	120
Net income/(loss)	–	–	(2,883)	–	–	(2,883)	(6)	(2,889)
Cumulative effect of accounting changes, net of tax	–	–	(464)	–	464	–	–	–
Total other comprehensive income/(loss), net of tax	–	–	–	–	(412)	(412)	17	(395)
Share-based compensation, net of tax	–	168	–	–	–	168	–	168
Dividends on share-based compensation, net of tax	–	(41)	–	–	–	(41)	–	(41)
Dividends paid	–	–	(146)	–	–	(146)	–	(146)
Changes in scope of consolidation, net	–	2	–	–	–	2	(194)	(192)
Other	–	702	–	–	–	702	(28)	674
Balance at end of period	**4,400**	**41,817**	**9,814**	**0**	**(13,242)**	**42,789**	**1,069**	**43,858**

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of cash flows in	2018	2017	2016
Operating activities (CHF million)			
Net income/(loss)	**1,722**	**(1,228)**	**(2,889)**
Adjustments to reconcile net income/(loss) to net cash provided by/(used in) operating activities (CHF million)			
Impairment, depreciation and amortization	844	837	934
Provision for credit losses	245	210	252
Deferred tax provision/(benefit)	592	2,285	(234)
Share of net income/(loss) from equity method investments	(107)	(150)	(62)
Trading assets and liabilities, net	25,388	3,441	21,214
(Increase)/decrease in other assets	3,519	(15,435)	9,731
Increase/(decrease) in other liabilities	(14,228)	(1,443)	(1,021)
Other, net	(5,564)	2,993	(917)
Total adjustments	10,689	(7,262)	29,897
Net cash provided by/(used in) operating activities	**12,411**	**(8,490)**	**27,008**
Investing activities (CHF million)			
(Increase)/decrease in interest-bearing deposits with banks	(364)	40	117
(Increase)/decrease in central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	(1,372)	14,286	(7,056)
Purchase of investment securities	(683)	(86)	(88)
Proceeds from sale of investment securities	255	14	14
Maturities of investment securities	853	422	363
Investments in subsidiaries and other investments	(546)	(1,094)	(1,357)
Proceeds from sale of other investments	1,770	1,967	1,693
(Increase)/decrease in loans	(13,701)	(14,779)	(4,221)
Proceeds from sales of loans	5,981	9,938	2,468
Capital expenditures for premises and equipment and other intangible assets	(989)	(950)	(1,164)
Proceeds from sale of premises and equipment and other intangible assets	80	60	55
Other, net	342	65	750
Net cash provided by/(used in) investing activities	**(8,374)**	**9,883**	**(8,426)**

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Consolidated statements of cash flows (continued)

in	2018	2017	2016
Financing activities (CHF million)			
Increase/(decrease) in due to banks and customer deposits	2,006	3,187	10,237
Increase/(decrease) in short-term borrowings	(2,985)	5,507	6,594
Increase/(decrease) in central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(2,052)	(5,251)	(14,525)
Issuances of long-term debt	33,308	43,567	52,944
Repayments of long-term debt	(43,858)	(62,644)	(47,132)
Dividends paid	(15)	(13)	(145)
Other, net	(657)	3,535	1,044
Net cash provided by/(used in) financing activities	**(14,253)**	**(12,112)**	**9,017**
Effect of exchange rate changes on cash and due from banks (CHF million)			
Effect of exchange rate changes on cash and due from banks	**20**	**(837)**	**1,213**
Net increase/(decrease) in cash and due from banks (CHF million)			
Net increase/(decrease) in cash and due from banks	**(10,196)**	**(11,556)**	**28,812**
Cash and due from banks at beginning of period [1]	109,510	121,066	92,254
Cash and due from banks at end of period [1]	**99,314**	**109,510**	**121,066**

1 Includes restricted cash.

Supplemental cash flow information

in	2018	2017	2016
Cash paid for income taxes and interest (CHF million)			
Cash paid for income taxes	666	531	659
Cash paid for interest	12,524	9,688	9,105
Assets and liabilities sold in business divestitures (CHF million)			
Assets sold	0	1,777	425
Liabilities sold	0	1,658	383

The accompanying notes to the consolidated financial statements are an integral part of these statements.

Notes to the consolidated financial statements

1 Summary of significant accounting policies

The accompanying consolidated financial statements of Credit Suisse AG (the Bank), the direct bank subsidiary of Credit Suisse Group AG (the Group), are prepared in accordance with accounting principles generally accepted in the US (US GAAP) and are stated in Swiss francs (CHF). The financial year for the Bank ends on December 31. Certain reclassifications have been made to the prior year's consolidated financial statements to conform to the current presentation which had no impact on net income/(loss) or total shareholders' equity.

In preparing the consolidated financial statements, management is required to make estimates and assumptions including, but not limited to, the fair value measurements of certain financial assets and liabilities, the allowance for loan losses, the evaluation of variable interest entities (VIEs), the impairment of assets other than loans, recognition of deferred tax assets, tax uncertainties, pension liabilities and various contingencies. These estimates and assumptions affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the dates of the consolidated balance sheets and the reported amounts of revenues and expenses during the reporting period. While management evaluates its estimates and assumptions on an ongoing basis, actual results could differ materially from management's estimates. Market conditions may increase the risk and complexity of the judgments applied in these estimates.

> Refer to "Note 1 – Summary of significant accounting policies" in VI – Consolidated financial statements – Credit Suisse Group for a summary of significant accounting policies, with the exception of the following accounting policies.

Pension and other post-retirement benefits

Credit Suisse sponsors a Group defined benefit pension plan in Switzerland that covers eligible employees of the Bank domiciled in Switzerland. The Bank also has single-employer defined benefit pension plans and defined contribution pension plans in Switzerland and other countries around the world.

For the Bank's participation in the Group defined benefit pension plan, no retirement benefit obligation is recognized in the consolidated balance sheets of the Bank and defined contribution accounting is applied, as the Bank is not the sponsoring entity of the Group plan.

For single-employer defined benefit plans, the Bank uses the projected unit credit actuarial method to determine the present value of its projected benefit obligations (PBO) and the current and past service costs or credits related to its defined benefit and other post-retirement benefit plans. The measurement date used to perform the actuarial valuation is December 31.

> Refer to "Pension and other post-retirement benefits" in VI – Consolidated financial statements – Credit Suisse Group – Note 1 – Summary of significant accounting policies for further information.

Own shares, own bonds and financial instruments on Group shares

The Bank's shares are wholly owned by Credit Suisse Group AG and are not subject to trading. The Bank may buy and sell Credit Suisse Group AG shares (Group shares) and Group bonds, own bonds and financial instruments on Group shares within its normal trading and market-making activities. In addition, the Bank may hold Group shares to economically hedge commitments arising from employee share-based compensation awards. Group shares are reported as trading assets, unless those shares are held to economically hedge share award obligations. Hedging shares are reported as treasury shares, resulting in a reduction to total shareholder's equity. Financial instruments on Group shares are recorded as assets or liabilities and carried at fair value. Dividends received on Group shares and unrealized and realized gains and losses on Group shares are recorded according to the classification of the shares as trading assets or treasury shares. Purchases of bonds originally issued by the Bank are recorded as an extinguishment of debt.

2 Recently issued accounting standards

> Refer to "Note 2 – Recently issued accounting standards" in VI – Consolidated financial statements – Credit Suisse Group for recently adopted accounting standards and standards to be adopted in future periods.

The impact on the Bank's and Group's financial position, results of operations or cash flows was or is expected to be identical.

3 Business developments, significant shareholders and subsequent events

> Refer to "Note 3 – Business developments, significant shareholders and subsequent events" in VI – Consolidated financial statements – Credit Suisse Group for further information.

4 Segment information

For the purposes of the presentation of reportable segments, the Bank has included accounts of affiliate entities wholly owned by the same parent which are managed together with the operating segments of the Bank.

> Refer to "Note 4 – Segment information" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Net revenues and income/(loss) before taxes

in	2018	2017	2016
Net revenues (CHF million)			
Swiss Universal Bank	5,564	5,396	5,759
International Wealth Management	5,414	5,111	4,698
Asia Pacific	3,393	3,504	3,597
Global Markets	4,980	5,551	5,497
Investment Banking & Capital Markets	2,177	2,139	1,972
Strategic Resolution Unit	(708)	(886)	(1,271)
Adjustments [1]	0	150	141
Net revenues	**20,820**	**20,965**	**20,393**
Income/(loss) before taxes (CHF million)			
Swiss Universal Bank	2,125	1,765	2,025
International Wealth Management	1,705	1,351	1,121
Asia Pacific	664	729	725
Global Markets	154	450	48
Investment Banking & Capital Markets	344	369	261
Strategic Resolution Unit	(1,381)	(2,135)	(5,759)
Adjustments [1]	(755)	(976)	(910)
Income/(loss) before taxes	**2,856**	**1,553**	**(2,489)**

1 Adjustments represent certain consolidating entries and balances, including those relating to items that are managed but are not legally owned by the Bank and vice versa, and certain expenses that were not allocated to the segments.

Total assets

end of	2018	2017
Total assets (CHF million)		
Swiss Universal Bank	224,301	228,857
International Wealth Management	91,835	94,753
Asia Pacific	99,809	96,497
Global Markets	211,530	242,159
Investment Banking & Capital Markets	16,156	20,803
Strategic Resolution Unit	20,874	45,629
Adjustments [1]	107,564	69,674
Total assets	**772,069**	**798,372**

1 Adjustments represent certain consolidating entries and balances, including those relating to items that are managed but are not legally owned by the Bank and vice versa, and certain expenses that were not allocated to the segments.

Net revenues and income/(loss) before taxes by geographical location

in	2018	2017	2016
Net revenues (CHF million)			
Switzerland	8,047	8,015	8,484
EMEA	1,164	1,042	2,036

Americas	8,750	8,952	7,267
Asia Pacific	2,859	2,956	2,606
Net revenues	**20,820**	**20,965**	**20,393**
Income/(loss) before taxes (CHF million)			
Switzerland	1,927	1,648	1,955
EMEA	(2,520)	(2,825)	(2,487)
Americas	3,344	2,660	(1,602)
Asia Pacific	105	70	(355)
Income/(loss) before taxes	**2,856**	**1,553**	**(2,489)**

The designation of net revenues and income/(loss) before taxes is based on the location of the office recording the transactions. This presentation does not reflect the way the Bank is managed.

Total assets by geographical location

end of	2018	2017
Total assets (CHF million)		
Switzerland	237,200	243,767
EMEA	149,715	154,179
Americas	309,616	318,358
Asia Pacific	75,538	82,068
Total assets	**772,069**	**798,372**

The designation of total assets by region is based upon customer domicile.

5 Net interest income

in	2018	2017	2016
Net interest income (CHF million)			
Loans	6,778	5,981	5,627
Investment securities	80	47	60
Trading assets	7,131	6,698	7,483
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	2,856	2,515	2,767
Other	2,778	1,820	1,438
Interest and dividend income	19,623	17,061	17,375
Deposits	(2,291)	(1,360)	(1,047)
Short-term borrowings	(370)	(168)	(84)
Trading liabilities	(3,453)	(3,546)	(3,602)
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(1,877)	(1,284)	(1,387)
Long-term debt	(3,696)	(3,580)	(3,460)
Other	(811)	(431)	(201)
Interest expense	(12,498)	(10,369)	(9,781)
Net interest income	**7,125**	**6,692**	**7,594**

6 Commissions and fees

in	2018	2017	2016
Commissions and fees (CHF million)			
Lending business	1,902	1,809	1,790
Investment and portfolio management	3,415	3,320	3,043
Other securities business	83	82	72
Fiduciary business	3,498	3,402	3,115
Underwriting	1,735	1,817	1,364
Brokerage	2,797	3,006	3,029
Underwriting and brokerage	4,532	4,823	4,393
Other services	1,810	1,638	1,640
Commissions and fees	**11,742**	**11,672**	**10,938**

7 Trading revenues

in	2018	2017	2016
Trading revenues (CHF million)			
Interest rate products	759	3,218	7,163
Foreign exchange products	372	1,991	(3,461)
Equity/index-related products	(481)	(2,895)	(1,738)
Credit products	(97)	(1,096)	(2,124)
Commodity and energy products	102	86	177
Other products	(199)	(4)	354
Total	**456**	**1,300**	**371**

Represents revenues on a product basis which are not representative of business results within segments, as segment results utilize financial instruments across various product types.

> Refer to “Note 7 – Trading revenues” in VI – Consolidated financial statements – Credit Suisse Group for further information.

8 Other revenues

in	2018	2017	2016
Other revenues (CHF million)			
Loans held-for-sale	(4)	3	(51)
Long-lived assets held-for-sale	39	(18)	437
Equity method investments	221	229	205
Other investments	335	81	7
Other	906	1,006	892
Other revenues	**1,497**	**1,301**	**1,490**

9 Provision for credit losses

in	2018	2017	2016
Provision for credit losses (CHF million)			
Provision for loan losses	201	190	249
Provision for lending-related and other exposures	44	20	3
Provision for credit losses	**245**	**210**	**252**

10 Compensation and benefits

in	2018	2017	2016
Compensation and benefits (CHF million)			
Salaries and variable compensation	7,449	8,421	9,058
Social security	567	620	691
Other	848[1]	923	1,028
Compensation and benefits	**8,864**	**9,964**	**10,777**

1 Includes pension-related expenses of CHF 533 million in 2018 relating to service costs for defined benefit pension plans and employer contributions for defined contribution pension plans.

11 General and administrative expenses

in	2018	2017	2016
General and administrative expenses (CHF million)			
Occupancy expenses	855	935	999
IT, machinery, etc.	926	1,005	1,160
Provisions and losses	433	697	3,009
Travel and entertainment	310	299	316
Professional services	2,991	3,019	2,966
Amortization and impairment of other intangible assets	9	9	8
Other	1,544[1]	1,449	1,427
General and administrative expenses	**7,068**	**7,413**	**9,885**

1 Includes pension-related expenses/(credits) of CHF 32 million in 2018 relating to certain components of net periodic benefit costs for defined benefit plans.

12 Restructuring expenses

Restructuring expenses by segment

in	2018	2017	2016
Restructuring expenses by segment (CHF million)			
Swiss Universal Bank	101	59	60
International Wealth Management	115	70	54
Asia Pacific	61	63	53
Global Markets	242	150	217
Investment Banking & Capital Markets	84	42	28
Strategic Resolution Unit	21	57	121
Corporate Center	2	14	7
Adjustments [1]	(98)	(59)	(27)
Total restructuring expenses	**528**	**396**	**513**

1 Adjustments represent certain consolidating entries and balances, including those relating to items that are managed but are not legally owned by the Bank and vice versa.

Restructuring expenses by type

in	2018	2017	2016
Restructuring expenses by type (CHF million)			
Compensation and benefits-related expenses	233	286	358
of which severance expenses	157	188	218
of which accelerated deferred compensation	76	98	140
General and administrative-related expenses	295	110	155
Total restructuring expenses	**528**	**396**	**513**

In connection with the ongoing implementation of the revised Bank strategy, restructuring expenses of CHF 528 million, CHF 396 million and CHF 513 million were recognized in 2018, 2017 and 2016, respectively.

> Refer to “Note 12 – Restructuring expenses” in VI – Consolidated financial statements – Credit Suisse Group for further information.

Restructuring provision

	2018			2017			2016		
in	Compen-sation and benefits	General and administrative expenses	Total	Compen-sation and benefits	General and administrative expenses	Total	Compen-sation and benefits	General and administrative expenses	Total
Restructuring provision (CHF million)									
Balance at beginning of period	**191**	**110**	**301**	**217**	**94**	**311**	**187**	**12**	**199**
Net additional charges [1]	157	216	373	188	86	274	218	137	355
Utilization	(196)	(136)	(332)	(214)	(70)	(284)	(188)	(55)	(243)
Balance at end of period	**152**	**190**	**342**	**191**	**110**	**301**	**217**	**94**	**311**

1 The following items for which expense accretion was accelerated in 2018, 2017 and 2016 due to the restructuring of the Bank are not included in the restructuring provision: unsettled share-based compensation of CHF 55 million, CHF 67 million and CHF 34 million, respectively; unsettled cash-based deferred compensation of CHF 21 million, CHF 31 million and CHF 106 million, respectively, which remain classified as compensation liabilities; and

accelerated accumulated depreciation and impairment of CHF 79 million, CHF 24 million and CHF 18 million, respectively, which remain classified as premises and equipment. The settlement date for the unsettled share-based compensation remains unchanged at three years.

13 Revenue from contracts with customers

Contracts with customers and disaggregation of revenues

in	4Q18	3Q18	2Q18	1Q18
Contracts with customers (CHF million)				
Investment and portfolio management	866	856	850	843
Other securities business	18	21	21	23
Underwriting	330	422	513	470
Brokerage	647	605	748	812
Other services	513	470	476	490
Total revenues from contracts with customers	2,374	2,374	2,608	2,638

The table above differs from “Note 6 – Commissions and fees” as it includes only those contracts with customers that are in scope of ASC Topic 606 – Revenue from Contracts with Customers.

Contract balances

in / end of	4Q18	3Q18	2Q18	1Q18
Contract balances (CHF million)				
Contract receivables	789	883	824	745
Contract liabilities	56	66	63	67
Revenue recognized in the reporting period included in the contract liabilities balance at the beginning of period	16	7	13	13

The Bank did not recognize any revenues in the reporting period from performance obligations satisfied in previous periods.

In 2018, we recognized a net impairment loss on contract receivables of CHF 2 million in the fourth quarter, CHF 6 million in the third quarter and CHF 3 million in the second quarter. No impairment losses were recognized on contract receivables in the first quarter of 2018. The Bank did not recognize any contract assets during the fourth quarter, the third quarter, the second quarter and the first quarter of 2018.

> Refer to “Note 14 – Revenue from contracts with customers” in VI – Consolidated financial statements – Credit Suisse Group for further information.

Capitalized costs

The Bank has not incurred costs in obtaining a contract nor costs to fulfill a contract that are eligible for capitalization.

Remaining performance obligations

ASC Topic 606’s practical expedient allows the Bank to exclude from its remaining performance obligations disclosure any performance obligations which are part of a contract with an original expected duration of one year or less. Additionally, any variable consideration, for which it is probable that a significant reversal in the amount of cumulative revenue recognized will occur when the uncertainty associated with the variable consideration is subsequently resolved, is not subject to the remaining performance obligations disclosure because such variable consideration is not included in the transaction price (e.g., investment management fees). Upon review, the Bank determined that no material remaining performance obligations are in scope of the remaining performance obligations disclosure.

Impact of the adoption of ASC Topic 606

The impact of adoption of ASC Topic 606 on the Bank’s consolidated statement of operations resulted in increases in commissions and fees revenues of CHF 12 million, CHF 19 million, CHF 23 million and CHF 20 million, increases in other revenues of CHF 7 million, CHF 2 million, CHF 6 million and CHF 5 million, increases in general and administrative expenses of CHF 33 million, CHF 47 million, CHF 54 million and CHF 45 million and decreases in commission expenses of CHF 12 million, CHF 25 million, CHF 29 million and CHF 22 million for the fourth quarter, the third quarter, the second quarter and the first quarter of 2018, respectively. The impact of the adoption did not have a material impact on the Banks’s consolidated balance sheet or the Bank’s consolidated statement of cash flows in the fourth quarter, the third quarter, the second quarter and the first quarter of 2018.

14 Securities borrowed, lent and subject to repurchase agreements

end of	2018	2017
Securities borrowed or purchased under agreements to resell (CHF million)		
Central bank funds sold and securities purchased under resale agreements	77,770	70,009
Deposits paid for securities borrowed	39,325	45,337
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	**117,095**	**115,346**
Securities lent or sold under agreements to repurchase (CHF million)		
Central bank funds purchased and securities sold under repurchase agreements	20,305	20,606
Deposits received for securities lent	4,318	5,890
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	**24,623**	**26,496**

> Refer to “Note 15 – Securities borrowed, lent and subject to repurchase agreements” in VI – Consolidated financial statements – Credit Suisse Group for further information.

15 Trading assets and liabilities

end of	2018	2017
Trading assets (CHF million)		
Debt securities	62,216	72,826
Equity securities	46,517	55,822
Derivative instruments [1]	18,402	19,900
Other	5,292	8,226
Trading assets	**132,427**	**156,774**
Trading liabilities (CHF million)		
Short positions	26,948	24,478
Derivative instruments [1]	15,223	14,654
Trading liabilities	**42,171**	**39,132**

1 Amounts shown after counterparty and cash collateral netting.

end of	2018	2017
Cash collateral on derivative instruments – netted (CHF million) [1]		
Cash collateral paid	20,333	23,587
Cash collateral received	13,213	14,996
Cash collateral on derivative instruments – not netted (CHF million) [2]		
Cash collateral paid	7,057	5,142
Cash collateral received	6,903	8,644

1 Recorded as cash collateral netting on derivative instruments in Note 26 – Offsetting of financial assets and financial liabilities.

2 Recorded as cash collateral on derivative instruments in Note 22 – Other assets and other liabilities.

16 Investment securities

end of	2018	2017
Investment securities (CHF million)		
Securities available-for-sale	2,909	2,189
Total investment securities	**2,909**	**2,189**

Investment securities by type

	2018				2017			
end of	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
Investment securities by type (CHF million)								
Debt securities issued by the Swiss federal, cantonal or local governmental entities	0	0	0	0	197	13	0	210
Debt securities issued by foreign governments	821	7	0	828	1,215	21	0	1,236
Corporate debt securities	649	0	0	649	238	0	0	238
Residential mortgage-backed securities [1]	1,430	0	0	1,430	207	0	0	207
Commercial mortgage-backed securities	2	0	0	2	173	0	0	173
Debt securities available-for-sale	2,902	7	0	2,909	2,030	34	0	2,064
Banks, trust and insurance companies [2]	–	–	–	–	95	30	0	125
Equity securities available-for-sale [2]	–	–	–	–	95	30	0	125
Securities available-for-sale	**2,902**	**7**	**0**	**2,909**	**2,125**	**64**	**0**	**2,189**

1
Relate to the consolidation of RMBS securitization VIEs where the assets are carried at fair value under the fair value option as are the VIEs' liabilities recorded in long-term debt.

2
As a result of the adoption of ASU 2016-01, equity securities available-for-sale are now recognized in trading assets and no longer in investment securities. Refer to "Note 2 – Recently issued accounting standards" for further information.

Proceeds from sales, realized gains and realized losses from available-for-sale securities

	2018		2017		2016	
in	Debt securities	Equity securities[1]	Debt securities	Equity securities	Debt securities	Equity securities
Additional information (CHF million)						
Proceeds from sales	255	–	7	7	9	4
Realized gains	8	–	0	0	0	0

1

As a result of the adoption of ASU 2016-01 equity securities available-for-sale are now recognized in trading assets and no longer in investment securities. Refer to "Note 2 – Recently issued accounting standards" for further information.

Amortized cost, fair value and average yield of debt securities

	Debt securities available-for-sale		
end of	Amortized cost	Fair value	Average yield (in %)
2018 (CHF million)			
Due within 1 year	844	850	0.72
Due from 1 to 5 years	6	6	4.54
Due from 5 to 10 years	620	621	0.83
Due after 10 years	1,432	1,432	2.45
Total debt securities	**2,902**	**2,909**	**1.61**

450

17 Other investments

end of	2018	2017
Other investments (CHF million)		
Equity method investments	2,429	3,027
Equity securities (without a readily determinable fair value) [1]	1,202	1,283
of which at net asset value	526	734
of which at measurement alternative	227	175
of which at fair value	208	161
of which at cost less impairment	241	213
Real estate held-for-investment [2]	56	209
Life finance instruments [3]	1,137	1,374
Total other investments	**4,824**	**5,893**

1
Includes private equity, hedge funds and restricted stock investments as well as certain investments in non-marketable mutual funds for which the Bank has neither significant influence nor control over the investee.

2
As of the end of 2018 and 2017, real estate held for investment included foreclosed or repossessed real estate of CHF 3 million and CHF 41 million, respectively, all related to residential real estate.

3
Includes life settlement contracts at investment method and SPIA contracts.

Equity securities at measurement alternative – impairments and adjustments

in / end of	2018	Cumulative
Impairments and adjustments (CHF million)		
Impairments and downward adjustments	(4)	(7)

> Refer to “Note 34 – Financial instruments” for further information on such investments.

No impairments were recorded on real estate held-for-investments in 2018, while in 2017 and 2016, impairments of CHF 16 million and CHF 31 million, respectively, were recorded.

Accumulated depreciation related to real estate held-for-investment amounted to CHF 27 million, CHF 136 million and CHF 133 million for 2018, 2017 and 2016, respectively. Prior periods have been corrected.

> Refer to “Note 18 – Other investments” in VI – Consolidated financial statements – Credit Suisse Group for further information.

18 Loans, allowance for loan losses and credit quality

end of	2018	2017
Loans (CHF million)		
Mortgages	107,845	106,039
Loans collateralized by securities	42,034	42,016
Consumer finance	3,905	4,242
Consumer	153,784	152,297
Real estate	26,727	26,599
Commercial and industrial loans	86,165	81,792
Financial institutions	23,320	19,662
Governments and public institutions	3,893	3,874
Corporate & institutional	140,105	131,927
Gross loans	**293,889**	**284,224**
of which held at amortized cost	279,016	268,917
of which held at fair value	14,873	15,307
Net (unearned income)/deferred expenses	(113)	(106)
Allowance for loan losses	(901)	(881)
Net loans	**292,875**	**283,237**
Gross loans by location		
Switzerland	165,184	161,645
Foreign	128,705	122,579
Gross loans	**293,889**	**284,224**
Impaired loans		
Non-performing loans	1,203	1,048
Non-interest-earning loans	288	210
Total non-performing and non-interest-earning loans	1,491	1,258
Restructured loans	299	290
Potential problem loans	390	549
Total other impaired loans	689	839
Gross impaired loans	**2,180**	**2,097**

Allowance for loan losses

	2018			2017			2016		
	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total
Allowance for loan losses (CHF million)									
Balance at beginning of period	**220**	**661**	**881**	**216**	**721**	**937**	**216**	**649**	**865**
Net movements recognized in statements of operations	19	182	201	54	136	190	63	186	249
Gross write-offs	(85)	(184)	(269)	(60)	(242)	(302)	(86)	(192)	(278)
Recoveries	21	37	58	12	41	53	13	53	66
Net write-offs	(64)	(147)	(211)	(48)	(201)	(249)	(73)	(139)	(212)

Provisions for interest	11	19	30	(1)	14	13	10	8	18
Foreign currency translation impact and other adjustments, net	1	(1)	0	(1)	(9)	(10)	0	17	17
Balance at end of period	**187**	**714**	**901**	**220**	**661**	**881**	**216**	**721**	**937**
of which individually evaluated for impairment	146	461	607	179	474	653	172	527	699
of which collectively evaluated for impairment	41	253	294	41	187	228	44	194	238
Gross loans held at amortized cost (CHF million)									
Balance at end of period	**153,761**	**125,255**	**279,016**	**152,277**	**116,640**	**268,917**	**145,070**	**115,428**	**260,498**
of which individually evaluated for impairment [1]	677	1,503	2,180	632	1,465	2,097	662	1,798	2,460
of which collectively evaluated for impairment	153,084	123,752	276,836	151,645	115,175	266,820	144,408	113,630	258,038

1 Represents gross impaired loans both with and without a specific allowance.

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Purchases, reclassifications and sales

in	2018			2017			2016		
	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total	Consumer	Corporate & institutional	Total
Loans held at amortized cost (CHF million)									
Purchases [1]	0	2,163	**2,163**	0	3,381	**3,381**	30	3,405	**3,435**
Reclassifications from loans held-for-sale [2]	0	1	**1**	0	63	**63**	0	125	**125**
Reclassifications to loans held-for-sale [3]	1	2,351	**2,352**	0	7,407	**7,407**	1,632	2,768	**4,400**
Sales [3]	1	2,267	**2,268**	0	7,051	**7,051**	72	2,087	**2,159**

1
Includes drawdowns under purchased loan commitments.
2
Includes loans previously reclassified to held-for-sale that were not sold and were reclassified back to loans held-to-maturity.
3
All loans held at amortized cost which are sold are reclassified to loans held-for-sale on or prior to the date of the sale.

Gross loans held at amortized cost by internal counterparty rating

	Investment grade	Non-investment grade		
end of	AAA to BBB	BB to C	D	Total
2018 (CHF million)				
Mortgages	97,404	10,046	395	107,845
Loans collateralized by securities	39,281	2,676	77	42,034
Consumer finance	1,465	2,247	170	3,882
Consumer	138,150	14,969	642	153,761
Real estate	19,461	6,494	110	26,065
Commercial and industrial loans	41,352	37,633	1,256	80,241
Financial institutions	15,540	2,138	86	17,764
Governments and public institutions	1,132	53	0	1,185
Corporate & institutional	77,485	46,318	1,452	125,255
Gross loans held at amortized cost	**215,635**	**61,287**	**2,094**	**279,016**
Value of collateral [1]	192,617	47,999	1,444	242,060
2017 (CHF million)				
Mortgages	94,553	11,214	272	106,039
Loans collateralized by securities	38,387	3,530	99	42,016
Consumer finance	1,801	2,241	180	4,222
Consumer	134,741	16,985	551	152,277
Real estate	20,278	5,640	85	26,003
Commercial and industrial loans	39,610	35,250	1,287	76,147
Financial institutions	11,223	2,022	46	13,291
Governments and public institutions	1,124	74	1	1,199
Corporate & institutional	72,235	42,986	1,419	116,640
Gross loans held at amortized cost	**206,976**	**59,971**	**1,970**	**268,917**

Value of collateral [1]	189,092	49,271	1,409	239,772

1 Includes the value of collateral up to the amount of the outstanding related loans. For mortgages, the value of collateral is determined at the time of granting the loan and thereafter regularly reviewed according to the Bank's risk management policies and directives, with maximum review periods determined by property type, market liquidity and market transparency.

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Gross loans held at amortized cost – aging analysis

	Current	Past due					
end of		Up to 30 days	31-60 days	61-90 days	More than 90 days	Total	Total
2018 (CHF million)							
Mortgages	107,364	155	23	10	293	481	107,845
Loans collateralized by securities	41,936	21	0	0	77	98	42,034
Consumer finance	3,383	286	35	32	146	499	3,882
Consumer	152,683	462	58	42	516	1,078	153,761
Real estate	25,914	63	4	0	84	151	26,065
Commercial and industrial loans	78,919	378	96	82	766	1,322	80,241
Financial institutions	17,593	104	19	3	45	171	17,764
Governments and public institutions	1,172	13	0	0	0	13	1,185
Corporate & institutional	123,598	558	119	85	895	1,657	125,255
Gross loans held at amortized cost	**276,281**	**1,020**	**177**	**127**	**1,411**	**2,735**	**279,016**
2017 (CHF million)							
Mortgages	105,689	102	27	14	207	350	106,039
Loans collateralized by securities	41,867	37	0	0	112	149	42,016
Consumer finance	3,701	297	39	40	145	521	4,222
Consumer	151,257	436	66	54	464	1,020	152,277
Real estate	25,871	37	12	15	68	132	26,003
Commercial and industrial loans	74,966	429	40	201	511	1,181	76,147
Financial institutions	12,912	333	1	2	43	379	13,291
Governments and public institutions	1,197	1	0	0	1	2	1,199
Corporate & institutional	114,946	800	53	218	623	1,694	116,640
Gross loans held at amortized cost	**266,203**	**1,236**	**119**	**272**	**1,087**	**2,714**	**268,917**

Gross impaired loans by category

	Non-performing and non-interest earning loans			Other impaired loans			
end of	Non-performing	Non-interest-earning	Total	Re-structured	Potential problem	Total	Total
2018 (CHF million)							
Mortgages	304	12	316	34	72	106	422[1]
Loans collateralized by securities	62	13	75	0	3	3	78
Consumer finance	170	6	176	0	1	1	177
Consumer	536	31	567	34	76	110	677
Real estate	80	4	84	0	38	38	122

Commercial and industrial loans	547	211	758	265	272	537	1,295
Financial institutions	40	42	82	0	4	4	86
Corporate & institutional	667	257	924	265	314	579	1,503
Gross impaired loans	**1,203**	**288**	**1,491**	**299**	**390**	**689**	**2,180**
2017 (CHF million)							
Mortgages	236	17	253	13	66	79	332[1]
Loans collateralized by securities	96	16	112	0	2	2	114
Consumer finance	176	9	185	0	1	1	186
Consumer	508	42	550	13	69	82	632
Real estate	73	4	77	0	19	19	96
Commercial and industrial loans	465	121	586	277	458	735	1,321
Financial institutions	1	43	44	0	3	3	47
Governments and public institutions	1	0	1	0	0	0	1
Corporate & institutional	540	168	708	277	480	757	1,465
Gross impaired loans	**1,048**	**210**	**1,258**	**290**	**549**	**839**	**2,097**

1 As of December 31, 2018 and 2017, CHF 123 million and CHF 90 million, respectively, were related to consumer mortgages secured by residential real estate for which formal foreclosure proceedings according to local requirements of the applicable jurisdiction were in process.

As of December 31, 2018 and 2017, the Bank did not have any material commitments to lend additional funds to debtors whose loan terms had been modified in troubled debt restructurings.

Gross impaired loan details

	2018			2017		
end of	Recorded investment	Unpaid principal balance	Associated specific allowance	Recorded investment	Unpaid principal balance	Associated specific allowance
CHF million						
Mortgages	278	262	21	254	239	36
Loans collateralized by securities	77	63	35	111	97	49
Consumer finance	174	154	90	180	160	94
Consumer	529	479	146	545	496	179
Real estate	82	73	10	86	79	11
Commercial and industrial loans	761	730	400	984	947	426
Financial institutions	86	84	51	47	46	37
Governments and public institutions	0	0	0	1	1	0
Corporate & institutional	929	887	461	1,118	1,073	474
Gross impaired loans with a specific allowance	**1,458**	**1,366**	**607**	**1,663**	**1,569**	**653**
Mortgages	144	144	–	78	78	–
Loans collateralized by securities	1	1	–	3	3	–
Consumer finance	3	3	–	6	6	–
Consumer	148	148	–	87	87	–
Real estate	40	40	–	10	10	–
Commercial and industrial loans	534	534	–	337	337	–
Corporate & institutional	574	574	–	347	347	–
Gross impaired loans without specific allowance	**722**	**722**	**–**	**434**	**434**	**–**
Gross impaired loans	**2,180**	**2,088**	**607**	**2,097**	**2,003**	**653**
of which consumer	677	627	146	632	583	179
of which corporate & institutional	1,503	1,461	461	1,465	1,420	474

Gross impaired loan details (continued)

	2018			2017			2016		
in	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)	Average recorded investment	Interest income recognized	Interest income recognized (cash basis)
CHF million									
Mortgages	261	2	1	229	2	1	195	2	1
Loans collateralized by securities	92	1	1	116	1	1	153	1	1
Consumer finance	176	2	2	167	5	5	205	1	1
Consumer	529	5	4	512	8	7	553	4	3
Real estate	90	0	0	78	1	0	72	1	0
Commercial and industrial loans	905	14	5	1,151	17	5	1,029	10	4
Financial institutions	58	1	0	76	1	1	154	1	0
Governments and public institutions	0	0	0	5	0	0	5	0	0
Corporate & institutional	1,053	15	5	1,310	19	6	1,260	12	4
Gross impaired loans with a specific allowance	**1,582**	**20**	**9**	**1,822**	**27**	**13**	**1,813**	**16**	**7**
Mortgages	91	3	0	83	3	0	83	3	0
Loans collateralized by securities	1	0	0	7	0	0	24	0	0
Consumer finance	3	0	0	3	0	0	11	0	0
Consumer	95	3	0	93	3	0	118	3	0
Real estate	14	1	0	27	1	0	31	1	0
Commercial and industrial loans	292	16	1	271	11	1	307	7	1
Financial institutions	0	0	0	0	0	0	5	0	0
Governments and public institutions	0	0	0	0	0	0	5	0	0
Corporate & institutional	306	17	1	298	12	1	348	8	1
	401	**20**	**1**	**391**	**15**	**1**	**466**	**11**	**1**

Gross impaired loans without specific allowance									
Gross impaired loans	**1,983**	**40**	**10**	**2,213**	**42**	**14**	**2,279**	**27**	**8**
of which consumer	624	8	4	605	11	7	671	7	3
of which corporate & institutional	1,359	32	6	1,608	31	7	1,608	20	5

Restructured loans held at amortized cost

	2018			2017			201		
in CHF million, except where indicated	Number of contracts	Recorded investment – pre-modification	Recorded investment – post-modification	Number of contracts	Recorded investment – pre-modification	Recorded investment – post-modification	Number of contracts	Recorded investment – pre-modification	Recorde investmen pos modificati
Mortgages	5	29	29	0	0	0	0	0	
Commercial and industrial loans	13	182	160	15	123	119	16	201	20
Total	**18**	**211**	**189**	**15**	**123**	**119**	**16**	**201**	**20**

Restructured loans held at amortized cost that defaulted within 12 months from restructuring

	2018		2017		2016	
in CHF million, except where indicated	Number of contracts	Recorded investment	Number of contracts	Recorded investment	Number of contracts	Recorded investment
Mortgages	1	8	0	0	0	0
Commercial and industrial loans	8	76	1	48	0	0
Total	**9**	**84**	**1**	**48**	**0**	**0**

In 2018, the loan modifications of the Bank included extended loan repayment terms, including suspensions of loan amortizations, deferral of lease installments or pay-as-you-earn arrangements, the waiver of claims, interest rate concessions and the subordination of a loan.

> Refer to “Note 19 – Loans, allowance for loan losses and credit quality” in VI – Consolidated financial statements – Credit Suisse Group for further information.

19 Premises and equipment

end of	2018	2017
Premises and equipment (CHF million)		
Buildings and improvements	1,595	1,624
Land	347	346
Leasehold improvements	1,752	1,751
Software	5,715	5,583
Equipment	1,136	1,226
Premises and equipment	**10,545**	**10,530**[1]
Accumulated depreciation	(6,015)	(6,085)[1]
Total premises and equipment, net	**4,530**	**4,445**

1 Prior period has been corrected.

in	2018	2017	2016
Depreciation and impairment (CHF million)			
Depreciation	745	770	882
Impairment	8	33	25

20 Goodwill

2018	Swiss Universal Bank	International Wealth Management	Asia Pacific	Global Markets	Investment Banking & Capital Markets	Strategic Resolution Unit	Bank
Gross amount of goodwill (CHF million)							
Balance at beginning of period	**592**	**1,531**	**2,044**	**2,837**	**911**	**12**	**7,927**
Foreign currency translation impact	2	8	9	1	5	0	**25**
Other	3	(8)	0	0	0	0	**(5)**
Balance at end of period	**597**	**1,531**	**2,053**	**2,838**	**916**	**12**	**7,947**
Accumulated impairment (CHF million)							
Balance at beginning of period	**0**	**0**	**772**	**2,719**	**388**	**12**	**3,891**
Balance at end of period	**0**	**0**	**772**	**2,719**	**388**	**12**	**3,891**
Net book value (CHF million)							
Net book value	**597**	**1,531**	**1,281**	**119**	**528**	**0**	**4,056**
2017							
Gross amount of goodwill (CHF million)							
Balance at beginning of period	**605**	**1,598**	**2,090**	**2,842**	**933**	**12**	**8,080**
Foreign currency translation impact	(13)	(54)	(46)	(5)	(22)	0	**(140)**
Other	0	(13)	0	0	0	0	**(13)**
Balance at end of period	**592**	**1,531**	**2,044**	**2,837**	**911**	**12**	**7,927**
Accumulated impairment (CHF million)							
Balance at beginning of period	**0**	**0**	**772**	**2,719**	**388**	**12**	**3,891**
Balance at end of period	**0**	**0**	**772**	**2,719**	**388**	**12**	**3,891**

Net book value (CHF million)

Net book value	**592**	**1,531**	**1,272**	**118**	**523**	**0**	**4,036**

> Refer to “Note 21 – Goodwill” in VI – Consolidated financial statements – Credit Suisse Group for further information.

21 Other intangible assets

	2018			2017		
end of	Gross carrying amount	Accumu-lated amorti-zation	Net carrying amount	Gross carrying amount	Accumu-lated amorti-zation	Net carrying amount
Other intangible assets (CHF million)						
Trade names/trademarks	27	(26)	1	27	(26)	1
Client relationships	43	(20)	23	47	(18)	29
Other	(2)	2	0	5	(3)	2
Total amortizing other intangible assets	**68**	**(44)**	**24**	**79**	**(47)**	**32**
Non-amortizing other intangible assets	195	–	195	191	–	191
of which mortgage servicing rights, at fair value	163	–	163	158	–	158
Total other intangible assets	**263**	**(44)**	**219**	**270**	**(47)**	**223**

Additional information

in	2018	2017	2016
Aggregate amortization and impairment (CHF million)			
Aggregate amortization	8	7	8
Impairment	1	2	0

Estimated amortization

Estimated amortization (CHF million)	
2019	4
2020	3
2021	2
2022	2
2023	2

22 Other assets and other liabilities

end of	2018	2017
Other assets (CHF million)		
Cash collateral on derivative instruments	7,057	5,142
Cash collateral on non-derivative transactions	465	490
Derivative instruments used for hedging	33	50
Assets held-for-sale	6,744	8,300
of which loans [1]	6,630	8,130
of which real estate [2]	54	141
of which long-lived assets	60	29
Assets held for separate accounts	125	190
Interest and fees receivable	5,506	4,819
Deferred tax assets	4,887	5,457
Prepaid expenses	560	330
Failed purchases	1,283	1,327
Defined benefit pension and post-retirement plan assets	1,001	1,058
Other	4,482	3,793
Other assets	**32,143**	**30,956**

1

Included as of the end of 2018 and 2017 were CHF 687 million and CHF 534 million, respectively, in restricted loans, which represented collateral on secured borrowings.

2

As of the end of 2018 and 2017, real estate held-for-sale included foreclosed or repossessed real estate of CHF 13 million and CHF 8 million, respectively, of which CHF 10 million and CHF 5 million, respectively, were related to residential real estate.

end of	2018	2017
Other liabilities (CHF million)		
Cash collateral on derivative instruments	6,903	8,644
Cash collateral on non-derivative transactions	514	473
Derivative instruments used for hedging	8	99
Provisions	920	998
of which off-balance sheet risk	151	106
Restructuring liabilities	342	301
Liabilities held for separate accounts	125	190
Interest and fees payable	5,521	5,804
Current tax liabilities	907	687
Deferred tax liabilities	268	152
Failed sales	2,187	720
Defined benefit pension and post-retirement plan liabilities	518	541
Other	12,114	13,074
Other liabilities	**30,327**	**31,683**

23 Deposits

	2018			2017		
end of	Switzer-land	Foreign	Total	Switzer-land	Foreign	Total
Deposits (CHF million)						
Non-interest-bearing demand deposits	2,713	1,981	4,694	2,594	2,058	4,652
Interest-bearing demand deposits	126,416	28,010	154,426	125,685	32,965	158,650
Savings deposits	63,924	48	63,972	64,068	18	64,086
Time deposits	32,347	125,044	157,391[1]	33,051	117,275	150,326[1]
Total deposits	**225,400**	**155,083**	**380,483**[2]	**225,398**	**152,316**	**377,714**[2]
of which due to banks	–	–	15,220	–	–	15,411
of which customer deposits	–	–	365,263	–	–	362,303

The designation of deposits in Switzerland versus foreign deposits is based upon the location of the office where the deposit is recorded.

1 Included CHF 157,252 million and CHF 150,203 million as of December 31, 2018 and 2017, respectively, of the Swiss franc equivalent of individual time deposits greater than USD 100,000 in Switzerland and foreign offices.

2 Not included as of December 31, 2018 and 2017 were CHF 137 million and CHF 135 million, respectively, of overdrawn deposits reclassified as loans.

24 Long-term debt

end of	2018	2017
Long-term debt (CHF million)		
Senior	136,445	148,568
Subordinated	15,224	22,611
Non-recourse liabilities from consolidated VIEs	1,764	863
Long-term debt	**153,433**	**172,042**
of which reported at fair value	63,027	62,622
of which structured notes	48,064	51,465

end of	2018	2017
Structured notes by product (CHF million)		
Equity	30,698	32,059
Fixed income	13,128	14,471
Credit	3,898	4,678
Other	340	257
Total structured notes	**48,064**	**51,465**

Long-term debt by maturities

end of	2019	2020	2021	2022	2023	Thereafter	Total
Long-term debt (CHF million)							
Senior debt							
Fixed rate	15,798	9,359	7,759	11,321	6,041	29,899	80,177
Variable rate	10,001	9,953	8,142	5,690	3,605	18,877	56,268
Interest rates (range in %) [1]	0.0 – 8.8	0.1 – 22.5	0.1 – 6.7	0.1 – 8.2	0.1 – 4.2	0.2 – 7.1	–

Subordinated debt							
Fixed rate	0	1,797	19	1,552	5,781	5,858	15,007
Variable rate	211	0	0	0	6	0	217
Interest rates (range in %) [1]	2.7	3.3 – 7.0	3.3	7.1 – 7.5	3.9 – 8.0	3.5 – 8.0	–
Non-recourse liabilities from consolidated VIEs							
Fixed rate	346	235	23	0	0	0	604
Variable rate	114	2	4	6[2]	21[2]	1,013	1,160
Interest rates (range in %) [1]	2.9 – 7.2	3.8	9.3 – 10.3	–	–	1.2 – 10.7	–
Total long-term debt	**26,470**	**21,346**	**15,947**	**18,569**	**15,454**	**55,647**	**153,433**
of which structured notes	8,268	9,260	5,779	3,787	2,726	18,244	48,064

The maturity of perpetual debt is based on the earliest callable date. The maturity of all other debt is based on contractual maturity and includes certain structured notes that have mandatory early redemption features based on stipulated movements in markets or the occurrence of a market event. Within this population there are approximately CHF 0.5 billion of such notes with a contractual maturity of greater than one year that have an observable likelihood of redemption occurring within one year based on a modelling assessment.

1 Excludes structured notes for which fair value has been elected as the related coupons are dependent upon the embedded derivatives and prevailing market conditions at the time each coupon is paid.

2 Reflects equity linked notes, where the payout is not fixed.

> Refer to “Note 25 – Long-term debt” in VI – Consolidated financial statements – Credit Suisse Group for further information.

25 Accumulated other comprehensive income

	Gains/ (losses) on cash flow hedges	Cumulative translation adjustments	Unrealized gains/ (losses) on securities	Actuarial gains/ (losses)	Net prior service credit/ (cost)	Gains/ (losses) on liabilities relating to credit risk	AOCI
2018 (CHF million)							
Balance at beginning of period	**(51)**	**(13,248)**	**48**	**(381)**	**2**	**(2,302)**	**(15,932)**
Increase/(decrease)	(115)	(344)	(11)	(18)	(10)	1,394	896
Reclassification adjustments, included in net income/(loss)	108	19	(7)	49	0	48	217
Cumulative effect of accounting changes, net of tax	0	0	(21)	0	0	0	(21)
Total increase/(decrease)	(7)	(325)	(39)	31	(10)	1,442	1,092
Balance at end of period	**(58)**	**(13,573)**	**9**	**(350)**	**(8)**	**(860)**	**(14,840)**
2017 (CHF million)							
Balance at beginning of period	**(16)**	**(12,269)**	**61**	**(402)**	**2**	**(618)**	**(13,242)**
Increase/(decrease)	(61)	(1,009)	(13)	(40)	0	(1,716)	(2,839)
Reclassification adjustments, included in net income/(loss)	26	30	0	61	0	32	149
Total increase/(decrease)	(35)	(979)	(13)	21	0	(1,684)	(2,690)
Balance at end of period	**(51)**	**(13,248)**	**48**	**(381)**	**2**	**(2,302)**	**(15,932)**
2016 (CHF million)							
Balance at beginning of period	**6**	**(12,750)**	**60**	**(612)**	**2**	**–**	**(13,294)**
Increase/(decrease)	(6)	409	1	131	0	(1,082)	(547)
Reclassification adjustments, included in net income/(loss)	(16)	72	0	79	0	0	135
Cumulative effect of accounting changes, net of tax	0	0	0	0	0	464	464
Total increase/(decrease)	(22)	481	1	210	0	(618)	52
Balance at end of period	**(16)**	**(12,269)**	**61**	**(402)**	**2**	**(618)**	**(13,242)**

> Refer to “Note 27 – Tax” and “Note 30 – Pension and other post-retirement benefits” for income tax expense/(benefit) on the movements of accumulated other comprehensive income/(loss).

Details of significant reclassification adjustments

in	2018	2017	2016
Reclassification adjustments, included in net income/(loss) (CHF million)			
Cumulative translation adjustments			
Reclassification adjustments [1]	**19**	**30**	**72**

Actuarial gains/(losses)			
Amortization of recognized actuarial losses [2]	55	68	123
Tax expense/(benefit)	(6)	(7)	(44)
Net of tax	**49**	**61**	**79**

1
Includes net releases of CHF 21 million on the liquidation of Credit Suisse Securities (Johannesburg) Proprietary Limited in 2018 and net releases of CHF 17 million on the liquidation of Credit Suisse Principal Investments Limited and AJP Cayman Ltd. in 2016. In addition, it includes net releases of CHF 23 million on the sale of Credit Suisse (Monaco) S.A.M. in 2017 and net releases of CHF 59 million on the sale of Credit Suisse (Gibraltar) Limited in 2016. These were reclassified from cumulative translation adjustments and included in net income in other revenues.
2
These components are included in the computation of total benefit costs. Refer to "Note 30 – Pension and other post-retirement benefits" for further information.

26 Offsetting of financial assets and financial liabilities

> Refer to "Note 27 – Offsetting of financial assets and financial liabilities" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Offsetting of derivatives

	2018		2017	
end of	Derivative assets	Derivative liabilities	Derivative assets	Derivative liabilities
Gross derivatives subject to enforceable master netting agreements (CHF billion)				
OTC-cleared	5.5	4.8	2.5	1.8
OTC	63.4	60.7	83.3	79.0
Exchange-traded	0.2	0.3	0.1	0.2
Interest rate products	**69.1**	**65.8**	**85.9**	**81.0**
OTC-cleared	0.1	0.2	0.2	0.2
OTC	26.9	31.2	29.1	34.6
Foreign exchange products	**27.0**	**31.4**	**29.3**	**34.8**
OTC	10.2	10.3	11.7	12.0
Exchange-traded	11.8	14.2	9.2	9.8
Equity/index-related products	**22.0**	**24.5**	**20.9**	**21.8**
OTC-cleared	1.5	1.6	3.6	3.8
OTC	3.8	4.9	3.9	4.7
Credit derivatives	**5.3**	**6.5**	**7.5**	**8.5**
OTC	1.3	0.5	1.4	0.9
Other products [1]	**1.3**	**0.5**	**1.4**	**0.9**
OTC-cleared	7.1	6.6	6.3	5.8
OTC	105.6	107.6	129.4	131.2
Exchange-traded	12.0	14.5	9.3	10.0
Total gross derivatives subject to enforceable master netting agreements	**124.7**	**128.7**	**145.0**	**147.0**
Offsetting (CHF billion)				
OTC-cleared	(6.0)	(5.8)	(5.7)	(5.4)
OTC	(92.5)	(99.1)	(114.5)	(122.4)
Exchange-traded	(11.6)	(12.5)	(8.6)	(9.6)
Offsetting	**(110.1)**	**(117.4)**	**(128.8)**	**(137.4)**
of which counterparty netting	(96.9)	(96.9)	(113.8)	(113.8)
of which cash collateral netting	(13.2)	(20.5)	(15.0)	(23.6)
Net derivatives presented in the consolidated balance sheets (CHF billion)				
OTC-cleared	1.1	0.8	0.6	0.4
OTC	13.1	8.5	14.9	8.8
Exchange-traded	0.4	2.0	0.7	0.4
Total net derivatives subject to enforceable master netting agreements	**14.6**	**11.3**	**16.2**	**9.6**
Total derivatives not subject to enforceable master netting agreements [2]	**3.8**	**3.9**	**3.7**	**5.2**
Total net derivatives presented in the consolidated balance sheets	**18.4**	**15.2**	**19.9**	**14.8**
of which recorded in trading assets and	18.4	15.2	19.9	14.7

trading liabilities				
of which recorded in other assets and other liabilities	0.0	0.0	0.0	0.1

1 Primarily precious metals, commodity and energy products.

2 Represents derivatives where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

Offsetting of securities purchased under resale agreements and securities borrowing transactions

	2018			2017		
end of	Gross	Offsetting	Net book value	Gross	Offsetting	Net book value
Securities purchased under resale agreements and securities borrowing transactions (CHF billion)						
Securities purchased under resale agreements	86.6	(20.9)	65.7	89.4	(28.8)	60.6
Securities borrowing transactions	12.6	(2.2)	10.4	18.7	(5.0)	13.7
Total subject to enforceable master netting agreements	**99.2**	**(23.1)**	**76.1**	**108.1**	**(33.8)**	**74.3**
Total not subject to enforceable master netting agreements [1]	**41.0**	**–**	**41.0**	**41.0**	**–**	**41.0**
Total	**140.2**	**(23.1)**	**117.1**[2]	**149.1**	**(33.8)**	**115.3**[2]

1 Represents securities purchased under resale agreements and securities borrowing transactions where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

2 CHF 81,818 million and CHF 77,498 million of the total net amount as of the end of 2018 and 2017, respectively, are reported at fair value.

Offsetting of securities sold under repurchase agreements and securities lending transactions

	2018			2017		
end of	Gross	Offsetting	Net book value	Gross	Offsetting	Net book value
Securities sold under repurchase agreements and securities lending transactions (CHF billion)						
Securities sold under repurchase agreements	42.3	(22.5)	19.8	49.4	(31.5)	17.9
Securities lending transactions	4.2	(0.6)	3.6	7.1	(2.3)	4.8
Obligation to return securities received as collateral, at fair value	39.4	0.0	39.4	37.0	0.0	37.0
Total subject to enforceable master netting agreements	**85.9**	**(23.1)**	**62.8**	**93.5**	**(33.8)**	**59.7**
Total not subject to enforceable master netting agreements [1]	**3.5**	**–**	**3.5**	**4.9**	**–**	**4.9**
Total	**89.4**	**(23.1)**	**66.3**	**98.4**	**(33.8)**	**64.6**
of which securities sold under repurchase agreements and securities lending transactions	47.7	(23.1)	24.6[2]	60.3	(33.8)	26.5[2]
of which obligation to return securities received as collateral, at fair value	41.7	0.0	41.7	38.1	0.0	38.1

1

Represents securities sold under repurchase agreements and securities lending transactions where a legal opinion supporting the enforceability of netting in the event of default or termination under the agreement is not in place.

2

CHF 14,828 million and CHF 15,262 million of the total net amount as of the end of 2018 and 2017, respectively, are reported at fair value.

Amounts not offset in the consolidated balance sheets

	2018				2017			
end of	Net	Financial instruments[1]	Cash collateral received/ pledged[1]	Net exposure	Net	Financial instruments[1]	Cash collateral received/ pledged[1]	Net exposure
Financial assets subject to enforceable master netting agreements (CHF billion)								
Derivatives	14.6	4.5	0.1	10.0	16.2	5.2	0.0	11.0
Securities purchased under resale agreements	65.7	65.7	0.0	0.0	60.6	60.6	0.0	0.0
Securities borrowing transactions	10.4	10.0	0.0	0.4	13.7	13.2	0.0	0.5
Total financial assets subject to enforceable master netting agreements	**90.7**	**80.2**	**0.1**	**10.4**	**90.5**	**79.0**	**0.0**	**11.5**
Financial liabilities subject to enforceable master netting agreements (CHF billion)								
Derivatives	11.3	1.4	0.0	9.9	9.6	2.1	0.0	7.5
Securities sold under repurchase agreements	19.8	19.7	0.1	0.0	17.9	17.9	0.0	0.0
Securities lending transactions	3.6	3.2	0.0	0.4	4.8	4.4	0.0	0.4
Obligation to return securities received as collateral, at fair value	39.4	34.3	0.0	5.1	37.0	32.7	0.0	4.3
Total financial liabilities subject to enforceable master netting agreements	**74.1**	**58.6**	**0.1**	**15.4**	**69.3**	**57.1**	**0.0**	**12.2**

1

The total amount reported in financial instruments (recognized financial assets and financial liabilities and non-cash financial collateral) and cash collateral is limited to the amount of the related instruments presented in the consolidated balance sheets and therefore any over-collateralization of these positions is not included.

27 Tax

Details of current and deferred taxes

in	2018	2017	2016
Current and deferred taxes (CHF million)			
Switzerland	126	76	135
Foreign	416	420	499
Current income tax expense	**542**	**496**	**634**
Switzerland	266	285	(167)
Foreign	326	2,000	(67)
Deferred income tax expense/(benefit)	**592**	**2,285**	**(234)**
Income tax expense	**1,134**	**2,781**	**400**
Income tax expense/(benefit) reported in shareholder's equity related to:			
Gains/(losses) on cash flow hedges	(28)	(24)	(6)
Cumulative translation adjustment	(7)	1	(4)
Unrealized gains/(losses) on securities	(5)	1	1
Actuarial gains/(losses)	7	(7)	87
Share-based compensation and treasury shares	0	0	106

Reconciliation of taxes computed at the Swiss statutory rate

in	2018	2017	2016
Income/(loss) before taxes (CHF million)			
Switzerland	1,927	1,648	1,955
Foreign	929	(95)	(4,444)
Income/(loss) before taxes	**2,856**	**1,553**	**(2,489)**
Reconciliation of taxes computed at the Swiss statutory rate (CHF million)			
Income tax expense/(benefit) computed at the statutory tax rate of 22%	628	342	(548)
Increase/(decrease) in income taxes resulting from			
Foreign tax rate differential	89	(92)	(559)
Non-deductible amortization of other intangible assets and goodwill impairment	3	0	1
Other non-deductible expenses	455	354	1,533
Additional taxable income	5	0	87
Lower taxed income	(187)	(272)	(216)
(Income)/loss taxable to noncontrolling interests	10	7	(10)
Changes in tax law and rates	(2)	2,095	145
Changes in deferred tax valuation allowance	(115)	88	76
Change in recognition of outside basis difference	(32)	(12)	211
Tax deductible impairments of Swiss subsidiary investments	(65)	88	(68)
(Windfall tax benefits)/shortfall tax charges on share-based compensation	10	91	–
Other	335	92	(252)
Income tax expense	**1,134**	**2,781**	**400**

2018

Foreign tax rate differential of CHF 89 million reflected a foreign tax expense mainly driven by profits made in

higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to profits incurred in lower tax jurisdictions, mainly in Singapore. The foreign tax rate expense of CHF 742 million comprised not only the foreign tax expense based on statutory tax rates but also the tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 455 million included the impact of CHF 325 million relating to non-deductible interest expenses (including a contingency accrual of CHF 92 million), CHF 49 million relating to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 15 million relating to non-deductible fines, and other various smaller non-deductible expenses.

Lower taxed income of CHF 187 million included a tax benefit of CHF 66 million related to non-taxable dividend income, CHF 48 million related to non-taxable life insurance income, CHF 33 million related to concessionary and lower taxed income, CHF 23 million related to exempt income, and various smaller items.

Changes in deferred tax valuation allowances of CHF 115 million included a tax benefit from the release of valuation allowances of CHF 191 million, mainly in respect of two of the Bank's operating entities in the UK. Also included was the net impact of the increase in valuation allowances on deferred tax assets of CHF 76 million, mainly in respect of one of the Bank's operating entities in Switzerland.

Other of CHF 335 million included CHF 202 million relating to the tax impact of transitional adjustments arising on first adoption of IFRS 9 for own credit movements, CHF 65 million relating to the US Base Erosion and Anti-abuse Tax (BEAT), CHF 56 million relating to the net re-assessment of deferred tax balances in respect of one of the Bank's operating entities in Switzerland, CHF 26 million relating to the increase of tax contingency accruals, and other smaller balances. This was partially offset by prior year adjustments of CHF 76 million.

2017

Foreign tax rate differential of CHF 92 million reflected a foreign tax benefit mainly driven by losses made in higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to losses incurred in lower tax jurisdictions, mainly in Guernsey. The foreign tax rate expense of CHF 2,420 million comprised not only the foreign tax benefit based on statutory tax rates but also the tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 354 million included the impact of CHF 217 million relating to non-deductible interest expenses (including a contingency accrual of CHF 155 million), CHF 57 million related to the non-deductible portion of the litigation provisions and settlement charges, CHF 27 million related to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 10 million related to non-deductible foreign exchange losses, and other various smaller non-deductible expenses of CHF 43 million.

Lower taxed income of CHF 272 million included a tax benefit of CHF 86 million related to non-taxable life insurance income, CHF 78 million related to non-taxable dividend income, CHF 31 million in respect of income taxed at rates lower than the statutory tax rate, CHF 25 million related to exempt income, and various smaller items.

Changes in tax law and rates of CHF 2,095 million mainly reflected the impact of the US tax reform enacted on December 22, 2017 which resulted in a reduction of the federal corporate income tax rate from 35% to 21%, effective as of January 1, 2018. The US tax reform required a re-assessment of the deferred tax assets.

Changes in deferred tax valuation allowances of CHF 88 million included the net impact of the increase in valuation allowances on deferred tax assets of CHF 285 million, mainly in respect of two of the Bank's operating entities in the UK. Also included was a tax benefit from the release of valuation allowances of CHF 197 million, mainly in respect of two of the Bank's operating entities, one in the UK and one in Switzerland.

Other of CHF 92 million included a tax expense of CHF 231 million relating to the net re-assessment of deferred tax balances in respect of two of the Bank's operating entities in Switzerland reflecting the establishment of Credit Suisse Asset Management & Investor Services (Schweiz) Holding AG, the impact of adverse earnings mix of the current year and changes in forecasted future profitability, CHF 26 million relating to the increase of tax contingency accruals and CHF 17 million from prior year adjustments, partially offset by CHF 85 million relating to tax deductibility of previously taken litigation accruals and CHF 49 million from a favorable court decision. The remaining balance included various smaller items.

2016

Foreign tax rate differential of CHF 559 million reflected a foreign tax benefit mainly driven by losses made in higher tax jurisdictions, such as the US, partially offset by foreign tax rate differential related to profits earned in lower tax jurisdictions, mainly the Bahamas. The foreign tax rate expense of CHF 432 million was not only impacted by the foreign tax benefit based on statutory tax rates but also by tax impacts related to additional reconciling items as explained below.

Other non-deductible expenses of CHF 1,533 million included the impact of CHF 983 million related to the non-deductible portion of the litigation provisions and settlement charges, CHF 420 million relating to non-deductible interest expenses, CHF 52 million related to non-deductible bank levy costs and other non-deductible compensation expenses and management costs, CHF 31 million related to non-deductible foreign exchange losses, CHF 25 million related to onerous lease provisions, and other various smaller non-deductible expenses of CHF 22 million.

Lower taxed income of CHF 216 million included a tax benefit of CHF 71 million related to non-taxable life insurance income, CHF 58 million related to non-taxable dividend income, CHF 19 million in respect of income taxed at rates lower than the statutory tax rate, CHF 11 million related to exempt income, and various smaller items.

Changes in tax law and rates of CHF 145 million reflected a tax expense of CHF 139 million caused by the reduction of deferred tax assets from the enactment of UK corporation tax rate changes, and CHF 6 million related to changes in other countries.

Changes in deferred tax valuation allowances of CHF 76 million included the net impact of the increase in valuation allowances on deferred tax assets of CHF 308 million, mainly in respect of four of the Bank's operating entities, two in the UK, one in Hong Kong and one in Switzerland. Additionally, 2016 included an accrual of valuation allowances of CHF 91 million for previously recognized deferred tax assets in respect of one of the Bank's operating entities in Hong Kong. Also included was a tax benefit from the release of valuation allowances of CHF 193 million, mainly in respect of one of the Bank's operating entities in the UK. The change in UK corporation tax rates caused a release of valuation allowances of CHF 130 million in respect of four of the Bank's operating entities in the UK.

Change in recognition of outside basis difference of CHF 211 million reflected a tax expense related to the expected reversal of the outside basis differences relating to Swiss subsidiary investments.

Other of CHF 252 million included a tax benefit of CHF 340 million relating to the re-assessment of deferred tax balances in Switzerland reflecting changes in forecasted future profitability and CHF 33 million from prior year adjustments, partially offset by CHF 89 million tax litigation expense and associated interest and penalties relating to two Italian income tax matters which have been resolved as part of an agreement with the Italian tax authorities, and CHF 22 million relating to the increase of tax contingency accruals. The remaining balance included various smaller items.

As of December 31, 2018, the Bank had accumulated undistributed earnings from foreign subsidiaries of CHF 9.1 billion compared to CHF 4.6 billion as of December 31, 2017. The increase compared to the end of 2017 reflected a reserve transfer in one of the Bank's entities. No deferred tax liability was recorded in respect of those amounts as these earnings are considered indefinitely reinvested. It is not practicable to estimate the amount of unrecognized deferred tax liabilities for these undistributed foreign earnings.

Deferred tax assets and liabilities

end of	2018	2017
Deferred tax assets and liabilities (CHF million)		
Compensation and benefits	944	1,095
Loans	192	330
Investment securities	1,986	1,039
Provisions	582	441
Derivatives	65	96
Real estate	278	333
Net operating loss carry-forwards	6,142	6,762
Goodwill and intangible assets	497	664
Other	197	127
Gross deferred tax assets before valuation allowance	**10,883**	**10,887**
Less valuation allowance	(3,957)	(4,224)
Gross deferred tax assets net of valuation allowance	**6,926**	**6,663**
Compensation and benefits	(257)	(278)
Loans	(87)	(36)
Investment securities	(1,170)	(197)
Provisions	(368)	(519)
Business combinations	(1)	(1)
Derivatives	(214)	(154)
Real estate	(56)	(54)
Other	(154)	(119)
Gross deferred tax liabilities	**(2,307)**	**(1,358)**
Net deferred tax assets	**4,619**	**5,305**
of which deferred tax assets	4,887	5,457

of which net operating losses	1,632	2,200
of which deductible temporary differences	3,255	3,257
of which deferred tax liabilities	(268)	(152)

The decrease in net deferred tax assets from 2017 to 2018 of CHF 686 million was primarily due to the impact of CHF 691 million related to current year earnings and CHF 50 million from the re-measurement of deferred tax balances in Switzerland. These decreases were partially offset by the tax impacts directly recorded in equity and other comprehensive income, mainly related to the pension plan re-measurement and other tax recorded directly in equity of CHF 32 million and foreign exchange translation gains of CHF 23 million, which are included within the currency translation adjustments recorded in accumulated other comprehensive income/(loss) (AOCI).

Due to uncertainty concerning its ability to generate the necessary amount and mix of taxable income in future periods, the Bank recorded a valuation allowance against deferred tax assets in the amount of CHF 4.0 billion as of December 31, 2018, compared to CHF 4.2 billion as of December 31, 2017.

Amounts and expiration dates of net operating loss carry-forwards

end of 2018	Total
Net operating loss carry-forwards (CHF million)	
Due to expire within 1 year	106
Due to expire within 2 to 5 years	6,545
Due to expire within 6 to 10 years	828
Due to expire within 11 to 20 years	6,798
Amount due to expire	**14,277**
Amount not due to expire	18,618
Total net operating loss carry-forwards	**32,895**

Movements in the valuation allowance

in	2018	2017	2016
Movements in the valuation allowance (CHF million)			
Balance at beginning of period	**4,224**	**4,168**	**3,898**
Net changes	(267)	56	270
Balance at end of period	**3,957**	**4,224**	**4,168**

Tax benefits associated with share-based compensation

in	2018	2017	2016
Tax benefits (CHF million)			
Tax benefits recorded in the consolidated statements of operations [1]	236	310	390
Windfall tax benefits/(shortfall tax charges) recorded in additional paid-in capital [2]	–	–	(110)

1 Calculated at the statutory tax rate before valuation allowance considerations.

2 As a result of the adoption of ASU 2016-09 windfall tax benefits and shortfall tax charges on share-based compensation are recognized in the consolidated statements of operations and no longer in additional paid-in capital.

> Refer to “Note 28 – Employee deferred compensation” for further information on share-based compensation.

Uncertain tax positions

Reconciliation of the beginning and ending amount of gross unrecognized tax benefits

in	2018	2017	2016
Movements in gross unrecognized tax benefits (CHF million)			
Balance at beginning of period	**481**	**401**	**360**
Increases in unrecognized tax benefits as a result of tax positions taken during a prior period	10	131	52
Decreases in unrecognized tax benefits as a result of tax positions taken during a prior period	(2)	(95)	(43)
Increases in unrecognized tax benefits as a result of tax positions taken during the current period	112	117	17
Decreases in unrecognized tax benefits relating to settlements with tax authorities	0	(73)	(2)
Reductions to unrecognized tax benefits as a result of a lapse of the applicable statute of limitations	(4)	(3)	(7)

Other (including foreign currency translation)	(23)	3	24
Balance at end of period	**574**	**481**	**401**
of which, if recognized, would affect the effective tax rate	574	481	401

Interest and penalties in	2018	2017	2016
Interest and penalties (CHF million)			
Interest and penalties recognized in the consolidated statements of operations	(28)	30	2
Interest and penalties recognized in the consolidated balance sheets	87	115	85

Interest and penalties are reported as tax expense. The Bank is currently subject to ongoing tax audits, inquiries and litigation with the tax authorities in a number of jurisdictions, including Brazil, the Netherlands, the US, the UK and Switzerland. Although the timing of completion is uncertain, it is reasonably possible that some of these will be resolved within 12 months of the reporting date. It is reasonably possible that there will be a decrease of between zero and CHF 26 million in unrecognized tax benefits within 12 months of the reporting date.

The Bank remains open to examination from federal, state, provincial or similar local jurisdictions from the following years onward in these major countries: Brazil – 2014; the UK – 2012; Switzerland – 2011; the US – 2010; and the Netherlands – 2006.

> Refer to “Note 28 – Tax” in VI – Consolidated financial statements – Credit Suisse Group for further information.

28 Employee deferred compensation

The following tables show the compensation expense for deferred compensation awards granted in 2018 and prior years that was recognized in the consolidated statements of operations during 2018, 2017 and 2016, the total shares delivered, the estimated unrecognized compensation expense for deferred compensation awards granted in 2018 and prior years outstanding as of December 31, 2018 and the remaining requisite service period over which the estimated unrecognized compensation expense will be recognized. The recognition of compensation expense for the deferred compensation awards granted in February 2019 began in 2019 and thus had no impact on the 2018 consolidated financial statements.

> Refer to “Note 29 – Employee deferred compensation” in VI – Consolidated financial statements – Credit Suisse Group for further information.

Deferred compensation expense

in	2018	2017	2016
Deferred compensation expense (CHF million)			
Share awards	512	519	624
Performance share awards	371	342	370
Contingent Capital Awards	149	277	234
Contingent Capital share awards	1	17	30
Capital Opportunity Facility awards	12	14	13
Plus Bond awards [1]	–	–	5
2008 Partner Asset Facility awards [2]	–	7	13
Other cash awards	257	417	331
Total deferred compensation expense	**1,302**	**1,593**	**1,620**
Total shares delivered (million)			
Total shares delivered	45.0	41.2	41.5

1 Compensation expense primarily relates to mark-to-market changes of the underlying assets of the Plus Bonds and the amortization of the voluntary Plus Bonds elected in the first quarter of 2013 and expensed over a three-year vesting period.

2 Compensation expense mainly includes the change in the underlying fair value of the indexed assets during the period.

Estimated unrecognized deferred compensation

end of	2018
Estimated unrecognized compensation expense (CHF million)	
Share awards	455
Performance share awards	161
Contingent Capital Awards	136
Other cash awards	160
Total	**912**
Aggregate remaining weighted-average requisite service period (years)	
Aggregate remaining weighted-average requisite service period	1.3

Does not include the estimated unrecognized compensation expense relating to grants made in 2019 for 2018.

Share awards

On February 15, 2019, the Bank granted 54.0 million share awards with a total value of CHF 620 million. The estimated unrecognized compensation expense of CHF 611 million was determined based on the fair value of the awards on the grant date, includes the current estimated future forfeitures and will be recognized over the vesting period, subject to early retirement rules.

Share awards granted for previous years

For compensation year	2018	2017	2016
Shares awarded (million)	54.0	33.1	37.6
Value of shares awarded (CHF million)	620	596	563

On February 15, 2019, the Bank granted 2.7 million blocked shares with a total value of CHF 31 million that vested immediately upon grant, have no future service requirements and were attributed to services performed in 2018.

Blocked share awards granted for previous years

For compensation year	2018	2017	2016
Blocked shares awarded (million)	2.7	1.9	2.4
Value of shares awarded (CHF million)	31	35	37

Share award activities

	2018		2017		2016	
	Number of share awards in million	Weighted-average grant-date fair value in CHF	Number of share awards in million	Weighted-average grant-date fair value in CHF	Number of share awards in million	Weighted-average grant-date fair value in CHF
Share awards						
Balance at beginning of period	**79.9**	**15.77**	**70.8**	**18.78**	**79.0**	**21.56**
Granted	40.5	16.97	51.5[1]	14.54	38.1	17.59
Settled	(39.0)	16.02	(36.8)	19.75	(37.2)	22.68
Forfeited	(4.3)	16.33	(5.6)[2]	16.47	(9.1)	21.88
Balance at end of period	**77.1**	**16.23**	**79.9**	**15.77**	**70.8**	**18.78**
of which vested	8.4	–	7.8	–	8.1	–
of which unvested	68.7	–	72.1	–	62.7	–

1
Includes an adjustment for share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional shares granted.

2
Includes the transfer of the share-based awards of Neue Aargauer Bank AG, BANK-now AG and Swisscard AECS GmbH.

Performance share awards

On February 15, 2019, the Bank granted 44.6 million performance share awards with a total value of CHF 515 million. The estimated unrecognized compensation expense of CHF 505 million was determined based on the fair value of the awards on the grant date, includes the current estimated outcome of the relevant performance criteria and estimated future forfeitures and will be recognized over the vesting period, subject to early retirement rules.

Performance share awards granted for previous years

For compensation year	2018	2017	2016
Performance shares awarded (million)	44.6	25.6	29.6
Value of performance shares awarded (CHF million)	515	462	449

Performance share award activities

	2018		2017		2016	
	Number of performance share awards in million	Weighted-average grant-date fair value in CHF	Number of performance share awards in million	Weighted-average grant-date fair value in CHF	Number of performance share awards in million	Weighted-average grant-date fair value in CHF
Performance share awards						
Balance at beginning of period	**52.8**	**15.88**	**48.1**	**19.12**	**55.5**	**21.01**
Granted	25.6	16.98	31.1[1]	14.41	21.3	18.62
Settled	(25.6)	16.07	(23.6)	20.41	(26.4)	22.66

Forfeited	(2.8)	16.26	(2.8)[2]	16.37	(2.3)	18.98
Balance at end of period	**50.0**	**16.33**	**52.8**	**15.88**	**48.1**	**19.12**
of which vested	5.2	–	6.6	–	6.8	–
of which unvested	44.8	–	46.2	–	41.3	–

1
Includes an adjustment for performance share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional performance shares granted.

2
Includes the transfer of the share-based awards of Neue Aargauer Bank AG, BANK-now AG and Swisscard AECS GmbH.

Contingent Capital Awards

On February 15, 2019, the Bank awarded CHF 289 million of Contingent Capital Awards (CCA) that will be expensed over the vesting period. The estimated unrecognized compensation expense of CHF 264 million was determined based on the fair value of the awards on the grant date and includes the current estimated outcome of the relevant performance criteria, the estimated future forfeitures and the expected semi-annual cash payments of interest equivalents and will be recognized over the vesting period.

Contingent Capital Awards granted for previous years

For compensation year	2018	2017	2016
CCA awarded (CHF million)	289	233	228

Contingent Capital share awards

In March 2016, the Bank executed a voluntary exchange offer, under which employees had the right to voluntarily convert all or a portion of their respective CCA into Contingent Capital share awards at a conversion price of CHF 14.57. CCA holders elected to convert CHF 213 million of their CCA into Contingent Capital share awards during the election period. This fair value represented an approximate conversion rate of 15%. Each Contingent Capital share award had a grant-date fair value of CHF 14.45 and contains the same contractual term, vesting period, performance criteria and other terms and conditions as the original CCA.

Contingent Capital share award activities

	2018	2017	2016
Contingent Capital share awards			
Balance at beginning of period	**7.5**	**12.8**	**–**
Granted	0.0	0.3[1]	15.6
Settled	(4.6)	(4.9)	(2.5)
Forfeited	(0.2)	(0.7)[2]	(0.3)
Balance at end of period	**2.7**	**7.5**	**12.8**
of which vested	0.7	1.3	1.0
of which unvested	2.0	6.2	11.8

1 Includes an adjustment for Contingent Capital share awards granted in the second quarter of 2017 to compensate for the proportionate dilution of Group shares resulting from the rights offering approved on May 18, 2017. The number of deferred share-based awards held by each individual was increased by 3.64%. The terms and conditions of the adjusted shares were the same as the existing share-based awards, thereby ensuring that holders of the awards were neither advantaged nor disadvantaged by the additional Contingent Capital shares granted.

2 Includes the transfer of the share-based awards of Neue Aargauer Bank AG, BANK-now AG and Swisscard AECS GmbH.

2008 Partner Asset Facility awards

During 2017, the final settlement of the outstanding PAF awards of CHF 789 million was made.

Other cash awards

During 2018, the Bank granted deferred fixed cash compensation of CHF 98 million to certain employees in the Americas. This compensation will be expensed in the Global Markets, Investment Banking & Capital Markets and International Wealth Management divisions over a three-year vesting period from the grant date. Amortization of this compensation totaled CHF 52 million in 2018.

During 2017, the Bank granted deferred cash retention awards of CHF 65 million relating to the reorganization of the Asia Pacific business. These awards will be expensed over a two-year vesting period from the grant date. Amortization of these awards totaled CHF 28 million in 2017 and was recognized in the Corporate Center. The Bank granted deferred fixed cash awards of CHF 90 million to certain employees in the US. These awards will be expensed in the Global Markets, Investment Banking & Capital Markets and International Wealth Management divisions over a three-year vesting period from the grant date. Amortization of these awards totaled CHF 48 million in 2017.

In 2016, the Bank granted deferred share and cash retention awards of CHF 249 million relating to the reorganization of the Global Markets and Investment Banking & Capital Markets businesses. These awards will be expensed over a vesting period of up to seven years from the grant date. Amortization of these awards in 2016 of CHF 118 million was recognized in the Corporate Center.

29 Related parties

The Group owns all of the Bank's outstanding voting registered shares. The Bank is involved in significant financing and other transactions with subsidiaries of the Group. The Bank generally enters into these transactions in the ordinary course of business and believes that these transactions are generally on market terms that could be obtained from unrelated third parties.

> Refer to "Note 30 – Related parties" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Related party assets and liabilities

end of	2018	2017
Assets (CHF million)		
Net loans	5,305	4,100
Other assets	508	208
Total assets	**5,813**	**4,308**
Liabilities (CHF million)		
Due to banks/customer deposits	1,338	1,141
Short-term borrowings	493	489
Long-term debt	23,456	15,612
Other liabilities	1,122	851
Total liabilities	**26,409**	**18,093**

Related party revenues and expenses

in	2018	2017	2016
Revenues (CHF million)			
Interest and dividend income	10	2	(2)
Interest expense	(924)	(574)	(280)
Net interest income	**(914)**	**(572)**	**(282)**
Commissions and fees	87	46	41
Other revenues	72	67	119
Net revenues	**(755)**	**(459)**	**(122)**
Expenses (CHF million)			
Total operating expenses	**1,642**	**1,044**[1]	**152**

1 Prior period has been corrected.

Related party guarantees

end of	2018	2017
Guarantees (CHF million)		
Credit guarantees and similar instruments	5	4
Total guarantees	**5**	**4**

Executive Board and Board of Directors loans

	2018	2017	2016
Loans to members of the Executive Board (CHF million)			
Balance at beginning of period	**26**[1]	**25**	**26**
Additions	8	3	6
Reductions	(1)	(2)	(7)
Balance at end of period	**33**[1]	**26**	**25**
Loans to members of the Board of Directors (CHF million)			
Balance at beginning of period	**11**[2]	**10**	**8**
Additions	0	1	3
Reductions	(1)	0	(1)

Balance at end of period	**10**[2]	**11**	**10**

1
The number of individuals with outstanding loans at the beginning and the end of the year was seven and eight, respectively.
2
The number of individuals with outstanding loans at the beginning and the end of the year was four.

Liabilities due to own pension plans

Liabilities due to the Bank's own defined benefit pension plans as of December 31, 2018 and 2017 of CHF 735 million and CHF 336 million, respectively, were reflected in various liability accounts in the Bank's consolidated balance sheets.

30 Pension and other post-retirement benefits

The Bank participates in a defined benefit pension plan sponsored by the Group and has defined contribution pension plans, single-employer defined benefit pension plans and other post-retirement defined benefit plans. The Bank's principal plans are located in Switzerland, the US and the UK.

> Refer to "Note 31 – Pension and other post-retirement benefits" in VI – Consolidated financial statements – Credit Suisse Group for further information on pension and other post-retirement benefits.

Defined contribution pension plans

The Bank contributes to various defined contribution pension plans primarily in the US and the UK as well as other countries throughout the world. During 2018, 2017 and 2016, the Bank contributed to these plans and recognized as expense CHF 140 million, CHF 156 million and CHF 160 million, respectively.

Defined benefit pension and other post-retirement benefit plans

Defined benefit pension plans

Group pension plan

The Bank covers pension requirements for its employees in Switzerland by participating in a defined benefit pension plan sponsored by the Group (Group plan), the Group's most significant defined benefit pension plan. The Group plan provides benefits in the event of retirement, death and disability. Various legal entities within the Group participate in the Group plan, which is set up as an independent trust domiciled in Zurich. Benefits in the Group plan are determined on the basis of the accumulated employer and employee contributions and accumulated interest credited. In accordance with US GAAP, the Group accounts for the Group plan as a single-employer defined benefit pension plan and uses the projected unit credit actuarial method to determine the net periodic benefit costs, the PBO and the accumulated benefit obligation (ABO). The Bank accounts for the defined benefit pension plan sponsored by the Group as a multi-employer pension plan because other legal entities within the Group also participate in the Group plan and the assets contributed by the Bank are not segregated into a separate account or restricted to provide benefits only to employees of the Bank. The assets contributed by the Bank are commingled with the assets contributed by the other legal entities of the Group and can be used to provide benefits to any employee of any participating legal entity. The Bank's contributions to the Group plan comprise 88% of the total assets contributed to the Group plan by all participating legal entities on an annual basis.

The Bank accounts for the Group plan on a defined contribution basis whereby it only recognizes the amounts required to be contributed to the Group plan during the period as net periodic pension expense and only recognizes a liability for any contributions due and unpaid. No other expenses or balance sheet amounts related to the Group plan were recognized by the Bank. In the savings section of the Group plan, the Bank's contribution varies between 7.5% and 25.0% of the pensionable salary depending on the employees' age.

During 2018, 2017 and 2016, the Bank contributed and recognized as expense CHF 377 million, CHF 379 million and CHF 438 million to the Group plan, respectively. The Bank expects to contribute CHF 323 million to the Group plan during 2019.

International pension plans

Various defined benefit pension plans cover the Bank's employees outside Switzerland. These plans provide benefits in the event of retirement, death, disability or termination of employment. Retirement benefits under the plans depend on age, contributions and salary. The Bank's principal defined benefit pension plans outside Switzerland are located in the US and in the UK. Both plans are funded, closed to new participants and have ceased accruing new benefits. Smaller defined benefit pension plans, both funded and unfunded, are operated in other locations.

Other post-retirement defined benefit plans

In the US, the Bank's defined benefit plans provide post-retirement benefits other than pension benefits that primarily focus on health and welfare benefits for certain retired employees. In exchange for the current services provided by the employee, the Bank promises to provide health and welfare benefits after the employee retires. The Bank's obligation for that compensation is incurred as employees render the services necessary to earn their post-retirement benefits.

Net periodic benefit costs of defined benefit plans

The net periodic benefit costs for defined benefit pension and other post-retirement defined benefit plans are the costs of the respective plan for a period during which an employee renders services. The actual amount to be recognized is determined using the standard actuarial methodology which considers, among other factors, current service cost,

interest cost, expected return on plan assets and the amortization of both prior service cost/(credit) and actuarial losses/(gains) recognized in AOCI.

Components of net periodic benefit costs

	International single-employer defined benefit pension plans			Other post-retirement defined benefit plans		
in	2018	2017	2016	2018	2017	2016
Net periodic benefit costs (CHF million)						
Service costs on benefit obligation	16	22	20	0	0	0
Interest costs on benefit obligation	86	91	124	5	6	8
Expected return on plan assets	(114)	(133)	(175)	0	0	0
Amortization of recognized actuarial losses/(gains)	47	60	41	8	7	10
Settlement losses/(gains)	0	0	72	0	0	0
Curtailment losses/(gains)	(1)	(10)	0	0	0	0
Net periodic benefit costs/(credits)	**34**	**30**	**82**	**13**	**13**	**18**

Service costs on benefit obligation reflected in compensation and benefits – other for 2018, 2017 and 2016 were CHF 16 million, CHF 22 million and CHF 20 million, respectively. During the second half of 2016, lump-sum settlement offers were made to terminated vested members of the pension fund in the US. As a result of members accepting this offer, there was an additional cost of CHF 72 million relating to the settlement of pension obligations for these members.

Benefit obligation

The following table shows the changes in the PBO, the ABO, the fair value of plan assets and the amounts recognized in the consolidated balance sheets for the international single-employer defined benefit pension plans and other post-retirement defined benefit plans.

Obligations and funded status of the plans

in / end of	International single-employer defined benefit pension plans 2018	2017	Other post-retirement defined benefit plans 2018	2017
PBO (CHF million) [1]				
Beginning of the measurement period	**3,390**	**3,337**	**173**	**184**
Service cost	16	22	0	0
Interest cost	86	91	5	6
Plan amendments	10	0	0	0
Settlements	(1)	0	0	0
Curtailments	(1)	(11)	0	0
Special termination benefits	1	1	0	0
Actuarial losses/(gains)	(229)	171	(9)	2
Benefit payments	(233)	(287)	(11)	(11)
Exchange rate losses/(gains)	(88)	66	2	(8)
End of the measurement period	**2,951**	**3,390**	**160**	**173**
Fair value of plan assets (CHF million)				
Beginning of the measurement period	**4,088**	**4,000**	**0**	**0**
Actual return on plan assets	(141)	256	0	0
Employer contributions	19	22	11	11
Settlements	(1)	0	0	0
Benefit payments	(233)	(287)	(11)	(11)
Exchange rate gains/(losses)	(128)	97	0	0
End of the measurement period	**3,604**	**4,088**	**0**	**0**
Total funded status recognized (CHF million)				
Funded status of the plan – over/(underfunded)	653	698	(160)	(173)
Funded status recognized in the consolidated balance sheet as of December 31	**653**	**698**	**(160)**	**(173)**
Total amount recognized (CHF million)				
Noncurrent assets	1,001	1,058	0	0
Current liabilities	(10)	(11)	(11)	(11)
Noncurrent liabilities	(338)	(349)	(149)	(162)
Net amount recognized in the consolidated balance sheet as of December 31	**653**	**698**	**(160)**	**(173)**
ABO (CHF million) [2]				
End of the measurement period	**2,921**	**3,351**	**160**	**173**

1
Including estimated future salary increases.
2
Excluding estimated future salary increases.

The net amount recognized in the consolidated balance sheets as of December 31, 2018 and 2017 was an overfunding of CHF 493 million and CHF 525 million, respectively.

In 2018 and 2017, the Bank made contributions of CHF 19 million and CHF 22 million, respectively, to the

international single-employer defined benefit pension plans and CHF 11 million and CHF 11 million, respectively, to the other post-retirement defined benefit plans. In 2019 the Bank expects to contribute CHF 16 million to the international single-employer defined benefit pension plans and CHF 11 million to other post-retirement defined benefit plans.

PBO or ABO in excess of plan assets

The following table shows the aggregate PBO and ABO, as well as the aggregate fair value of plan assets for those plans with PBO in excess of plan assets and those plans with ABO in excess of plan assets as of December 31, 2018 and 2017, respectively.

Defined benefit pension plans in which PBO or ABO exceeded plan assets

	PBO exceeds fair value of plan assets[1]		ABO exceeds fair value of plan assets[1]	
December 31	2018	2017	2018	2017
PBO/ABO exceeded plan assets (CHF million)				
PBO	1,336	1,464	1,325	1,447
ABO	1,312	1,433	1,304	1,420
Fair value of plan assets	989	1,104	978	1,088

1 Includes only those defined benefit pension plans where the PBO/ABO exceeded the fair value of plan assets.

Amount recognized in AOCI and OCI

The following table shows the actuarial gains/(losses) and prior service credit/(cost) which were recorded in AOCI and subsequently recognized as components of net periodic benefit costs.

Amounts recognized in AOCI, net of tax

	International single-employer defined benefit pension plans		Other post-retirement defined benefit plans		Total	
end of	2018	2017	2018	2017	2018	2017
Amounts recognized in AOCI (CHF million)						
Actuarial gains/(losses)	(327)	(345)	(23)	(36)	(350)	(381)
Prior service credit/(cost)	(11)	(1)	3	3	(8)	2
Total	**(338)**	**(346)**	**(20)**	**(33)**	**(358)**	**(379)**

The following tables show the changes in OCI due to actuarial gains/(losses) and prior service credit/(cost) recognized in AOCI during 2018 and 2017 and the amortization of the aforementioned items as components of net periodic benefit costs for these periods, as well as the amounts expected to be amortized in 2019.

Amounts recognized in OCI

	International single-employer defined benefit pension plans			Other post-retirement defined benefit plans			
in	Gross	Tax	Net	Gross	Tax	Net	Total net
2018 (CHF million)							
Actuarial gains/(losses)	(26)	1	(25)	9	(2)	7	(18)
Prior service credit/(cost)	(10)	0	(10)	0	0	0	(10)
Amortization of actuarial losses/(gains)	47	(4)	43	8	(2)	6	49
Total	**11**	**(3)**	**8**	**17**	**(4)**	**13**	**21**
2017 (CHF million)							
Actuarial gains/(losses)	(48)	14	(34)	(2)	1	(1)	(35)
Amortization of actuarial losses/(gains)	60	(7)	53	7	(3)	4	57
Total	**12**	**7**	**19**	**5**	**(2)**	**3**	**22**

Amounts in AOCI, net of tax, expected to be amortized

	International single-employer defined benefit pension plans	Other post-retirement defined benefit plans
Amortization in 2019 (CHF million)		
Amortization of actuarial losses/(gains)	15	2
Amortization of prior service cost/(credit)	1	0
Total	**16**	**2**

Assumptions

The measurement of both the net periodic benefit costs and the benefit obligation is determined using explicit assumptions, each of which individually represents the best estimate of a particular future event.

Weighted-average assumptions used to determine net periodic benefit costs and benefit obligation

	International single-employer defined benefit pension plans			Other post-retirement defined benefit plans		
December 31	2018	2017	2016	2018	2017	2016
Net periodic benefit cost (%)						
Discount rate - service cost	2.96	2.92	4.05	3.86	4.03	4.50
Discount rate - interest cost	2.77	2.79	4.05	3.28	3.48	4.50
Salary increases	2.97	3.55	3.56	–	–	–
Expected long-term rate of return on plan assets	3.22	3.88	5.07	–	–	–
Benefit obligation (%)						
Discount rate	3.30	2.83	3.10	4.37	3.70	4.21
Salary increases	2.90	2.97	3.55	–	–	–

Mortality tables and life expectancies for major plans

		Life expectancy at age 65 for a male member currently				Life expectancy at age 65 for a female member currently			
		aged 65		aged 45		aged 65		aged 45	
December 31		2018	2017	2018	2017	2018	2017	2018	2017
Life expectancy (years)									
UK	SAPS S2 light tables[1]	23.7	23.8	25.3	25.4	24.8	24.8	26.5	26.6
US	RP-2014 mortality tables[2]	21.5	21.5	22.7	22.7	23.4	23.3	24.5	24.4

1
95% of Self-Administered Pension Scheme (SAPS) S2 light tables were used, which included final CMI projections, with a long-term rate of improvement of 1.5% per annum.

2
The Retirement Projection 2014 (RP-2014) mortality tables were used, with projections based on the Social Security Administration's intermediate improvement scale.

Health care cost assumptions

The health care cost trend is used to determine the appropriate other post-retirement defined benefit costs. In determining those costs, an annual weighted-average rate is assumed in the cost of covered health care benefits. The following table provides an overview of assumed health care cost trend rates and the sensitivity of a one percentage point increase or decrease of the rate.

Health care cost trend rates and sensitivity

in / end of	2018	2017	2016
Health care cost trend rate (%)			
Annual weighted-average health care cost trend rate [1]	8.7	8.3	8.3
Increase/(decrease) in post-retirement expenses (CHF million)			
One percentage point increase in health care cost trend rates	0.1	0.1	0.2
One percentage point decrease in health care cost trend rates	(0.1)	(0.1)	(0.2)
Increase/(decrease) in post-retirement benefit obligation (CHF million)			
One percentage point increase in health care cost trend rates	3	3	4
One percentage point decrease in health care cost trend rates	(3)	(3)	(4)

1 The annual health care cost trend rate is assumed to decrease gradually to achieve the long-term health care cost trend rate of 5.0% by 2026.

The annual health care cost trend rate used to determine the defined benefit cost for 2019 is 8.7%.

Plan assets and investment strategy

As of December 31, 2018 and 2017, no Group debt or equity securities were included in plan assets for the international single-employer defined benefit pension plans.

Fair value of plan assets

The following tables present the plan assets measured at fair value on a recurring basis as of December 31, 2018 and 2017, for the Bank's defined benefits plans.

Plan assets measured at fair value on a recurring basis

end of	2018					2017				
	Level 1	Level 2	Level 3	Assets measured at net asset value per share	Total	Level 1	Level 2	Level 3	Assets measured at net asset value per share	Total
Plan assets at fair value (CHF million)										
Cash and cash equivalents	86	123	0	0	209	70	133	0	0	203
Debt securities	1,889	846	0	328	3,063	1,991	1,080	0	370	3,441
of which governments	1,574	5	0	0	1,579	1,622	9	0	0	1,631
of which corporates	315	841	0	328	1,484	369	1,071	0	370	1,810
Equity securities	52	12	0	74	138	55	14	0	147	216
Real estate – indirect	0	0	0	29	29	0	0	0	27	27

Alternative investments	0	19	0	61	80	0	33	0	76	109
of which hedge funds	0	0	0	61	61	0	0	0	76	76
of which other	0	19[1]	0	0	19	0	33[1]	0	0	33
Other investments	0	85	0	0	85	0	92	0	0	92
Total plan assets at fair value	**2,027**	**1,085**	**0**	**492**	**3,604**	**2,116**	**1,352**	**0**	**620**	**4,088**

1 Primarily related to derivative instruments.

Plan assets measured at fair value on a recurring basis for level 3

				Actual return on plan assets				
	Balance at beginning of period	Transfers in	Transfers out	On assets still held at reporting date	On assets sold during the period	Purchases, sales, settlements	Foreign currency translation impact	Balance at end of period
2017 (CHF million)								
Debt securities – corporates	7	0	0	0	0	(7)	0	0
Total plan assets at fair value	**7**	**0**	**0**	**0**	**0**	**(7)**	**0**	**0**

Plan asset allocation

The following table shows the plan asset allocation as of the measurement date calculated based on the fair value at that date including the performance of each asset class.

Plan asset allocation

December 31	2018	2017
Weighted-average (%)		
Cash and cash equivalents	5.8	5.0
Debt securities	85.0	84.0
Equity securities	3.8	5.3
Real estate	0.8	0.7
Alternative investments	2.2	2.7
Insurance	2.4	2.3
Total	**100.0**	**100.0**

The following table shows the target plan asset allocation for 2019 in accordance with the Bank's investment strategy. The target plan asset allocation is used to determine the expected return on plan assets to be considered in the net periodic benefit costs for 2019.

2019 target plan asset allocation

Weighted-average (%)	
Cash and cash equivalents	0.3
Debt securities	88.9
Equity securities	5.1
Real estate	0.6
Alternative investments	2.7
Insurance	2.4
Total	**100.0**

Estimated future benefit payments

The following table shows the estimated future benefit payments for defined benefit pension and other post-retirement defined benefit plans.

Estimated future benefit payments

	International single-employer defined benefit pension plans	Other post-retirement defined benefit

		plans
Payments (CHF million)		
2019	92	11
2020	90	12
2021	107	12
2022	98	12
2023	108	12
For five years thereafter	622	53

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31 Derivatives and hedging activities

> Refer to "Note 32 – Derivatives and hedging activities" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Hedge accounting

Cash flow hedges

As of the end of 2018, the maximum length of time over which the Bank hedged its exposure to the variability in future cash flows for forecasted transactions, excluding those forecasted transactions related to the payment of variable interest on existing financial instruments, was five years.

Fair value of derivative instruments

	Trading			Hedging[1]		
end of 2018	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)
Derivative instruments (CHF billion)						
Forwards and forward rate agreements	7,477.7	3.6	3.7	0.0	0.0	0.0
Swaps	13,221.5	49.0	45.4	44.6	0.1	0.2
Options bought and sold (OTC)	2,027.6	17.0	17.1	0.0	0.0	0.0
Futures	256.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	111.1	0.3	0.3	0.0	0.0	0.0
Interest rate products	**23,094.7**	**69.9**	**66.5**	**44.6**	**0.1**	**0.2**
Forwards	1,124.5	9.5	10.5	12.0	0.1	0.1
Swaps	456.6	14.4	17.4	0.0	0.0	0.0
Options bought and sold (OTC)	313.0	3.9	4.3	0.0	0.0	0.0
Futures	10.7	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	1.3	0.0	0.0	0.0	0.0	0.0
Foreign exchange products	**1,906.1**	**27.8**	**32.2**	**12.0**	**0.1**	**0.1**
Forwards	0.7	0.2	0.1	0.0	0.0	0.0
Swaps	152.9	4.1	5.0	0.0	0.0	0.0
Options bought and sold (OTC)	212.3	7.3	6.7	0.0	0.0	0.0
Futures	39.2	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	356.7	11.9	14.4	0.0	0.0	0.0
Equity/index-related products	**761.8**	**23.5**	**26.2**	**0.0**	**0.0**	**0.0**
Credit derivatives [2]	**469.4**	**5.4**	**6.6**	**0.0**	**0.0**	**0.0**
Forwards	8.2	0.1	0.1	0.0	0.0	0.0
Swaps	13.5	1.5	0.6	0.0	0.0	0.0
Options bought and sold (OTC)	9.5	0.1	0.1	0.0	0.0	0.0
Futures	9.3	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	1.9	0.0	0.0	0.0	0.0	0.0
Other products [3]	**42.4**	**1.7**	**0.8**	**0.0**	**0.0**	**0.0**
Total derivative instruments	**26,274.4**	**128.3**	**132.3**	**56.6**	**0.2**	**0.3**

The notional amount, PRV and NRV (trading and hedging) was CHF 26,331.0 billion, CHF 128.5 billion and CHF 132.6 billion, respectively, as of December 31, 2018.

1

Relates to derivative contracts that qualify for hedge accounting under US GAAP.

2

Primarily credit default swaps.

3

Primarily precious metals, commodity and energy products.

Fair value of derivative instruments (continued)

	Trading			Hedging[1]		
end of 2017	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)
Derivative instruments (CHF billion)						
Forwards and forward rate agreements	8,509.3	1.2	1.2	0.0	0.0	0.0
Swaps	13,048.8	60.4	56.3	46.8	0.2	0.2
Options bought and sold (OTC)	2,374.5	25.2	24.0	0.0	0.0	0.0
Futures	547.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	419.2	0.2	0.3	0.0	0.0	0.0
Interest rate products	**24,899.6**	**87.0**	**81.8**	**46.8**	**0.2**	**0.2**
Forwards	1,387.9	10.7	11.1	13.3	0.0	0.2
Swaps	581.1	15.2	19.9	0.0	0.0	0.0
Options bought and sold (OTC)	414.8	4.6	4.8	2.1	0.0	0.0
Futures	13.0	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	5.4	0.0	0.0	0.0	0.0	0.0
Foreign exchange products	**2,402.2**	**30.5**	**35.8**	**15.4**	**0.0**	**0.2**
Forwards	0.9	0.0	0.1	0.0	0.0	0.0
Swaps	199.1	3.8	4.9	0.0	0.0	0.0
Options bought and sold (OTC)	221.8	8.6	8.5	0.0	0.0	0.0
Futures	32.8	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	373.2	9.3	10.3	0.0	0.0	0.0
Equity/index-related products	**827.8**	**21.7**	**23.8**	**0.0**	**0.0**	**0.0**
Credit derivatives [2]	**524.9**	**7.7**	**8.9**	**0.0**	**0.0**	**0.0**
Forwards	7.0	0.0	0.1	0.0	0.0	0.0
Swaps	17.9	1.5	1.4	0.0	0.0	0.0
Options bought and sold (OTC)	10.1	0.1	0.0	0.0	0.0	0.0
Futures	15.6	0.0	0.0	0.0	0.0	0.0
Options bought and sold (exchange-traded)	2.1	0.0	0.0	0.0	0.0	0.0
Other products [3]	**52.7**	**1.6**	**1.5**	**0.0**	**0.0**	**0.0**
Total derivative instruments	**28,707.2**	**148.5**	**151.8**	**62.2**	**0.2**	**0.4**

The notional amount, PRV and NRV (trading and hedging) was CHF 28,769.4 billion, CHF 148.7 billion and CHF 152.2 billion, respectively, as of December 31, 2017.

1 Relates to derivative contracts that qualify for hedge accounting under US GAAP.

2 Primarily credit default swaps.

3 Primarily precious metals, commodity and energy products.

Fair value hedges

in	2018	2017	2016
Gains/(losses) recognized in income on derivatives (CHF million)			
Interest rate products	(415)	(285)	(116)
Total	**(415)**	**(285)**	**(116)**
Gains/(losses) recognized in income on hedged items (CHF million)			
Interest rate products	423	290	111
Total	**423**	**290**	**111**
Details of fair value hedges (CHF million)			
Net gains/(losses) on the ineffective portions	8	5	(5)

Represents gains/(losses) recognized in trading revenues.

Cash flow hedges

in	2018	2017	2016
Gains/(losses) recognized in AOCI on derivatives (CHF million)			
Interest rate products	(76)	(56)	(5)
Foreign exchange products	(86)	(31)	(3)
Total	**(162)**	**(87)**	**(8)**
Gains/(losses) reclassified from AOCI into income (CHF million)			
Interest rate products [1]	(85)	(11)	29
Foreign exchange products	(42)[2,3]	(17)[2]	(7)[3]
Total	**(127)**	**(28)**	**22**
Details of cash flow hedges (CHF million)			
Net gains/(losses) on the ineffective portions [2]	0	(1)	(1)

Represents gains/(losses) on effective portion.

1 Included in interest and other dividend income.

2 Included in trading revenues.

3 Included in total other operating expenses.

The net loss associated with cash flow hedges expected to be reclassified from AOCI within the next 12 months was CHF 39 million.

Net investment hedges

in	2018	2017	2016
Gains/(losses) recognized in AOCI on derivatives (CHF million)			
Foreign exchange products	131	(475)	(537)
Total	**131**	**(475)**	**(537)**

Represents gains/(losses) on effective portion.

The Bank includes all derivative instruments not included in hedge accounting relationships in its trading activities.

> Refer to “Note 7 – Trading revenues” for gains and losses on trading activities by product type.

Disclosures relating to contingent credit risk

The following table provides the Bank’s current net exposure from contingent credit risk relating to derivative contracts with bilateral counterparties and special purpose entities (SPEs) that include credit support agreements, the related collateral posted and the additional collateral required in a one-notch, two-notch and a three-notch downgrade event, respectively. The table also includes derivative contracts with contingent credit risk features without credit support agreements that have accelerated termination event conditions. The current net exposure for derivative contracts with bilateral counterparties and contracts with accelerated termination event conditions is the aggregate fair value of derivative instruments that were in a net liability position. For SPEs, the current net exposure is the

contractual amount that is used to determine the collateral payable in the event of a downgrade. The contractual amount could include both the negative replacement value and a percentage of the notional value of the derivative.

Contingent credit risk

	2018				2017			
end of	Bilateral counterparties	Special purpose entities	Accelerated terminations	Total	Bilateral counterparties	Special purpose entities	Accelerated terminations	Total
Contingent credit risk (CHF billion)								
Current net exposure	3.6	0.1	0.3	**4.0**	5.4	0.1	1.2	**6.7**
Collateral posted	3.4	0.1	–	**3.5**	4.4	0.1	–	**4.5**
Impact of a one-notch downgrade event	0.2	0.0	0.0	**0.2**	0.2	0.1	0.1	**0.4**
Impact of a two-notch downgrade event	0.9	0.0	0.1	**1.0**	0.9	0.2	0.5	**1.6**
Impact of a three-notch downgrade event	1.0	0.1	0.2	**1.3**	1.0	0.4	0.7	**2.1**

The impact of a downgrade event reflects the amount of additional collateral required for bilateral counterparties and special purpose entities and the amount of additional termination expenses for accelerated terminations, respectively.

Credit derivatives

> Refer to "Note 32 – Derivatives and hedging activities" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Credit protection sold/purchased

The following tables do not include all credit derivatives and differ from the credit derivatives in the "Fair value of derivative instruments" table. This is due to the exclusion of certain credit derivative instruments under US GAAP, which defines a credit derivative as a derivative instrument (a) in which one or more of its underlyings are related to the credit risk of a specified entity (or a group of entities) or an index based on the credit risk of a group of entities and (b) that exposes the seller to potential loss from credit risk-related events specified in the contract.

Total return swaps (TRS) of CHF 9.7 billion and CHF 6.7 billion as of December 31, 2018 and 2017, respectively, were also excluded because a TRS does not expose the seller to potential loss from credit risk-related events specified in the contract. A TRS only provides protection against a loss in asset value and not against additional amounts as a result of specific credit events.

Credit protection sold/purchased

					2018				
end of	Credit protection sold	Credit protection purchased[1]	Net credit protection (sold)/ purchased	Other protection purchased	Fair value of credit protection sold	Credit protection sold	Credit protection purchased[1]	Net credit protection (sold)/ purchased	Other protection purchased
Single-name instruments (CHF billion)									
Investment grade[2]	(46.0)	43.1	(2.9)	11.8	0.2	(57.6)	53.8	(3.8)	15.3
Non-investment grade	(26.2)	24.3	(1.9)	17.7	(0.2)	(28.2)	25.5	(2.7)	14.3
Total single-name instruments	**(72.2)**	**67.4**	**(4.8)**	**29.5**	**0.0**	**(85.8)**	**79.3**	**(6.5)**	**29.6**
of which sovereign	(16.4)	15.0	(1.4)	5.5	(0.1)	(21.0)	19.2	(1.8)	6.2
of which non-sovereign	(55.8)	52.4	(3.4)	24.0	0.1	(64.8)	60.1	(4.7)	23.4
Multi-name instruments (CHF billion)									
Investment grade[2]	(102.9)	102.4	(0.5)	25.1	(0.8)	(107.1)	104.7	(2.4)	59.3
Non-investment grade	(26.5)	25.3	(1.2)	8.4[3]	0.1	(21.0)	19.6	(1.4)	12.0[3]
Total multi-name instruments	**(129.4)**	**127.7**	**(1.7)**	**33.5**	**(0.7)**	**(128.1)**	**124.3**	**(3.8)**	**71.3**
of which sovereign	(0.2)	0.2	0.0	0.0	0.0	(0.3)	0.3	0.0	0.3
of which non-sovereign	(129.2)	127.5	(1.7)	33.5	(0.7)	(127.8)	124.0	(3.8)	71.0
Total instruments (CHF billion)									
Investment grade[2]	(148.9)	145.5	(3.4)	36.9	(0.6)	(164.7)	158.5	(6.2)	74.6
Non-investment grade	(52.7)	49.6	(3.1)	26.1	(0.1)	(49.2)	45.1	(4.1)	26.3
Total	**(201.6)**	**195.1**	**(6.5)**	**63.0**	**(0.7)**	**(213.9)**	**203.6**	**(10.3)**	**100.9**

instruments									
of which sovereign	(16.6)	15.2	(1.4)	5.5	(0.1)	(21.3)	19.5	(1.8)	6.5
of which non-sovereign	(185.0)	179.9	(5.1)	57.5	(0.6)	(192.6)	184.1	(8.5)	94.4

1
Represents credit protection purchased with identical underlyings and recoveries.
2
Based on internal ratings of BBB and above.
3
Includes synthetic securitized loan portfolios.

The following table reconciles the notional amount of credit derivatives included in the table “Fair value of derivative instruments” to the table “Credit protection sold/purchased”.

Credit derivatives

end of	2018	2017
Credit derivatives (CHF billion)		
Credit protection sold	201.6	213.9
Credit protection purchased	195.1	203.6
Other protection purchased	63.0	100.9
Other instruments [1]	9.7	6.5
Total credit derivatives	**469.4**	**524.9**

1
Consists of total return swaps and other derivative instruments.

Maturity of credit protection sold

end of	Maturity less than 1 year	Maturity between 1 to 5 years	Maturity greater than 5 years	Total
2018 (CHF billion)				
Single-name instruments	13.1	54.9	4.2	72.2
Multi-name instruments	28.8	80.6	20.0	129.4
Total instruments	**41.9**	**135.5**	**24.2**	**201.6**
2017 (CHF billion)				
Single-name instruments	21.6	59.4	4.8	85.8
Multi-name instruments	31.2	79.9	17.0	128.1
Total instruments	**52.8**	**139.3**	**21.8**	**213.9**

32 Guarantees and commitments

Guarantees

end of	Maturity less than 1 year	Maturity between 1 to 3 years	Maturity between 3 to 5 years	Maturity greater than 5 years	Total gross amount	Total net amount[1]	Carrying value	Collateral received
2018 (CHF million)								
Credit guarantees and similar instruments	2,229	439	218	402	3,288	3,199	14	1,752
Performance guarantees and similar instruments	5,008	1,344	552	240	7,144	6,278	44	3,153
Derivatives [2]	17,594	3,995	1,256	778	23,623	23,623	919	[3]
Other guarantees	4,325	1,405	640	517	6,887	6,814	56	4,169
Total guarantees	**29,156**	**7,183**	**2,666**	**1,937**	**40,942**	**39,914**	**1,033**	**9,074**
2017 (CHF million)								
Credit guarantees and similar instruments	1,820	520	314	435	3,089	2,840	12	1,603
Performance guarantees and similar instruments	4,931	1,639	373	200	7,143	6,216	44	3,012
Derivatives [2]	15,520	6,860	1,397	727	24,504	24,504	403	[3]
Other guarantees	4,461	1,006	708	503	6,678	6,673	47	3,833
Total guarantees	**26,732**	**10,025**	**2,792**	**1,865**	**41,414**	**40,233**	**506**	**8,448**

1
Total net amount is computed as the gross amount less any participations.

2
Excludes derivative contracts with certain active commercial and investment banks and certain other counterparties, as such contracts can be cash settled and the Bank had no basis to conclude it was probable that the counterparties held, at inception, the underlying instruments.

3
Collateral for derivatives accounted for as guarantees is not significant.

> Refer to “Note 33 – Guarantees and commitments” in VI – Consolidated financial statements – Credit Suisse Group for further information.

Deposit-taking banks and securities dealers in Switzerland and certain other European countries are required to ensure the payout of privileged deposits in case of specified restrictions or compulsory liquidation of a deposit-taking bank. In Switzerland, deposit-taking banks and securities dealers jointly guarantee an amount of up to CHF 6 billion. Upon occurrence of a payout event triggered by a specified restriction of business imposed by the Swiss Financial Market Supervisory Authority FINMA (FINMA) or by the compulsory liquidation of another deposit-taking bank, the Bank’s contribution will be calculated based on its share of privileged deposits in proportion to total privileged deposits. Based on FINMA’s estimate for the Bank, the Bank’s share in the deposit insurance guarantee program for the period July 1, 2018 to June 30, 2019 is CHF 0.5 billion. These deposit insurance guarantees were reflected in other guarantees.

Representations and warranties on residential mortgage loans sold

In connection with the Global Markets division’s sale of US residential mortgage loans, the Bank has provided certain representations and warranties relating to the loans sold.

Lease commitments

CHF million

2020	376
2021	262
2022	239
2023	198
Thereafter	1,292
Future operating lease commitments	**2,794**
Less minimum non-cancellable sublease rentals	436
Total net future minimum lease commitments	**2,358**

Rental expense for operating leases

in	2018	2017	2016
CHF million			
Minimum rental expense	446	528	550
Sublease rental income	(66)	(65)	(89)
Total net expenses for operating leases	**380**	**463**	**461**

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Operating lease commitments

Sale-leaseback transactions

During 2018, we entered into one sale-leaseback transaction in respect of own property, which was recognized as an operating lease arrangement with a lease term of ten years. In 2017, we did not enter into any sale-leaseback transactions, and in 2016, the Bank entered into several smaller sale-leaseback transactions in respect of own property, which were all recognized as operating lease arrangements with lease terms of two years. The total contractual rental expenses were CHF 5 million for the 2018 sale-leaseback transaction and CHF 19 million for the 2016 sale-leaseback transactions.

Other commitments

end of	Maturity less than 1 year	Maturity between 1 to 3 years	Maturity between 3 to 5 years	Maturity greater than 5 years	Total gross amount	Total net amount[1]	Collateral received
2018 (CHF million)							
Irrevocable commitments under documentary credits	5,056	182	0	0	5,238	5,077	3,651
Irrevocable loan commitments	26,882	34,188	45,938	9,065	116,073[2]	111,967	57,153
Forward reverse repurchase agreements	31	0	0	0	31	31	31
Other commitments	329	11	119	33	492	492	4
Total other commitments	**32,298**	**34,381**	**46,057**	**9,098**	**121,834**	**117,567**	**60,839**
2017 (CHF million)							
Irrevocable commitments under documentary credits	4,976	113	1	1	5,091	5,000	3,218
Irrevocable loan commitments	24,296	33,649	40,425	8,031	106,401[2]	101,270	42,307
Forward reverse repurchase agreements	12	0	0	0	12	12	12
Other commitments	219	13	11	104	347	347	0
Total other commitments	**29,503**	**33,775**	**40,437**	**8,136**	**111,851**	**106,629**	**45,537**

1 Total net amount is computed as the gross amount less any participations.

2 Irrevocable loan commitments do not include a total gross amount of CHF 113,593 million and CHF 108,665 million of unused credit limits as of December 31, 2018 and 2017, respectively, which were revocable at the Bank's sole discretion upon notice to the client.

33 Transfers of financial assets and variable interest entities

Transfers of financial assets

> Refer to "Note 34 – Transfers of financial assets and variable interest entities" in VI – Credit Suisse Group – Consolidated financial statements for further information.

Securitizations

The following table provides the gains or losses and proceeds from the transfer of assets relating to 2018, 2017 and 2016 securitizations of financial assets that qualify for sale accounting and subsequent derecognition, along with the cash flows between the Bank and the SPEs used in any securitizations in which the Bank still has continuing involvement, regardless of when the securitization occurred.

Securitizations

in	2018	2017	2016
Gains/(losses) and cash flows (CHF million)			
CMBS			
Net gain/(loss) [1]	10	37	(2)
Proceeds from transfer of assets	5,861	6,604	3,954
Cash received on interests that continue to be held	41	28	69
RMBS			
Net gain/(loss) [1]	(1)	0	(4)
Proceeds from transfer of assets	22,536	14,817	9,866
Purchases of previously transferred financial assets or its underlying collateral	0	(2)	0
Servicing fees	3	3	2
Cash received on interests that continue to be held	576	368	529
Other asset-backed financings			
Net gain [1]	77	31	26
Proceeds from transfer of assets	6,422	7,664	2,813
Purchases of previously transferred financial assets or its underlying collateral [2]	(318)	(380)	(68)
Fees [3]	142	135	137
Cash received on interests that continue to be held	3	4	2

1 Includes underwriting revenues, deferred origination fees, gains or losses on the sale of collateral to the SPE and gains or losses on the sale of newly issued securities to third parties, but excludes net interest income on assets prior to the securitization. The gains or losses on the sale of the collateral is the difference between the fair value on the day prior to the securitization pricing date and the sale price of the loans.

2 Line item was omitted in 2017 and 2016.

3 Represents management fees and performance fees earned for investment management services provided to managed CLOs.

Continuing involvement in transferred financial assets

The following table provides the outstanding principal balance of assets to which the Bank continued to be exposed after the transfer of the financial assets to any SPE and the total assets of the SPE as of December 31, 2018 and 2017, regardless of when the transfer of assets occurred.

Principal amounts outstanding and total assets of SPEs resulting from continuing involvement

end of	2018	2017

CHF million		
CMBS		
Principal amount outstanding	25,330	19,918
Total assets of SPE	35,760	31,586
RMBS		
Principal amount outstanding	40,253	35,645
Total assets of SPE	41,242	36,770
Other asset-backed financings		
Principal amount outstanding	23,036	20,916
Total assets of SPE	47,542	39,330

Principal amount outstanding relates to assets transferred from the Bank and does not include principle amounts for assets transferred from third parties.

Fair value of beneficial interests

The fair value measurement of beneficial interests held at the time of transfer and as of the reporting date that result from any continuing involvement is determined using fair value estimation techniques, such as the present value of estimated future cash flows that incorporate assumptions that market participants customarily use in these valuation techniques. The fair value of the assets or liabilities that result from any continuing involvement does not include any benefits from financial instruments that the Bank may utilize to hedge the inherent risks.

Key economic assumptions at the time of transfer

> Refer to “Note 34 – Financial instruments” for further information on the fair value hierarchy.

Key economic assumptions used in measuring fair value of beneficial interests at time of transfer

	2018		2017		2016	
at time of transfer, in	CMBS	RMBS	CMBS	RMBS	CMBS	RMBS
CHF million, except where indicated						
Fair value of beneficial interests	662	3,613	445	2,400	69	2,068
of which level 2	640	3,509	444	2,221	69	1,827
of which level 3	22	103	1	179	0	241
Weighted-average life, in years	6.6	7.8	10.0	6.0	8.4	7.2
Prepayment speed assumption (rate per annum), in % [1]	[2]	5.0 – 13.5	[2]	1.0 – 22.9	[2]	5.0 – 33.0
Cash flow discount rate (rate per annum), in % [3]	3.6 – 9.8	3.0 – 13.6	2.4 – 9.0	2.0 – 29.5	2.4 – 4.9	1.2 – 24.4
Expected credit losses (rate per annum), in % [4]	1.8 – 3.1	2.3 – 7.2	0.6 – 3.4	0.8 – 6.3	0.0 – 0.0	2.5 – 11.2

Transfers of assets in which the Bank does not have beneficial interests are not included in this table.

1 Prepayment speed assumption (PSA) is an industry standard prepayment speed metric used for projecting prepayments over the life of a residential mortgage loan. PSA utilizes the constant prepayment rate (CPR) assumptions. A 100% prepayment assumption assumes a prepayment rate of 0.2% per annum of the outstanding principal balance of mortgage loans in the first month. This increases by 0.2 percentage points thereafter during the term of the mortgage loan, leveling off to a CPR of 6% per annum beginning in the 30th month and each month thereafter during the term of the mortgage loan. 100 PSA equals 6 CPR.

2 To deter prepayment, commercial mortgage loans typically have prepayment protection in the form of prepayment lockouts and yield maintenances.

3 The rate was based on the weighted-average yield on the beneficial interests.

4 The range of expected credit losses only reflects instruments with an expected credit loss greater than zero unless all of the instruments have an expected credit loss of zero.

Key economic assumptions as of the reporting date

The following table provides the sensitivity analysis of key economic assumptions used in measuring the fair value of beneficial interests held in SPEs as of December 31, 2018 and 2017.

Key economic assumptions used in measuring fair value of beneficial interests held in SPEs

	2018			2017		
end of	CMBS [1]	RMBS [1]	Other[2] asset-backed financing	CMBS [1]	RMBS [1]	Other[2] asset-backed financing

			activities			activities
CHF million, except where indicated						
Fair value of beneficial interests	805	2,006	226	579	1,985	665
of which non-investment grade	112	307	26	100	508	50
Weighted-average life, in years	5.7	7.9	5.6	4.7	8.1	6.4
Prepayment speed assumption (rate per annum), in % [3]	– 2.0 – 20.0		–	– 1.0 – 25.0		–
Impact on fair value from 10% adverse change	–	(22.3)	–	–	(35.0)	–
Impact on fair value from 20% adverse change	–	(43.2)	–	–	(68.1)	–
Cash flow discount rate (rate per annum), in % [4]	3.4 – 14.3	3.0 – 21.3	1.0 – 21.2	2.7 – 12.3	1.9 – 30.6	1.0 – 21.2
Impact on fair value from 10% adverse change	(20.7)	(52.1)	(2.9)	(8.8)	(49.2)	(12.4)
Impact on fair value from 20% adverse change	(37.6)	(101.3)	(5.7)	(17.0)	(95.3)	(24.5)
Expected credit losses (rate per annum), in % [5]	0.8 – 4.7	0.6 – 18.8	1.0 – 21.2	0.6 – 6.3	0.5 – 28.2	0.7 – 21.2
Impact on fair value from 10% adverse change	(10.2)	(23.8)	(2.4)	(3.9)	(23.6)	(6.6)
Impact on fair value from 20% adverse change	(17.3)	(46.7)	(4.8)	(7.8)	(46.1)	(12.9)

1
To deter prepayment, commercial mortgage loans typically have prepayment protection in the form of prepayment lockouts and yield maintenances.

2
CDOs within this category are generally structured to be protected from prepayment risk.

3
PSA is an industry standard prepayment speed metric used for projecting prepayments over the life of a residential mortgage loan. PSA utilizes the CPR assumptions. A 100% prepayment assumption assumes a prepayment rate of 0.2% per annum of the outstanding principal balance of mortgage loans in the first month. This increases by 0.2 percentage points thereafter during the term of the mortgage loan, leveling off to a CPR of 6% per annum beginning in the 30th month and each month thereafter during the term of the mortgage loan. 100 PSA equals 6 CPR.

4
The rate was based on the weighted-average yield on the beneficial interests.
5
The range of expected credit losses only reflects instruments with an expected credit loss greater than zero unless all of the instruments have an expected credit loss of zero.
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Transfers of financial assets where sale treatment was not achieved

The following table provides the carrying amounts of transferred financial assets and the related liabilities where sale treatment was not achieved as of December 31, 2018 and 2017.

Carrying amounts of transferred financial assets and liabilities where sale treatment was not achieved

end of	2018	2017
CHF million		
Other asset-backed financings		
Trading assets	255	347
Other assets	0	48
Liability to SPE, included in other liabilities	(255)	(395)

Securities sold under repurchase agreements and securities lending transactions accounted for as secured borrowings

The following tables provide the gross obligation relating to securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral by the class of collateral pledged and by remaining contractual maturity as of December 31, 2018 and 2017.

Securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral – by class of collateral pledged

end of	2018	2017
CHF billion		
Government debt securities	31.1	31.4
Corporate debt securities	9.6	15.1
Asset-backed securities	1.8	5.0
Other	0.2	0.6
Securities sold under repurchase agreements	**42.7**	**52.1**
Government debt securities	1.4	2.7
Corporate debt securities	0.2	0.4
Equity securities	3.2	4.8
Other	0.2	0.3
Securities lending transactions	**5.0**	**8.2**
Government debt securities	3.6	1.8
Corporate debt securities	1.0	0.6
Asset-backed securities	0.1	0.0
Equity securities	37.0	35.6
Other	0.0	0.1
Obligation to return securities received as collateral, at fair value	**41.7**	**38.1**
Total	**89.4**	**98.4**

Securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral – by remaining contractual maturity

	Remaining contractual maturities				
end of	On demand[1]	Up to 30 days[2]	31-90 days	More than 90 days	Total
2018 (CHF billion)					
Securities sold under repurchase agreements	7.4	26.3	6.7	2.3	42.7
Securities lending transactions	4.1	0.9	0.0	0.0	5.0
Obligation to return securities received as collateral, at fair value	41.4	0.1	0.2	0.0	41.7

Total	**52.9**	**27.3**	**6.9**	**2.3**	**89.4**
2017 (CHF billion)					
Securities sold under repurchase agreements	7.2	32.5	5.2	7.2	52.1
Securities lending transactions	5.7	2.2	0.0	0.3	8.2
Obligation to return securities received as collateral, at fair value	37.9	0.0	0.0	0.2	38.1
Total	**50.8**	**34.7**	**5.2**	**7.7**	**98.4**

1
Includes contracts with no contractual maturity that may contain termination arrangements subject to a notice period.
2
Includes overnight transactions.
> Refer to “Note 26 – Offsetting of financial assets and financial liabilities” for further information on the gross amount of securities sold under repurchase agreements, securities lending transactions and obligation to return securities received as collateral and the net amounts disclosed in the consolidated balance sheets.

Variable interest entities

> Refer to “Note 34 – Transfers of financial assets and variable interest entities” in VI – Consolidated financial statements – Credit Suisse Group for further information.

Commercial paper conduit

The Bank acts as the administrator and provider of liquidity and credit enhancement facilities for Alpine Securitization Ltd (Alpine), a multi-seller asset-backed CP conduit used for client and Bank financing purposes. Alpine discloses to CP investors certain portfolio and asset data and submits its portfolio to rating agencies for public ratings. This CP conduit purchases assets such as loans and receivables or enters into reverse repurchase agreements and finances such activities through the issuance of CP backed by these assets. The CP conduit can enter into liquidity facilities with third-party entities pursuant to which it may be required to purchase assets from these entities to provide them with liquidity and credit support. The financing transactions are structured to provide credit support to the CP conduit in the form of over-collateralization and other asset-specific enhancements. Alpine is a separate legal entity that is wholly owned by the Bank. However, its assets are available to satisfy only the claims of its creditors. In addition, the Bank, as administrator and liquidity facility provider, has significant exposure to and power over the activities of Alpine. Alpine is considered a VIE for accounting purposes and the Bank is deemed the primary beneficiary and consolidates this entity.

The overall average maturity of Alpine’s outstanding CP was approximately 129 days as of December 31, 2018. Alpine was rated A-1(sf) by Standard & Poor’s and P-1(sf) by Moody’s and had exposures mainly in a reverse repurchase agreement with a Bank entity, consumer loans and car loans.

The Bank’s commitment to this CP conduit consists of obligations under liquidity agreements. The liquidity agreements are asset-specific arrangements, which require the Bank to provide short-term financing to the CP conduit or to purchase assets from the CP conduit in certain circumstances, including a lack of liquidity in the CP market such that the CP conduit cannot refinance its obligations or, in some cases, a default of an underlying asset. The asset-specific credit enhancements provided by the client seller of the assets remain unchanged as a result of such a purchase. In entering into such agreements, the Bank reviews the credit risk associated with these transactions on the same basis that would apply to other extensions of credit.

The Bank’s economic risks associated with the CP conduit are included in the Bank’s risk management framework including counterparty, economic risk capital and scenario analysis.

Consolidated VIEs

The Bank has significant involvement with VIEs in its role as a financial intermediary on behalf of clients. The Bank consolidated all VIEs related to financial intermediation for which it was the primary beneficiary.

Consolidated VIEs in which the Bank was the primary beneficiary

				Financial intermediation			
end of	CDO/ CLO	CP Conduit	Securi- tizations	Funds	Loans	Other	Total
2018 (CHF million)							
Cash and due from banks	15	1	68	17	52	20	173
Trading assets	72	0	170	418	944	12	1,616
Investment securities	0	0	1,432	0	0	0	1,432
Other investments	0	0	0	153	1,073	279	1,505
Net loans	0	0	119	0	23	245	387
Premises and equipment	0	0	0	0	18	0	18
Other assets	57	16	863	4	32	1,037	2,009
of which loans held-for-sale	57	0	107	0	3	0	167
Total assets of consolidated VIEs	**144**	**17**	**2,652**	**592**	**2,142**	**1,593**	**7,140**
Trading liabilities	0	0	0	0	3	0	3
Short-term borrowings	0	5,465	0	0	0	0	5,465
Long-term debt	48	0	1,487	174	26	29	1,764
Other liabilities	0	43	1	8	98	127	277
Total liabilities of consolidated VIEs	**48**	**5,508**	**1,488**	**182**	**127**	**156**	**7,509**
2017 (CHF million)							
Cash and due from banks	22	0	96	32	70	12	232
Trading assets	17	0	10	179	1,122	20	1,348
Investment securities	0	0	381	0	0	0	381
Other investments	0	0	0	350	1,197	286	1,833
Net loans	0	0	0	3	21	243	267
Premises and equipment	0	0	0	0	128	0	128
Other assets	83	4	1,070	21	31	1,187	2,396
of which loans held-for-sale	83	0	152	0	3	0	238
Total assets of consolidated VIEs	**122**	**4**	**1,557**	**585**	**2,569**	**1,748**	**6,585**
Trading liabilities	0	0	0	0	3	0	3
Short-term borrowings	0	6,672[1]	0	0	0	0	6,672
Long-term debt	51	0	752	0	26	34	863
Other liabilities	0	237[1]	1	26	111	66	441
Total liabilities of consolidated VIEs	**51**	**6,909**	**753**	**26**	**140**	**100**	**7,979**

1 Amounts were omitted in prior periods and have been corrected.

Non-consolidated VIEs

Total assets of non-consolidated VIEs are the assets of the non-consolidated VIEs themselves and are typically unrelated to the exposures the Bank has with these entities due to variable interests held by third-party investors. Accordingly, these amounts are not considered for risk management purposes.

Non-consolidated VIEs

			Financial intermediation			
end of	CDO/ CLO	Securi- tizations	Funds	Loans	Other	Total
2018 (CHF million)						
Trading assets	209	4,527	927	183	3,703	9,549
Net loans	154	1,475	1,591	5,246	430	8,896
Other assets	3	19	112	0	444	578
Total variable interest assets	**366**	**6,021**	**2,630**	**5,429**	**4,577**	**19,023**
Maximum exposure to loss	**366**	**7,637**	**2,645**	**8,680**	**5,150**	**24,478**
Total assets of non-consolidated VIEs	**7,033**	**96,483**	**65,848**	**20,804**	**8,784**	**198,952**
2017 (CHF million)						
Trading assets	746	4,573	1,014	224	2,388	8,945
Net loans	620	1,563	2,438	4,591	328	9,540
Other assets	9	11	55	1	437	513
Total variable interest assets	**1,375**	**6,147**	**3,507**	**4,816**	**3,153**	**18,998**
Maximum exposure to loss	**1,375**	**7,617**	**3,514**	**7,061**	**4,079**	**23,646**
Total assets of non-consolidated VIEs	**15,874**	**64,839**	**63,504**	**16,270**	**6,265**	**166,752**

34 Financial instruments

> Refer to "Note 35 – Financial instruments" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Assets and liabilities measured at fair value on a recurring basis

end of 2018	Level 1	Level 2	Level 3	Netting impact[1]	Assets measured at net asset value per share[2]	Total
Assets (CHF million)						
Cash and due from banks	0	115	0	–	–	115
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	0	81,818	0	–	–	81,818
Securities received as collateral	37,962	3,704	30	–	–	41,696
Trading assets	76,178	156,239	8,814	(109,930)	1,126	132,427
of which debt securities	23,726	36,402	2,076	–	12	62,216
of which foreign government	23,547	4,542	232	–	–	28,321
of which corporates	66	8,065	1,260	–	12	9,403
of which RMBS	0	19,652	269	–	–	19,921
of which equity securities	42,812	2,459	132	–	1,114	46,517
of which derivatives	8,000	117,034	3,298	(109,930)	–	18,402
of which interest rate products	3,557	65,823	507	–	–	–
of which foreign exchange products	25	27,526	258	–	–	–
of which equity/index-related products	4,415	18,059	1,054	–	–	–
of which credit derivatives	0	4,739	673	–	–	–
of which other derivatives	2	633	806	–	–	–
of which other trading assets	1,640	344	3,308	–	–	5,292
Investment securities	0	2,743	166	–	–	2,909
Other investments	14	7	1,309	–	1,100	2,430
of which life finance instruments	0	0	1,067	–	–	1,067
Loans	0	10,549	4,324	–	–	14,873
of which real estate	0	146	515	–	–	661
of which commercial and industrial loans	0	3,976	1,949	–	–	5,925
of which financial institutions	0	4,164	1,391	–	–	5,555
Other intangible assets (mortgage servicing rights)	0	0	163	–	–	163
Other assets	117	5,807	1,543	(204)	–	7,263
of which loans held-for-sale	0	4,238	1,235	–	–	5,473
Total assets at fair value	**114,271**	**260,982**	**16,349**	**(110,134)**	**2,226**	**283,694**

1
Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.
2
In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2018	Level 1	Level 2	Level 3	Netting impact[1]	Liabilities measured at net asset value per share[2]	Total
Liabilities (CHF million)						
Due to banks	0	406	0	–	–	406
Customer deposits	0	2,839	453	–	–	3,292
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	0	14,828	0	–	–	14,828
Obligation to return securities received as collateral	37,962	3,704	30	–	–	41,696
Trading liabilities	31,940	123,737	3,589	(117,105)	10	42,171
of which debt securities	4,462	3,511	25	–	–	7,998
of which foreign government	4,328	255	0	–	–	4,583
of which equity securities	18,785	118	37	–	10	18,950
of which derivatives	8,693	120,108	3,527	(117,105)	–	15,223
of which interest rate products	3,699	62,573	189	–	–	–
of which foreign exchange products	32	31,983	160	–	–	–
of which equity/index-related products	4,961	19,788	1,500	–	–	–
of which credit derivatives	0	5,485	1,140	–	–	–
Short-term borrowings	0	7,284	784	–	–	8,068
Long-term debt	0	50,356	12,671	–	–	63,027
of which structured notes over one year and up to two years	0	7,242	528	–	–	7,770
of which structured notes over two years	0	28,215	11,800	–	–	40,015
Other liabilities	0	7,877	1,327	(221)	–	8,983
Total liabilities at fair value	**69,902**	**211,031**	**18,854**	**(117,326)**	**10**	**182,471**

1
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In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2017	Level 1	Level 2	Level 3	Netting impact[1]	Assets measured at net asset value per share[2]	Total
Assets (CHF million)						
Cash and due from banks	0	212	0	–	–	212
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	0	77,498	0	–	–	77,498
Securities received as collateral	36,697	1,331	46	–	–	38,074
of which debt securities	576	802	0	–	–	1,378
of which corporates	0	726	0	–	–	726
of which equity securities	36,121	529	46	–	–	36,696
Trading assets	87,452	188,122	8,754	(128,607)	1,053	156,774
of which debt securities	29,827	40,707	2,292	–	–	72,826
of which foreign governments	29,561	4,256	270	–	–	34,087
of which corporates	179	10,292	1,412	–	–	11,883
of which RMBS	0	21,399	320	–	–	21,719
of which CMBS	0	2,501	16	–	–	2,517
of which CDO	0	2,255	126	–	–	2,381
of which equity securities	51,125	3,481	163	–	1,053	55,822
of which derivatives	3,577	141,641	3,289	(128,607)	–	19,900
of which interest rate products	1,219	84,932	801	–	–	–
of which foreign exchange products	19	30,302	188	–	–	–
of which equity/index-related products	2,339	18,544	833	–	–	–
of which credit derivatives	0	7,107	634	–	–	–
Other trading assets	2,923	2,293	3,010	–	–	8,226
Investment securities	250	1,897	42	–	–	2,189
of which debt securities	244	1,778	42	–	–	2,064
of which foreign governments	98	1,138	0	–	–	1,236
of which corporates	0	238	0	–	–	238
of which RMBS	0	167	40	–	–	207
of which CMBS	0	171	2	–	–	173
of which equity securities	6	119	0	–	–	125
Other investments	25	16	1,601	–	1,855	3,497
of which private equity	0	0	29	–	343	372
of which equity funds	0	0	22	–	133	155
of which hedge funds	0	0	0	–	391	391
of which debt funds	0	0	0	–	239	239
	25	9	271	–	1,121	1,426

of which other equity investments						
of which private	18	9	271	–	1,121	1,419
of which life finance instruments	0	7	1,301	–	–	1,308
Loans	0	10,777	4,530	–	–	15,307
of which commercial and industrial loans	0	3,437	2,207	–	–	5,644
of which financial institutions	0	4,890	1,480	–	–	6,370
Other intangible assets (mortgage servicing rights)	0	0	158	–	–	158
Other assets	101	7,570	1,511	(164)	–	9,018
of which loans held-for-sale	0	5,800	1,350	–	–	7,150
Total assets at fair value	**124,525**	**287,423**	**16,642**	**(128,771)**	**2,908**	**302,727**

1
Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

2
In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis (continued)

end of 2017	Level 1	Level 2	Level 3	Netting impact[1]	Liabilities measured at net asset value per share[2]	Total
Liabilities (CHF million)						
Due to banks	0	197	0	–	–	197
Customer deposits	0	3,056	455	–	–	3,511
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	0	15,262	0	–	–	15,262
Obligation to return securities received as collateral	36,697	1,331	46	–	–	38,074
of which debt securities	576	802	0	–	–	1,378
of which corporates	0	726	0	–	–	726
of which equity securities	36,121	529	46	–	–	36,696
Trading liabilities	23,121	149,951	3,226	(137,175)	9	39,132
of which debt securities	5,160	4,139	2	–	–	9,301
of which foreign governments	5,108	746	0	–	–	5,854
of which corporates	12	3,334	2	–	–	3,348
of which equity securities	14,230	883	55	–	9	15,177
of which derivatives	3,731	144,929	3,169	(137,175)	–	14,654
of which interest rate products	1,254	80,290	317	–	–	–
of which foreign exchange products	8	35,707	100	–	–	–
of which equity/index-related products	2,468	20,017	1,301	–	–	–
of which credit derivatives	0	7,982	898	–	–	–
Short-term borrowings	0	10,174	845	–	–	11,019
Long-term debt	0	50,121	12,501	–	–	62,622
of which treasury debt over two years	0	936	0	–	–	936
of which structured notes over one year and up to two years	0	6,216	149	–	–	6,365
of which structured notes over two years	0	32,782	12,259	–	–	45,041
of which other debt instruments over two years	0	2,221	61	–	–	2,282
of which other subordinated bonds	0	4,557	0	–	–	4,557
of which non-recourse liabilities	0	833	30	–	–	863
Other liabilities	0	7,356	1,467	(233)	–	8,590
of which failed sales	0	439	223	–	–	662
Total liabilities at fair value	**59,818**	**237,448**	**18,540**	**(137,408)**	**9**	**178,407**

1
Derivative contracts are reported on a gross basis by level. The impact of netting represents legally enforceable master netting agreements.

2
In accordance with US GAAP, certain investments that are measured at fair value using the net asset value per share practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in the consolidated balance sheet.

Assets and liabilities measured at fair value on a recurring basis for level 3

								Trading revenues		Other
2018	Balance at beginning of period	Transfers in	Transfers out	Purchases	Sales	Issuances	Settlements	On transfers in / out	On all other	C transfe in / o
Assets (CHF million)										
Securities received as collateral	46	0	(15)	102	(103)	0	0	0	0	
Trading assets	8,754	1,563	(1,602)	40,057	(40,138)	1,394	(1,477)	(21)	303	
of which debt securities	2,292	802	(904)	3,301	(3,261)	0	0	25	(150)	
of which foreign governments	270	21	(12)	45	(67)	0	0	0	4	
of which corporates	1,412	491	(593)	2,582	(2,583)	0	0	31	(72)	
of which RMBS	320	211	(225)	370	(333)	0	0	(3)	(74)	
of which equity securities	163	132	(95)	51	(185)	0	0	8	55	
of which derivatives	3,289	510	(525)	0	0	1,394	(1,434)	(56)	144	
of which interest rate products	801	18	(66)	0	0	100	(116)	17	(237)	
of which foreign exchange derivatives	188	3	(2)	0	0	14	(24)	(2)	79	
of which equity/index-related products	833	329	(317)	0	0	447	(436)	(77)	300	
of which credit derivatives	634	160	(141)	0	0	505	(438)	5	(59)	
of which other derivatives	833	0	1	0	0	328	(420)	1	61	
of which other trading assets	3,010	119	(78)	36,705	(36,692)	0	(43)	2	254	
Investment securities	42	8	(121)	281	(28)	0	(205)	0	185	
Other investments	1,601	79	(102)	228	(405)	0	0	0	(93)	
of which life finance instruments	1,301	0	0	151	(299)	0	0	0	(96)	
Loans	4,530	934	(393)	163	(491)	1,563	(1,866)	7	(134)	
of which real estate	171	196	(81)	0	0	307	(64)	2	(8)	
of which commercial and industrial loans	2,207	348	(29)	1	(226)	783	(1,057)	0	(83)	

of which financial institutions	1,480	335	(53)	150	(133)	332	(746)	10	8
Other intangible assets (mortgage servicing rights)	158	0	0	1	0	0	0	0	0
Other assets	1,511	288	(191)	1,610	(1,357)	300	(540)	22	(32)
of which loans held-for-sale	1,350	243	(166)	1,447	(1,310)	300	(539)	21	(44)
Total assets at fair value	**16,642**	**2,872**	**(2,424)**	**42,442**	**(42,522)**	**3,257**	**(4,088)**	**8**	**229**
Liabilities (CHF million)									
Customer deposits	455	0	0	0	0	0	0	0	32
Obligation to return securities received as collateral	46	0	(15)	102	(103)	0	0	0	0
Trading liabilities	3,226	768	(641)	127	(107)	2,573	(1,527)	(7)	(839)
of which debt securities	2	30	(24)	39	(23)	0	0	0	1
of which equity securities	55	19	(5)	87	(80)	0	0	(3)	(33)
of which derivatives	3,169	719	(612)	1	(4)	2,573	(1,527)	(4)	(807)
of which interest rate derivatives	317	25	(11)	0	0	156	(145)	16	(171)
of which foreign exchange derivatives	100	19	(1)	0	0	55	(29)	0	15
of which equity/index-related derivatives	1,301	429	(364)	0	0	1,306	(548)	(36)	(592)
of which credit derivatives	898	247	(235)	0	0	806	(572)	16	(30)
Short-term borrowings	845	335	(242)	0	0	1,090	(1,133)	3	(117)
Long-term debt	12,501	2,873	(3,108)	0	0	5,761	(3,656)	(25)	(1,381)
of which structured notes over one year and up to two years	149	452	(296)	0	0	745	(501)	(10)	(14)
of which structured notes over two years	12,259	2,368	(2,800)	0	0	4,761	(3,115)	(17)	(1,355)
Other liabilities	1,467	117	(29)	45	(128)	20	(417)	(7)	94
Total liabilities at fair value	**18,540**	**4,093**	**(4,035)**	**274**	**(338)**	**9,444**	**(6,733)**	**(36)**	**(2,211)**
Net assets/(liabilities) at fair value	**(1,898)**	**(1,221)**	**1,611**	**42,168**	**(42,184)**	**(6,187)**	**2,645**	**44**	**2,440**

Assets and liabilities measured at fair value on a recurring basis for level 3 (continued)

								Trading revenues		Other
2017	Balance at beginning of period	Transfers in	Transfers out	Purchases	Sales	Issuances	Settlements	On transfers in / out	On all other	C transfe in / o
Assets (CHF million)										
Interest-bearing deposits with banks	1	40	0	0	(41)	0	0	0	0	
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	174	0	0	0	0	26	(193)	0	0	
Securities received as collateral	70	3	(1)	65	(86)	0	0	0	0	
Trading assets	12,765	1,159	(2,046)	15,810	(18,032)	1,317	(2,068)	121	252	
of which debt securities	3,977	608	(1,074)	2,747	(3,705)	0	0	(4)	(80)	
of which corporates	1,674	276	(654)	2,203	(2,005)	0	0	(4)	14	
of which RMBS	605	280	(229)	85	(305)	0	0	3	(95)	
of which CMBS	65	6	(17)	2	(13)	0	0	(3)	(21)	
of which CDO	1,165	39	(157)	174	(1,047)	0	0	0	(16)	
of which equity securities	240	49	(35)	146	(260)	0	0	0	33	
of which derivatives	4,305	416	(839)	0	0	1,317	(1,817)	123	(63)	
of which interest rate products	748	56	(53)	0	0	118	(183)	6	104	
of which equity/index-related products	914	142	(98)	0	0	443	(597)	14	58	
of which credit derivatives	688	216	(252)	0	0	381	(297)	38	(110)	
of which other trading assets	4,243	86	(98)	12,917	(14,067)	0	(251)	2	362	
Investment securities	72	0	(17)	100	(113)	0	(90)	(1)	95	
Other investments	1,906	23	(22)	324	(562)	0	0	0	9	
of which equity	318	23	(22)	139	(144)	0	0	0	(7)	
of which life finance instruments	1,588	0	0	185	(418)	0	0	0	16	
Loans	6,585	1,130	(947)	106	(580)	1,151	(2,743)	15	85	

of which commercial and industrial loans	3,816	448	(482)	71	(395)	590	(1,705)	(2)	21
of which financial institutions	1,829	352	(126)	33	(176)	444	(821)	28	(6)
Other intangible assets (mortgage servicing rights)	138	0	0	23	(1)	0	0	0	0
Other assets	1,679	347	(132)	759	(1,056)	1,054	(885)	(1)	(172)
of which loans held-for-sale	1,316	286	(113)	667	(904)	1,053	(885)	(2)	0
Total assets at fair value	**23,390**	**2,702**	**(3,165)**	**17,187**	**(20,471)**	**3,548**	**(5,979)**	**134**	**269**
Liabilities (CHF million)									
Customer deposits	410	0	0	0	0	35	(3)	0	(61)
Obligation to return securities received as collateral	70	3	(1)	65	(86)	0	0	0	0
Trading liabilities	3,737	566	(1,049)	113	(134)	1,193	(1,625)	140	461
of which interest rate derivatives	538	57	(36)	0	0	45	(258)	6	(14)
of which foreign exchange derivatives	150	11	(1)	0	0	9	(12)	0	(52)
of which equity/index-related derivatives	1,181	54	(188)	0	0	543	(692)	17	441
of which credit derivatives	851	377	(392)	0	0	350	(376)	61	66
Short-term borrowings	516	95	(172)	0	0	865	(472)	(2)	19
Long-term debt	13,415	1,172	(3,004)	0	0	4,540	(4,479)	(12)	1,400
of which structured notes over two years	12,434	995	(2,886)	0	0	3,913	(3,079)	(14)	1,390
Other liabilities	1,679	150	(102)	211	(304)	7	(398)	(25)	(8)
of which failed sales	219	80	(70)	189	(218)	0	0	(7)	40
Total liabilities at fair value	**19,827**	**1,986**	**(4,328)**	**389**	**(524)**	**6,640**	**(6,977)**	**101**	**1,811**
Net assets/(liabilities) at fair value	**3,563**	**716**	**1,163**	**16,798**	**(19,947)**	**(3,092)**	**998**	**33**	**(1,542)**

Gains and losses on assets and liabilities measured at fair value on a recurring basis (level 3)

	2018			2017		
in	Trading revenues	Other revenues	Total revenues	Trading revenues	Other revenues	Total revenues
Gains and losses on assets and liabilities (CHF million)						
Net realized/unrealized gains/(losses) included in net revenues	2,484	(160)	**2,324**[1]	(1,509)	(316)	**(1,825)**[1]
Whereof:						
Unrealized gains/(losses) relating to assets and liabilities still held as of the reporting date	(35)	(6)	**(41)**	(2,088)	20	**(2,068)**

1 Excludes net realized/unrealized gains/(losses) attributable to foreign currency translation impact.

Quantitative information about level 3 assets at fair value

end of 2018	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Securities received as collateral	30	–	–	–	–	–
Trading assets	8,814					
of which debt securities	2,076					
of which foreign governments	232	Discounted cash flow	Credit spread, in bp	140	140	140
of which corporates	1,260					
of which	441	Market comparable	Price, in %	0	118	94
of which	621	Option model	Correlation, in %	(60)	98	68
			Volatility, in %	0	178	30
of which RMBS	269	Discounted cash flow	Default rate, in %	0	11	3
			Discount rate, in %	1	26	7
			Loss severity, in %	0	100	63
			Prepayment rate, in %	1	22	8
of which equity securities	132					
of which	76	Market comparable	EBITDA multiple	2	9	6
			Price, in %	100	100	100
of which	49	Vendor price	Price, in actuals	0	355	1
of which derivatives	3,298					
of which interest rate products	507	Option model	Correlation, in %	0	100	69
			Prepayment rate, in %	1	26	9
			Volatility skew, in %	(4)	0	(2)
of which foreign exchange products	258					
of which	28	Discounted cash flow	Contingent probability, in %	95	95	95
of which	218	Option model	Correlation, in %	(23)	70	24
			Prepayment rate, in %	21	26	23
			Volatility, in %	80	90	85
	1,054			50	100	74

of which equity/index-related products		Option model	Buyback probability, in %			
			Correlation, in %	(40)	98	80
			Gap risk, in %[2]	0	4	1
			Volatility, in %	2	178	34
of which credit derivatives	673	Discounted cash flow	Correlation, in %	97	97	97
			Credit spread, in bp	3	2,147	269
			Default rate, in %	1	20	4
			Discount rate, in %	3	28	15
			Loss severity, in %	16	85	56
			Prepayment rate, in %	0	12	6
			Recovery rate, in %	0	68	8
of which other derivatives	806	Discounted cash flow	Market implied life expectancy, in years	2	16	5
			Mortality rate, in %	87	106	101
of which other trading assets	3,308					
of which	870	Discounted cash flow	Market implied life expectancy, in years	3	17	7
of which	2,119	Market comparable	Price, in %	0	110	30
of which	249	Option model	Mortality rate, in %	0	70	6

1
Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

2
Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

Quantitative information about level 3 assets at fair value (continued)

end of 2018	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Investment securities	166	–	–	–	–	–
Other investments	1,309					
of which life finance instruments	1,067	Discounted cash flow	Market implied life expectancy, in years	2	17	6
Loans	4,324					
of which real estate	515	Discounted cash flow	Credit spread, in bp	200	1,522	612
			Recovery rate, in %	25	40	39
of which commercial and industrial loans	1,949					
of which	1,531	Discounted cash flow	Credit spread, in bp	159	1,184	582
of which	306	Market comparable	Price, in %	0	99	65
of which financial institutions	1,391					
of which	1,157	Discounted cash flow	Credit spread, in bp	88	1,071	596
of which	73	Market comparable	Price, in %	1	100	74
Other intangible assets (mortgage servicing rights)	163	–	–	–	–	–
Other assets	1,543					
of which loans held-for-sale	1,235					
of which	422	Discounted cash flow	Credit spread, in bp	105	2,730	394
			Recovery rate, in %	25	87	56
of which	739	Market comparable	Price, in %	0	130	82
Total level 3 assets at fair value	**16,349**					

1 Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

Quantitative information about level 3 assets at fair value (continued)

end of 2017	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Securities received as collateral	46	–	–	–	–	–
Trading assets	8,754					
of which debt securities	2,292					
of which corporates	1,412					
of which	387	Option model	Correlation, in %	(60)	98	55
of which	545	Market comparable	Price, in %	0	139	84
of which	444	Discounted cash flow	Credit spread, in bp	37	952	230
of which RMBS	320	Discounted cash flow	Discount rate, in %	1	24	11
			Prepayment rate, in %	1	36	10
			Default rate, in %	0	12	4
			Loss severity, in %	0	100	57
of which CMBS	16	Discounted cash flow	Capitalization rate, in %	14	14	14
			Discount rate, in %	8	16	14
			Prepayment rate, in %	0	5	4
of which CDO	126	Discounted cash flow	Discount rate, in %	5	13	8
			Prepayment rate, in %	5	20	13
			Credit spread, in bp	464	669	553
			Default rate, in %	2	5	3
			Loss severity, in %	0	80	34
of which equity securities	163					
of which	67	Vendor price	Price, in actuals	0	2,080	10
of which	81	Market comparable	EBITDA multiple	2	9	7
			Price, in %	18	100	67
of which derivatives	3,289					
of which interest rate products	801	Option model	Correlation, in %	20	100	72
			Prepayment rate, in %	6	34	17

			Volatility skew, in %	(4)	1	(1)
of which equity/index-related products	833	Option model	Correlation, in %	(60)	98	65
			Volatility, in %	0	105	64
			Buyback probability, in %	50	100	90
			Gap risk, in %[2]	0	2	1
of which credit derivatives	634	Discounted cash flow	Credit spread, in bp	1	956	217
			Recovery rate, in %	0	45	20
			Discount rate, in %	3	50	16
			Default rate, in %	1	20	5
			Loss severity, in %	1	100	64
			Correlation, in %	97	97	97
			Prepayment rate, in %	0	14	6
of which other trading assets	3,010					
of which	1,605	Market comparable	Price, in %	0	110	23
of which	1,095	Discounted cash flow	Market implied life expectancy, in years	3	18	8

1
Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

2
Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

Quantitative information about level 3 assets at fair value (continued)

end of 2017	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Investment securities	42	–	–	–	–	–
Other investments	1,601					
of which private equity	29	–	–	–	–	–
of which other equity investments	271	–	–	–	–	–
of which life finance instruments	1,301	Discounted cash flow	Market implied life expectancy, in years	2	18	6
Loans	4,530					
of which commercial and industrial loans	2,207					
of which	1,924	Discounted cash flow	Credit spread, in bp	89	1,116	420
of which	250	Market comparable	Price, in %	0	99	56
of which financial institutions	1,480					
of which	1,426	Discounted cash flow	Credit spread, in bp	43	1,430	371
Other intangible assets (mortgage servicing rights)	158	–	–	–	–	–
Other assets	1,511					
of which loans held-for-sale	1,350					
of which	849	Discounted cash flow	Credit spread, in bp	117	973	292
			Recovery rate, in %	18	87	73
of which	280	Market comparable	Price, in %	0	102	88
Total level 3 assets at fair value	**16,642**					

1 Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

Quantitative information about level 3 liabilities at fair value

end of 2018	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Customer deposits	453	–	–	–	–	–
Obligation to return securities received as collateral	30	–	–	–	–	–
Trading liabilities	3,589					
of which debt securities	25	–	–	–	–	–
of which equity securities	37	Vendor price	Price, in actuals	0	3	0
of which derivatives	3,527					
of which interest rate derivatives	189	Option model	Basis spread, in bp	(20)	147	48
			Correlation, in %	1	100	41
			Prepayment rate, in %	1	26	7
of which foreign exchange derivatives	160					
of which	62	Discounted cash flow	Contingent probability, in %	95	95	95
			Credit spread, in bp	146	535	379
of which	37	Market comparable	Price, in %	100	100	100
of which	57	Option model	Correlation, in %	35	70	53
			Prepayment rate, in %	21	26	23
of which equity/index-related derivatives	1,500	Option model	Buyback probability, in %[2]	50	100	74
			Correlation, in %	(60)	98	74
			Volatility, in %	0	178	30
of which credit derivatives	1,140					
of which	566	Discounted cash flow	Correlation, in %	38	82	47
			Credit spread, in bp	3	2,937	262
			Default rate, in %	1	20	4
			Discount rate, in %	3	28	14
			Loss severity, in %	16	95	56

			Prepayment rate, in %	0	12	6
			Recovery rate, in %	0	80	14
of which	508	Market comparable	Price, in %	75	104	89
of which	20	Option model	Correlation, in %	50	50	50
			Credit spread, in bp	35	1,156	320
Short-term borrowings	784					
of which	61	Discounted cash flow	Credit spread, in bp	1,018	1,089	1,067
			Recovery rate, in %	40	40	40
of which	644	Option model	Buyback probability, in %	50	100	74
			Correlation, in %	(40)	98	64
			Fund gap risk, in %[3]	0	4	1
			Volatility, in %	2	178	32
Long-term debt	12,671					
of which structured notes over one year and up to two years	528					
of which	3	Discounted cash flow	Credit spread, in bp	112	112	112
of which	427	Option model	Correlation, in %	(40)	98	71
			Volatility, in %	2	178	31
of which structured notes over two years	11,800					
of which	1,570	Discounted cash flow	Credit spread, in bp	(11)	1,089	136
of which	43	Market comparable	Price, in %	0	46	30
of which	9,533	Option model	Buyback probability, in %[2]	50	100	74
			Correlation, in %	(60)	98	65
			Gap risk, in %[3]	0	4	1
			Mean reversion, in %[4]	(55)	(1)	(7)
			Volatility, in %	0	178	27

Other liabilities	1,327	–	–	–	–	–
Total level 3 liabilities at fair value	**18,854**					

1
Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.
2
Estimate of the probability of structured notes being put back to the Bank at the option of the investor over the remaining life of the financial instruments.
3
Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.
4
Management's best estimate of the speed at which interest rates will revert to the long-term average.
503

Quantitative information about level 3 liabilities at fair value (continued)

end of 2017	Fair value	Valuation technique	Unobservable input	Minimum value	Maximum value	Weighted average[1]
CHF million, except where indicated						
Customer deposits	455	–	–	–	–	–
Obligation to return securities received as collateral	46	–	–	–	–	–
Trading liabilities	3,226					
of which interest rate derivatives	317					
of which	205	Option model	Basis spread, in bp	(25)	52	19
			Correlation, in %	20	100	60
			Prepayment rate, in %	6	34	9
of which	81	Market comparable	Price, in %	1	102	44
of which foreign exchange derivatives	100					
of which	64	Option model	Correlation, in %	(10)	70	51
			Prepayment rate, in %	27	34	30
of which	7	Discounted cash flow	Contingent probability, in %	95	95	95
of which equity/index-related derivatives	1,301					
of which	947	Option model	Correlation, in %	(60)	98	55
			Volatility, in %	0	105	25
			Buyback probability, in %[2]	50	100	90
of which	62	Vendor price	Price, in actuals	0	53	18
of which credit derivatives	898	Discounted cash flow	Credit spread, in bp	2	973	172
			Discount rate, in %	3	50	16
			Default rate, in %	1	20	5
			Recovery rate, in %	10	60	38
			Loss severity, in %	25	100	67
				38	85	54

			Correlation, in %			
			Prepayment rate, in %	0	20	7
			Term TRS/repo spread, in bp	176	176	176
Short-term borrowings	845					
of which	288	Option model	Correlation, in %	(40)	98	60
			Volatility, in %	4	105	26
of which	527	Discounted cash flow	Credit spread, in bp	2	278	175
			Recovery rate, in %	25	40	29
of which	24	Market comparable	Price, in %	11	47	47
Long-term debt	12,501					
of which structured notes over two years	12,259					
of which	9,739	Option model	Correlation, in %	(60)	99	55
			Volatility, in %	0	105	21
			Buyback probability, in %[2]	50	100	90
			Gap risk, in %[3]	0	2	1
			Mean reversion, in %[4]	(14)	(1)	(6)
of which	1,571	Discounted cash flow	Credit spread, in bp	2	729	105
Other liabilities	1,467					
of which failed sales	223					
of which	122	Market comparable	Price, in %	0	100	51
of which	25	Discounted cash flow	Credit spread, in bp	1,430	1,430	1,430
Total level 3 liabilities at fair value	**18,540**					

1
Cash instruments are generally presented on a weighted average basis, while certain derivative instruments either contain a combination of weighted averages and arithmetic means of the related inputs or are presented on an arithmetic mean basis.

2
Estimate of the probability of structured notes being put back to the Bank at the option of the investor over the remaining life of the financial instruments.

3
Risk of unexpected large declines in the underlying values occurring between collateral settlement dates.

4
Management's best estimate of the speed at which interest rates will revert to the long-term average.
504

Fair value, unfunded commitments and term of redemption conditions of investment funds measured at NAV per share

	2018				2017			
end of	Non-redeemable	Redeemable	Total fair value	Unfunded commit-ments	Non-redeemable	Redeemable	Total fair value	Unfunded commit-ments
Fair value of investment funds and unfunded commitments (CHF million)								
Debt funds	12	0	12	0	0	0	0	0
Equity funds	103	1,011[1]	1,114	53	61	992[2]	1,053	0
Equity funds sold short	(8)	(2)	(10)	0	0	(9)	(9)	0
Funds held in trading assets and trading liabilities	107	1,009	1,116	53	61	983	1,044	0
Debt funds	1	0	1	0	1	0	1	0
Equity funds	126	0	126	42	133	0	133	63
Real estate funds	214	0	214	34	178	0	178	44
Other private equity funds	24	5	29	29	31	0	31	16
Private equity funds	365	5	370	105	343	0	343	123
Debt funds	68	34	102	0	164	75	239	0
Equity funds	14	14	28	0	2	53	55	0
Other hedge funds	2	24	26	0	2	95	97	9
Hedge funds	84	72[3]	156	0	168	223[4]	391	9
Equity method investment funds	52	522	574	21	71	1,050	1,121	5
Funds held in other investments	501	599	1,100	126	582	1,273	1,855	137
Fair value of investment funds and unfunded commitments	**608**[5]	**1,608**	**2,216**	**179**[7]	**643**[5]	**2,256**[6]	**2,899**	**137**[7]

1
46% of the redeemable fair value amount of equity funds is redeemable on demand with a notice period primarily of less than 30 days, 40% is redeemable on a monthly basis with a notice period primarily of more than 30 days, 13% is redeemable on a quarterly basis with a notice period primarily of more than 45 days and 1% is redeemable on an annual basis with a notice period primarily of less than 30 days.

2
54% of the redeemable fair value amount of equity funds is redeemable on demand with a notice period primarily of less than 30 days, 35% is redeemable on a monthly basis with a notice period primarily of less than 30 days, 9% is redeemable on a quarterly basis with a notice period primarily of more than 45 days and 2% is redeemable on an annual basis with a notice period primarily of more than 60 days.

3
65% of the redeemable fair value amount of hedge funds is redeemable on a quarterly basis with a notice period primarily of more than 60 days and 35% is redeemable on demand with a notice period primarily of less than 30 days.

4
51% of the redeemable fair value amount of hedge funds is redeemable on a quarterly basis with a notice period primarily of more than 45 days, 43% is redeemable on a monthly basis with a notice period primarily of less than 30 days and 6% is redeemable on demand with a notice period primarily of less than 30 days.
5
Includes CHF 102 million and CHF 229 million attributable to noncontrolling interests as of the end of 2018 and 2017, respectively.
6
Includes CHF 167 million attributable to noncontrolling interests as of the end of 2017.
7
Includes CHF 23 million and CHF 53 million attributable to noncontrolling interests as of the end of 2018 and 2017, respectively.

Assets measured at fair value on a nonrecurring basis end of	2018	2017
Assets held-for-sale recorded at fair value on a nonrecurring basis (CHF billion)		
Assets held-for-sale recorded at fair value on a nonrecurring basis	0.0	0.1
of which level 2	0.0	0.1

Difference between the aggregate fair value and the unpaid principal balances of fair value option-elected financial instruments

	2018			2017		
end of	Aggregate fair value	Aggregate unpaid principal	Difference	Aggregate fair value	Aggregate unpaid principal	Difference
Financial instruments (CHF million)						
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	81,818	81,637	181	77,498	76,643	855
Loans	14,873	15,441	(568)	15,307	15,372	(65)
Other assets [1]	6,706	9,240	(2,534)	8,468	10,910	(2,442)
Due to banks and customer deposits	(859)	(778)	(81)	(907)	(861)	(46)
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	(14,828)	(14,827)	(1)	(15,262)	(15,180)	(82)
Short-term borrowings	(8,068)	(8,647)	579	(11,019)	(11,104)	85
Long-term debt	(63,027)	(69,914)	6,887	(62,622)	(62,813)	191
Other liabilities	(2,068)	(3,125)	1,057	(661)	(1,716)	1,055
Non-performing and non-interest-earning loans [2]	640	3,493	(2,853)	708	3,375	(2,667)

1 Primarily loans held-for-sale.

2 Included in loans or other assets.

Gains and losses on financial instruments

	2018	2017	2016
in	Net gains/ (losses)	Net gains/ (losses)	Net gains/ (losses)
Financial instruments (CHF million)			
Interest-bearing deposits with banks	2[1]	13[1]	4[1]
of which related to credit risk	(10)	0	1
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	2,451[1]	2,206[1,4]	1,440[1]
Other investments	241[3]	215[2]	214[2]
of which related to credit risk	(1)	(4)	(3)
Loans	717[1]	1,542[1]	1,643[1]
of which related to credit risk	(296)	7	(16)
Other assets	770[1]	480[1]	(507)[2]
of which related to credit risk	61	96	(200)
Due to banks and customer deposits	(39)[2]	1[2]	(12)[1]
of which related to credit risk	(37)	5	(22)
	(890)[1]	(418)[1,4]	(112)[1]

Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions			
Short-term borrowings	2,807[2]	(512)[2]	323[2]
of which related to credit risk	(5)	(23)	(4)
Long-term debt	4,375[2]	(6,615)[2]	(1,136)[2]
of which related to credit risk	7	(32)	22
Other liabilities	72[3]	181[3]	443[2]
of which related to credit risk	4	88	312

1
Primarily recognized in net interest income.
2
Primarily recognized in trading revenues.
3
Primarily recognized in other revenues.
4
Prior period has been corrected.

Gains/(losses) attributable to changes in instrument-specific credit risk on fair value option elected liabilities

	Gains/(losses) recorded into AOCI[1]			Gains/(losses) recorded in AOCI transferred to net income[1]	
in	2018	Cumulative	2017	2018	2017
Financial instruments (CHF million)					
Deposits	36	(21)	(15)	(6)	0
Short-term borrowings	6	(53)	(63)	2	0
Long-term debt	1,520	(876)	(1,768)	53	32
of which treasury debt over two years	676	132	(513)	0	0
of which structured notes over two years	774	(1,060)	(1,246)	53	27
Total	**1,562**	**(950)**	**(1,846)**	**49**	**32**

1 Amounts are reflected gross of tax.

Carrying value and fair value of financial instruments not carried at fair value

	Carrying value	Fair value			
end of		Level 1	Level 2	Level 3	Total
2018 (CHF million)					
Financial assets					
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	35,277	0	35,243	35	35,278
Loans	274,440	0	275,105	7,047	282,152
Other financial assets [1]	117,002	99,238	17,139	796	117,173
Financial liabilities					
Due to banks and deposits	376,741	197,320	179,448	0	376,768
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions	9,795	0	9,795	0	9,795
Short-term borrowings	14,351	0	14,352	0	14,352
Long-term debt	90,406	0	89,707	854	90,561
Other financial liabilities [2]	16,803	0	16,547	184	16,731
2017 (CHF million)					
Financial assets					
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions	37,848	0	37,848	0	37,848
Loans	264,181	0	268,380	3,212	271,592
Other financial assets [1,3]	170,687	109,414	60,518	1,108	171,040
Financial liabilities					
Due to banks and deposits	374,006	202,164	171,831	0	373,995
Central bank funds purchased,	11,233	0	11,233	0	11,233

securities sold under repurchase agreements and securities lending transactions					
Short-term borrowings	15,359	0	15,359	0	15,359
Long-term debt	109,420	0	112,564	235	112,799
Other financial liabilities [2,3]	61,701	0	61,543	146	61,689

1
Primarily includes cash and due from banks, interest-bearing deposits with banks, loans held-for-sale, cash collateral on derivative instruments, interest and fee receivables and non-marketable equity securities.
2
Primarily includes cash collateral on derivative instruments and interest and fee payables.
3
2017 balances included brokerage receivables and payables, which, effective January 1, 2018, were no longer included due to the adoption of ASU 2016-01.

35 Assets pledged and collateral

Assets pledged

The Bank pledges assets mainly for repurchase agreements and other securities financing. Certain pledged assets may be encumbered, meaning they have the right to be sold or repledged. The encumbered assets are parenthetically disclosed on the consolidated balance sheet.

Assets pledged end of	2018	2017
CHF million		
Total assets pledged or assigned as collateral	117,895	130,038
of which encumbered	58,672	73,189

Collateral

The Bank receives cash and securities in connection with resale agreements, securities borrowing and loans, derivative transactions and margined broker loans. A significant portion of the collateral and securities received by the Bank was sold or repledged in connection with repurchase agreements, securities sold not yet purchased, securities borrowings and loans, pledges to clearing organizations, segregation requirements under securities laws and regulations, derivative transactions and bank loans.

Collateral end of	2018	2017
CHF million		
Fair value of collateral received with the right to sell or repledge	406,389	433,190
of which sold or repledged	193,267	212,155

Other information end of	2018	2017
CHF million		
Swiss National Bank required minimum liquidity reserves	2,042	2,043
Other cash and securities restricted under Swiss and foreign regulations for financial institutions	24,681	26,928

> Refer to “Note 36 – Assets pledged and collateral” in VI – Consolidated financial statements – Credit Suisse Group for further information.

36 Capital adequacy

The Bank is subject to the Basel III framework, as implemented in Switzerland, as well as Swiss legislation and regulations for systemically important banks (Swiss Requirements). The Bank, which is subject to regulation by FINMA, has based its capital adequacy calculations on US GAAP financial statements, as permitted by FINMA Circular 2013/1.

> Refer to “Note 37 – Capital adequacy” in VI – Consolidated financial statements – Credit Suisse Group for further information.

As of December 31, 2018 and 2017, the Bank’s capital position exceeded its capital requirements under the regulatory provisions outlined under Swiss Requirements.

Broker-dealer operations

Certain of the Bank’s broker-dealer subsidiaries are also subject to capital adequacy requirements. As of December 31, 2018 and 2017, the Bank and its subsidiaries complied with all applicable regulatory capital adequacy requirements.

Dividend restrictions

Certain of the Bank’s subsidiaries are subject to legal restrictions governing the amount of dividends they can pay (for example, pursuant to corporate law as defined by the Swiss Code of Obligations).

As of December 31, 2018 and 2017, Credit Suisse AG was not subject to restrictions on its ability to pay the proposed dividends.

Swiss metrics

end of	2018	Phase-in 2017
Swiss capital (CHF million)		
Swiss CET1 capital	38,810	38,288
Going concern capital	51,634	53,995
Gone concern capital	35,683	35,771
Total loss-absorbing capacity (TLAC)	87,317	89,766
Swiss risk-weighted assets and leverage exposure (CHF million)		
Swiss risk-weighted assets	286,682	273,332
Leverage exposure	885,854	921,793
Swiss capital ratios (%)		
Swiss CET1 ratio	13.5	14.0
Going concern capital ratio	18.0	19.8
Gone concern capital ratio	12.4	13.1
TLAC ratio	30.5	32.8
Swiss leverage ratios (%)		
Swiss CET1 leverage ratio	4.4	4.2
Going concern leverage ratio	5.8	5.9
Gone concern leverage ratio	4.0	3.9
TLAC leverage ratio	9.9	9.7
Swiss capital ratio requirements (%)		
Swiss CET1 ratio requirement	9.46	9.0
Going concern capital ratio requirement	12.86	12.0
Gone concern capital ratio requirement	8.9	6.2
TLAC ratio requirement	21.76	18.2
Swiss leverage ratio requirements (%)		
Swiss CET1 leverage ratio requirement	2.9	2.6
Going concern leverage ratio requirement	4.0	3.5
Gone concern leverage ratio requirement	3.0	2.0
TLAC leverage ratio requirement	7.0	5.5

37 Assets under management

The following disclosure provides information regarding client assets, assets under management and net new assets as regulated by FINMA.

> Refer to "Note 38 – Assets under management" in VI – Consolidated financial statements – Credit Suisse Group for further information.

Assets under management

end of	2018	2017
CHF billion		
Assets in collective investment instruments managed by Credit Suisse	178.3	177.4
Assets with discretionary mandates	256.5	267.3
Other assets under management	904.4	923.6
Assets under management (including double counting)	**1,339.2**	**1,368.3**
of which double counting	42.4	44.6

Changes in assets under management

	2018	2017
Assets under management (CHF billion)		
Balance at beginning of period [1]	**1,368.3**	**1,243.9**
Net new assets/(net asset outflows)	56.0	36.2
Market movements, interest, dividends and foreign exchange	(68.0)	87.6
of which market movements, interest and dividends [2]	(54.8)	89.8
of which foreign exchange	(13.2)	(2.2)
Other effects	(17.1)	0.6
Balance at end of period	**1,339.2**	**1,368.3**

1 Including double counting.

2 Net of commissions and other expenses and net of interest expenses charged.

38 Litigation

> Refer to "Note 39 – Litigation" in VI – Consolidated financial statements – Credit Suisse Group for further information.

39 Significant subsidiaries and equity method investments
Significant subsidiaries

Company name	Domicile	Currency	Nominal capital in million	Equity interest in %
End of 2018				
Credit Suisse AG				
Alpine Securitization LTD	George Town, Cayman Islands	USD	0.0	100
Asset Management Finance LLC	Wilmington, United States	USD	167.8	100
Banco Credit Suisse (Brasil) S.A.	São Paulo, Brazil	BRL	53.6	100
Banco Credit Suisse (México), S.A.	Mexico City, Mexico	MXN	1,716.7	100
Banco de Investimentos Credit Suisse (Brasil) S.A.	São Paulo, Brazil	BRL	164.8	100
BANK-now AG	Horgen, Switzerland	CHF	30.0	100
Boston Re Ltd.	Hamilton, Bermuda	USD	2.0	100
Casa de Bolsa Credit Suisse (México), S.A. de C.V.	Mexico City, Mexico	MXN	274.0	100
Column Financial, Inc.	Wilmington, United States	USD	0.0	100
Credit Suisse (Australia) Limited	Sydney, Australia	AUD	34.1	100
Credit Suisse (Brasil) S.A. Corretora de Titulos e Valores Mobiliários	São Paulo, Brazil	BRL	98.4	100
Credit Suisse (Deutschland) Aktiengesellschaft	Frankfurt, Germany	EUR	130.0	100
Credit Suisse (Hong Kong) Limited	Hong Kong, China	HKD	13,758.0	100
Credit Suisse (Italy) S.p.A.	Milan, Italy	EUR	170.0	100
Credit Suisse (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	230.9	100
Credit Suisse (Qatar) LLC	Doha, Qatar	USD	29.0	100
Credit Suisse (Schweiz) AG	Zurich, Switzerland	CHF	100.0	100
Credit Suisse (Singapore) Limited	Singapore, Singapore	SGD	743.3	100
Credit Suisse (UK) Limited	London, United Kingdom	GBP	245.2	100
Credit Suisse (USA), Inc.	Wilmington, United States	USD	0.0	100
Credit Suisse Asset Management (UK) Holding Limited	London, United Kingdom	GBP	144.2	100
Credit Suisse Asset Management Immobilien Kapitalanlagegesellschaft mbH	Frankfurt, Germany	EUR	6.1	100
Credit Suisse Asset Management International Holding Ltd	Zurich, Switzerland	CHF	20.0	100
Credit Suisse Asset Management Investments Ltd	Zurich, Switzerland	CHF	0.1	100
Credit Suisse Asset Management Limited	London, United Kingdom	GBP	45.0	100
Credit Suisse Asset Management, LLC	Wilmington, United States	USD	1,086.8	100
Credit Suisse Atlas I Investments (Luxembourg) S.à.r.l.	Luxembourg, Luxembourg	USD	0.0	100
Credit Suisse Brazil (Bahamas) Limited	Nassau, Bahamas	USD	70.0	100
Credit Suisse Business Analytics (India) Private Limited	Mumbai, India	INR	40.0	100
Credit Suisse Capital LLC	Wilmington, United States	USD	937.6	100

Credit Suisse Energy LLC	Wilmington, United States	USD	0.0	100
Credit Suisse Equities (Australia) Limited	Sydney, Australia	AUD	62.5	100
Credit Suisse Finance (India) Private Limited	Mumbai, India	INR	1,050.1	100
Credit Suisse First Boston (Latam Holdings) LLC	George Town, Cayman Islands	USD	23.8	100
Credit Suisse First Boston Finance B.V.	Amsterdam, The Netherlands	EUR	0.0	100
Credit Suisse First Boston Mortgage Capital LLC	Wilmington, United States	USD	356.6	100
Credit Suisse First Boston Next Fund, Inc.	Wilmington, United States	USD	10.0	100
Credit Suisse Fund Management S.A.	Luxembourg, Luxembourg	CHF	0.3	100

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Significant subsidiaries (continued)

Company name	Domicile	Currency	Nominal capital in million	Equity interest in %
Credit Suisse Fund Services (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	1.5	100
Credit Suisse Funds AG	Zurich, Switzerland	CHF	7.0	100
Credit Suisse Group Finance (U.S.) Inc.	Wilmington, United States	USD	100.0	100
Credit Suisse Hedging-Griffo Corretora de Valores S.A.	São Paulo, Brazil	BRL	29.6	100
Credit Suisse Holding Europe (Luxembourg) S.A.	Luxembourg, Luxembourg	CHF	32.6	100
Credit Suisse Holdings (Australia) Limited	Sydney, Australia	AUD	3.0	100
Credit Suisse Holdings (USA), Inc.	Wilmington, United States	USD	550.0	100
Credit Suisse InvestLab AG	Zurich, Switzerland	CHF	1.0	100
Credit Suisse Istanbul Menkul Degerler A.S.	Istanbul, Turkey	TRY	6.8	100
Credit Suisse Leasing 92A, L.P.	Wilmington, United States	USD	43.9	100
Credit Suisse Life & Pensions AG	Vaduz, Liechtenstein	CHF	15.0	100
Credit Suisse Life (Bermuda) Ltd.	Hamilton, Bermuda	USD	1.0	100
Credit Suisse Loan Funding LLC	Wilmington, United States	USD	0.0	100
Credit Suisse Management LLC	Wilmington, United States	USD	896.4	100
Credit Suisse Prime Securities Services (USA) LLC	Wilmington, United States	USD	263.3	100
Credit Suisse Private Equity, LLC	Wilmington, United States	USD	42.2	100
Credit Suisse PSL GmbH	Zurich, Switzerland	CHF	0.0	100
Credit Suisse Saudi Arabia	Riyadh, Saudi Arabia	SAR	625.0	100
Credit Suisse Securities (Canada), Inc.	Toronto, Canada	CAD	3.4	100
Credit Suisse Securities (Europe) Limited	London, United Kingdom	USD	3,859.3	100
Credit Suisse Securities (Hong Kong) Limited	Hong Kong, China	HKD	2,080.9	100
Credit Suisse Securities (India) Private Limited	Mumbai, India	INR	2,214.7	100
Credit Suisse Securities (Japan) Limited	Tokyo, Japan	JPY	78,100.0	100
Credit Suisse Securities (Johannesburg) Proprietary Limited	Johannesburg, South Africa	ZAR	0.0	100
Credit Suisse Securities (Malaysia) Sdn. Bhd.	Kuala Lumpur, Malaysia	MYR	100.0	100
Credit Suisse Securities (Moscow)	Moscow, Russia	RUB	97.1	100
Credit Suisse Securities (Singapore) Pte Limited	Singapore, Singapore	SGD	30.0	100
Credit Suisse Securities (Thailand) Limited	Bangkok, Thailand	THB	500.0	100
Credit Suisse Securities (USA) LLC	Wilmington, United States	USD	1,131.7	100
Credit Suisse Services (India) Private Limited	Pune, India	INR	0.1	100
Credit Suisse Services (USA) LLC	Wilmington, United States	USD	0.0	100
CS Non-Traditional Products Ltd.	Nassau, Bahamas	USD	0.1	100
CSAM Americas Holding Corp.	Wilmington, United States	USD	0.0	100
DLJ Merchant Banking Funding, Inc	Wilmington, United States	USD	0.0	100
DLJ Mortgage Capital, Inc.	Wilmington, United States	USD	0.0	100
Fides Treasury Services AG	Zurich, Switzerland	CHF	2.0	100
JSC "Bank Credit Suisse (Moscow)"	Moscow, Russia	USD	37.8	100
Lime Residential Ltd	Nassau, Bahamas	USD	100.0	100
Merban Equity AG	Zug, Switzerland	CHF	0.1	100
Merchant Holding, LLC	Wilmington, United States	USD	0.0	100
Neue Aargauer Bank AG	Aarau, Switzerland	CHF	134.1	100
Solar Investco II Ltd.	George Town, Cayman Islands	USD	0.0	100
SPS Holding Corporation	Wilmington, United States	USD	0.0	100
SVC - AG für KMU Risikokapital	Zurich, Switzerland	CHF	15.0	100

PT Credit Suisse Sekuritas Indonesia	Jakarta, Indonesia	IDR	235,000.0	99
Credit Suisse Hypotheken AG	Zurich, Switzerland	CHF	0.1	98
Credit Suisse International	London, United Kingdom	USD	12,366.1	98[1]

1 Remaining 2% held directly by Credit Suisse Group AG. 98% of voting rights and 98% of equity interest held by Credit Suisse AG.

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Significant equity method investments

Company name	Domicile	Equity interest in %
End of 2018		
Credit Suisse AG		
Swisscard AECS GmbH	Horgen, Switzerland	50
Credit Suisse Founder Securities Limited	Beijing, China	33
E.L. & C. Baillieu Stockbroking (Holdings) Pty Ltd	Melbourne, Australia	23
ICBC Credit Suisse Asset Management Co., Ltd.	Beijing, China	20
York Capital Management Global Advisors, LLC	New York, United States	5[1]
Holding Verde Empreendimentos e Participações S.A.	São Paulo, Brazil	0[1]

1 The Bank holds a significant noncontrolling interest.

40 Significant valuation and income recognition differences between US GAAP and Swiss GAAP banking law (true and fair view)

> Refer to “Note 43 – Significant valuation and income recognition differences between US GAAP and Swiss GAAP banking law (true and fair view)” in VI – Consolidated financial statements – Credit Suisse Group for further information.

Controls and procedures

Evaluation of disclosure controls and procedures

The Bank has evaluated the effectiveness of the design and operation of its disclosure controls and procedures as of the end of the period covered by this report under the supervision and with the participation of management, including the Bank Chief Executive Officer (CEO) and Chief Financial Officer (CFO), pursuant to Rule 13(a)-15(a) under the Securities Exchange Act of 1934 (the Exchange Act). There are inherent limitations to the effectiveness of any system of controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective controls and procedures can only provide reasonable assurance of achieving their control objectives.

The CEO and CFO concluded that, as of December 31, 2018, the design and operation of the Bank's disclosure controls and procedures were effective, in all material respects, to ensure that information required to be disclosed in reports filed and submitted under the Exchange Act is recorded, processed, summarized and reported as and when required.

Management report on internal control over financial reporting

The management of the Bank is responsible for establishing and maintaining adequate internal control over financial reporting. The Bank's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with US GAAP. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

Management has made an evaluation and assessment of the Bank's internal control over financial reporting as of December 31, 2018 using the criteria issued in 2013 by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in "Internal Control – Integrated Framework".

Based upon its review and evaluation, management, including the Bank CEO and CFO, has concluded that the Bank's internal control over financial reporting is effective as of December 31, 2018.

The Bank's independent auditors, KPMG AG, have issued an unqualified opinion on the effectiveness of the Bank's internal control over financial reporting as of December 31, 2018, as stated in their report, which follows.

Changes in internal control over financial reporting

There were no changes in the Bank's internal control over financial reporting during the period covered by this report that have materially affected, or are reasonably likely to materially affect, the Bank's internal control over financial reporting.

Report of the Independent Registered Public Accounting Firm

Report of the Independent Registered Public Accounting FirmTo the shareholders and Board of DirectorsCredit Suisse AG,

Zurich_____Opinion on Internal Control Over Financial Reporting We have audited Credit Suisse AG and subsidiaries' (the “Bank”) internal control over financial reporting as of December 31, 2018, based oncriteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Bank maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (“PCAOB”), the consolidated balance sheets of the Bank as of December 31, 2018 and 2017, the related consolidated statements of operations, comprehensive income, changes in equity, and cash flows for each of the years in the threeyear period ended December31, 2018, and the related notes (collectively, the “consolidated financial statements”), and our report dated March 22, 2019 expressed an unqualified opinion on those consolidated financial statements. Basis for Opinion The Bank’s Board of Directors and management are responsible for maintaining effective internal control over financial reporting and the Bank’s management is responsible for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Bank’s internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Bank in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB. We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion. Definition and Limitations of Internal Control Over Financial Reporting A company’s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company’s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company’s assets that could have a material effect on the financial statements. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate. KPMG AG Nicholas Edmonds Anthony Anzevino Licensed Audit Expert Global Lead Partner Auditor in Charge Zurich, Switzerland March 22, 2019

IX – Parent company financial statements – Credit Suisse (Bank)
Report of the Statutory Auditor
Parent company financial statements
Notes to the financial statements
Proposed appropriation of reserves and retained earnings

1 Company details, business developments and subsequent events
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6 Personnel expenses
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8 Increase/(release) of provisions and other valuation adjustments, losses and extraordinary income and expenses
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Report of the Statutory Auditor

Report of the Statutory AuditorTo the General Meeting of Credit Suisse AG, ZurichReport of the Statutory Auditor on the Financial StatementsAs statutory auditor, we have audited the accompanying financial statements of Credit Suisse AG, which comprise the balance sheet, statement of income, statement of changes in equity and notes for the year ended December 31, 2018.Board of Directors' ResponsibilityThe Board of Directors is responsible for the preparation of the financial statements in accordance with the requirements of Swiss law and Credit Suisse AG's articles of association. This responsibility includes designing, implementing and maintaining an internal control system relevant to the preparation of financial statements that are free from material misstatement, whether due to fraud or error. The Board of Directors is further responsible for selecting and applying appropriate accounting policies and making accounting estimates that are reasonable in the circumstances.Auditor's ResponsibilityOur responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with Swiss law and Swiss Auditing Standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement. An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers the internal control system relevant to the entity's preparation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control system. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as evaluating the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.OpinionIn our opinion, the financial statements for the year ended December 31, 2018, comply with Swiss law and Credit Suisse AG's articles of association.Report on Key Audit Matters based on the circular 1/2015 of the Federal Audit Oversight AuthorityValuation of financial instruments reported at fair valueProvisions for litigation and regulatory actionsValuation of the allowance for loan lossesValuation of participationsControls over IT systems impacting financial reporting Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.Valuation of financial instruments reported at fair valueKey Audit MatterOur responseCredit Suisse AG reports financial assets reported at fair value of CHF 80.8 billion and financial liabilities reported at fair value of CHF 102.1 billion as of December 31, 2018. These financial assets represented 15% of total assets and these financial liabilities represented 21% of total liabilities as of December 31, 2018.The fair value of the majority of Credit Suisse AG's financial instruments is based on quoted prices in active markets or observable inputs.In addition, Credit Suisse AG holds financial instruments for which no prices are available and which have little or no observable inputs. For these financial instruments, fair value is determined through the application of valuation techniques, which often involve the exercise of judgment by management including the use of assumptions and estimates. In particular, for financial instruments which do not have directly observable market prices, judgment is often required to determine modelling assumptions that are used in the determination of fair value. Credit Suisse AG also has certain financial instruments that utilize significant, judgmental inputs with varying degrees of observability for purposes of determining fair value. Further, Credit Suisse AG applies significant judgment in calculating certain valuation adjustments including credit, debit and funding valuation adjustments.We assessed and tested the design and operating effectiveness of the key controls over financial reporting with respect to the valuation of financial instruments reported at fair value. This included controls over independent price verification, valuation model approval and the calculation, validation and recording of valuation adjustments.For a sample of financial instruments, we examined the appropriateness of models used and valuation inputs or data. We compared observable inputs and data against independent sources and externally available market data.For a sample of instruments which do not have directly observable market prices, we critically examined and challenged the assumptions and models used or re-performed an independent valuation assessment, by reference to what we considered to be available alternative methods and sensitivities to key factors.We also evaluated the methodology and inputs used in determining key judgmental valuation adjustments (including credit, debit, and funding valuation adjustments) by critically examining and challenging these assumptions and models, and performing recalculations for a sample of these adjustments.We

made use of our own valuation specialists in performing the above procedures, in particular in relation to the most judgmental financial instruments, models, methodologies and assumptions.For further information on the valuation of financial instruments reported at fair value refer to the following:Note 2 Accounting and valuation principles, “Trading assets and liabilities”Note 12 Trading assets and liabilities and other financial instruments held at fair valueNote 13 Derivative financial instrumentsProvisions for litigation and regulatory actionsKey Audit MatterOur responseCredit Suisse AG is involved in a number of judicial, regulatory and arbitration proceedings concerning matters arising in connection with the conduct of its businesses. The outcome of such cases is dependent on the future outcome of continuing legal and regulatory processes. Consequently, the calculations of the provisions are subject to inherent uncertainty as they rely on management judgment about the likelihood and amount of liabilities arising from litigation and regulatory claims.We assessed and tested the design and operating effectiveness of the key controls over financial reporting with respect to provisions for litigation and regulatory actions. This included controls over the valuation of the litigation provisions and their approval, review and disclosure.We evaluated Credit Suisse AG’s assessment of the nature and status of litigation, claims and regulatory actions. We considered the legal advice received by Credit Suisse AG from in-house counsel, as well as external counsel, when relevant, for certain of the more significant cases.We examined Credit Suisse AG’s conclusions with respect to the provisions and disclosures made for significant cases, considering the results of corroborative information obtained from management. In view of the significance of the judgments required, we examined the more significant provisions in detail. For the significant cases, we obtained correspondence directly from Credit Suisse AG’s outside attorneys and, where appropriate, performed corroborative inquiry of outside counsel and tested data and inputs used by management in determining their litigation provisions.For further information on provisions for litigation and regulatory actions refer to the following:Note 2 Accounting and valuation principles, “Provisions”Note 20 Provisions and valuation adjustmentsValuation of the allowance for loan lossesKey Audit MatterOur responseCredit Suisse AG reports gross loans held at amortized cost of CHF 183.2 billion and has recorded an allowance for loan losses of CHF 0.9 billion as of December 31, 2018.The valuation of the allowance for loan losses relies on the application of significant management judgment and the use of different modelling techniques and assumptions. The specific allowance for loan losses involves judgment to estimate the recoverable amount and the collateral value. The collective allowance for loan losses involves judgment in determining the methodology and parameters in calculating the allowance at a portfolio level.We assessed and tested the design and operating effectiveness of the key controls over financial reporting with respect to the valuation of the allowance for loan losses. This included controls over the calculation, approval, recording and monitoring of the allowance for loan losses. This also included controls over model approval, validation and approval of key data inputs and the qualitative considerations for potential impairment that were not captured by management’s models.For a sample of loan loss allowances calculated on an individual basis we tested the assumptions underlying the impairment identification and quantification including forecasts of future cash flows, valuation of underlying collateral and estimates of recovery on default. We also examined a sample of loans which had not been identified by management as impaired and formed our own opinion about collectability.For a sample of loan loss allowances calculated on a collective basis we tested the underlying models including the model approval and validation process. We also tested the reasonableness of the inputs to those models, such as recovery rates, by comparing data and assumptions made to external benchmarks, when available. For further information on the valuation of allowance for loan losses refer to the following:Note 2 Accounting and valuation principles, “Due from customers and mortgage loans”Note 3 Risk management, “Credit Risk”Note 11 Collateral and impaired loansValuation of participationsKey Audit MatterOur responseCredit Suisse AG reports participations of CHF 74.4 billion as of December 31, 2018. The participations portfolio consists of investments in subsidiary entities mainly operating in the banking and finance industry.Participations are valued at acquisition cost less impairment. For the purpose of impairment testing, the portfolio valuation method is applied, and therefore impairment is assessed on the level of the entire portfolio of participations and not individually for each participation. The valuation of participations involves judgment in the projections and assumptions used, which are sensitive to the expected future market developments that could affect the profitability of these entities.We assessed and tested the design and implementation of the key controls over financial reporting with respect to the valuation of participations. This included controls over the identification and measurement of impairments, the evaluation of the valuation methodology, key inputs and assumptions used in the determination of the participation value, and management’s annual comparison of legal entity plans to past performance.For a sample of participations, we evaluated key assumptions applied in performing the valuation. We

used our own valuation specialists to critically examine and challenge the key assumptions applied by benchmarking them against independent data.For further information on the valuation of participations refer to the following:Note 2 Accounting and valuation principles, “Participations” Controls over IT systems impacting financial reportingKey Audit MatterOur responseCredit Suisse AG is dependent on technology due to the significant number of transactions that are processed daily across Credit Suisse AG’s businesses. Credit Suisse AG’s IT infrastructure and applications are an integral component of its operations and financial reporting framework. Appropriate IT controls are required to ensure transactions are processed correctly and to mitigate the risk of fraud and error.We assessed the design of the general IT controls for Credit Suisse AG’s key systems relevant to financial reporting.We tested the operating effectiveness of Credit Suisse AG’s general IT controls including user access and provisioning (including system enforced segregation of duties), physical access, change management, information security, incident management, and back-up and restoration protocols. Our work included testing whether access requests were appropriately authorised in line with Credit Suisse AG’s general IT controls framework and, where required, the effective operation of compensating IT or business controls. Additionally, our work included testing selected system interface controls to confirm the completeness and accuracy of data transfers between systems.In performing our work, we included IT specialists as part of our audit team.Report on Other Legal Requirements We confirm that we meet the legal requirements on licensing according to the Auditor Oversight Act (AOA) and independence (article 728 CO and article 11 AOA) and that there are no circumstances incompatible with our independence. In accordance with article 728a paragraph 1 item 3 CO and Swiss Auditing Standard 890, we confirm that an internal control system exists, which has been designed for the preparation of financial statements according to the instructions of the Board of Directors.We further confirm that the proposed appropriation of available earnings complies with Swiss law and Credit Suisse AG’s articles of association. We recommend that the financial statements submitted to you be approved.KPMG AGNicholas EdmondsRalph DichtLicensed Audit ExpertLicensed Audit ExpertAuditor in ChargeZurich, SwitzerlandMarch 22, 2019

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Parent company financial statements
Statements of income

	Note	in 2018	2017
Statements of income (CHF million)			
Interest and discount income		10,940	8,038
Interest and dividend income from trading activities		1,683	592
Interest and dividend income from financial investments		185	20
Interest expense		(10,158)	(6,415)
Gross income from interest activities		**2,650**	**2,235**
(Increase)/release of allowance for default risks and losses from interest activities		(257)	(453)
Net income from interest activities	4	**2,393**	**1,782**
Commission income from securities trading and investment activities		2,168	2,397
Commission income from lending activities		901	753
Commission income from other services		119	244
Commission expense		(588)	(637)
Net income from commission and service activities		**2,600**	**2,757**
Net income/(loss) from trading activities and fair value option	5	**(867)**	**(199)**
Income/(loss) from the disposal of financial investments		16	(11)
Income from participations		2,299	772
Income from real estate		18	20
Other ordinary income		1,198	1,687
Other ordinary expenses		(106)	(333)
Net income from other ordinary activities		**3,425**	**2,135**
Personnel expenses	6	2,064	2,548
General and administrative expenses	7	3,711	3,070
Total operating expenses		**5,775**	**5,618**
Impairment of participations, depreciation and amortization of tangible fixed assets and intangible assets		2,126	432
Increase/(release) of provisions and other valuation adjustments, and losses	8	69	156
Operating profit/(loss)		**(419)**	**269**
Extraordinary income	8	38	364
Extraordinary expenses	8	0	(5)
Taxes	9	(266)	(403)
Net profit/(loss)		**(647)**	**225**

Balance sheets

	Note	2018	end of 2017
Assets (CHF million)			
Cash and other liquid assets		35,127	55,149
Due from banks		82,924	96,652
Securities borrowing and reverse repurchase agreements	10	69,768	66,677
Due from customers	11	177,104	193,106
Mortgage loans	11	5,162	5,051
Trading assets	12	42,781	48,629
Positive replacement values of derivative financial instruments	13	8,023	9,046
Other financial instruments held at fair value		0	322
Financial investments	14	30,773	18,591
Accrued income and prepaid expenses		2,803	2,810
Participations		74,380	75,439
Tangible fixed assets		2,149	2,370
Intangible assets		1	2
Other assets	15	1,821	2,374
Total assets		**532,816**	**576,218**
Total subordinated receivables		4,505	1,906
of which receivables subject to contractual mandatory conversion and/or cancellation		3,155	550
Liabilities and shareholders' equity			
Due to banks		61,136	74,992
Securities lending and repurchase agreements	10	55,806	61,064
Customer deposits		175,109	161,745
Trading liabilities	12	5,949	6,366
Negative replacement values of derivative financial instruments	13	7,215	8,373
Liabilities from other financial instruments held at fair value	12, 18	54,645	60,945
Bonds and mortgage-backed bonds		121,793	149,831
Accrued expenses and deferred income		3,870	4,617
Other liabilities	15	318	564
Provisions	20	459	548
Total liabilities		**486,300**	**529,045**
Share capital	21	4,400	4,400
Legal capital reserves		38,477	38,477
of which capital contribution reserves		37,913	37,913
Legal income reserves		3,461	3,461
Voluntary income reserves		610	610
Retained earnings		215	0
Net profit/(loss)		(647)	225
Total shareholders' equity		**46,516**	**47,173**
Total liabilities and shareholders' equity		**532,816**	**576,218**
Total subordinated liabilities		15,318	22,461
of which liabilities subject to contractual mandatory conversion and/or cancellation		11,210	15,976

Off-balance sheet transactions end of	2018	2017
CHF million		
Contingent liabilities	32,441	74,877
Irrevocable commitments	98,749	85,539
Obligations for calls on shares and additional payments	97	57

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Contingent liabilities to other bank entities include guarantees for obligations, performance-related guarantees and letters of comfort issued to third parties. Contingencies with a stated amount are included in the off-balance sheet section of the financial statements. In some instances, the exposure of Credit Suisse AG (Bank parent company) is not defined as an amount but relates to specific circumstances such as the solvency of subsidiaries or the performance of a service.

Joint and several liability

On November 20, 2016, the Bank parent company transferred its universal bank business for Swiss customers, comprising a significant part of the division Swiss Universal Bank and parts of the former Sales and Trading Services (STS), a business area providing sales and trading services and which became part of International Trading Solutions, to Credit Suisse (Schweiz) AG. This business transfer was executed through a transfer of assets and liabilities in accordance with the Swiss Merger Act. By operation of the Swiss Merger Act, the Bank parent company assumed a three-year statutory joint and several liability for obligations existing at the transfer date on November 20, 2016 and which were transferred to Credit Suisse (Schweiz) AG. With the exception of certain claims of employees becoming due up to the date upon which the employment relationship could ordinarily have been terminated, or was terminated by the employee if the employee declined to transfer to Credit Suisse (Schweiz) AG, the Bank parent company has no liability for obligations incurred by Credit Suisse (Schweiz) AG after the asset transfer date.

The Bank parent company entered into a contractual arrangement under which it assumed joint and several liability with respect to liabilities of Credit Suisse (Schweiz) AG arising in connection with Credit Suisse (Schweiz) AG's roles under the covered bonds program.

The Bank parent company is a member of Credit Suisse Group AG's Swiss VAT group and therefore subject to joint and several liability according to the Swiss VAT Act.

Deposit insurance guarantee programs

Deposit-taking banks and securities dealers in Switzerland are required to ensure the payout of privileged deposits in case of specified restrictions or compulsory liquidation of a deposit-taking bank, and they jointly guarantee an amount of up to CHF 6 billion. Upon occurrence of a payout event triggered by a specified restriction of business imposed by the Swiss Financial Market Supervisory Authority FINMA (FINMA) or by the compulsory liquidation of another deposit-taking bank, the Bank parent company's contribution will be calculated based on its share of privileged deposits in proportion to total privileged deposits. Based on FINMA's estimate for the Bank parent company, the Bank's share in the deposit insurance guarantee program for the period July 1, 2018 to June 30, 2019 is CHF 48 million. This deposit insurance guarantee was reflected in contingent liabilities.

> Refer to "Note 24 – Amounts receivable from and amounts payable to related parties" for further information off-balance sheet transactions.

Statement of changes in equity

	Share capital	Legal capital reserves	Legal income reserves	Voluntary income reserves	Retained earnings	Net profit/(loss)	Total share-holder's equity
2018 (CHF million)							
Balance at beginning of period	**4,400**	**38,477**[1]	**3,461**	**610**	**0**	**225**	**47,173**
Appropriation of net profit	–	–	–	–	225	(225)	–
Dividends and other distributions	–	–	–	–	(10)	–	(10)
Net profit/(loss)	–	–	–	–	–	(647)	(647)
Balance at end of period	**4,400**	**38,477**[1]	**3,461**	**610**	**215**	**(647)**	**46,516**

1 Includes capital contribution reserves of CHF 37,913 million at the beginning and at the end of the period. Distributions from capital contribution reserves are free of Swiss withholding tax.

Notes to the financial statements

1 Company details, business developments and subsequent events

Company details

Credit Suisse AG (Bank parent company) is a Swiss bank incorporated as a joint stock corporation (public limited company) with its registered office in Zurich, Switzerland.

The Bank parent company is a 100% subsidiary of Credit Suisse Group AG (Group parent company) domiciled in Switzerland.

Number of employees

end of	2018	2017
Full-time equivalents		
Switzerland	5,700	5,850
Abroad	3,700	4,770
Total	**9,400**	**10,620**

Business developments

In connection with the evolution of the legal entity structure of Credit Suisse Group AG and its consolidated subsidiaries (the Group), the Bank parent company transferred certain central functions and related employees from its Singapore branch to the Singapore branch of Credit Suisse Services AG, which became operational in January 2018.

Subsequent events

There were no subsequent events from the balance sheet date until March 22, 2019, the publishing date of these financial statements.

2 Accounting and valuation principles

Summary of significant accounting and valuation principles

Basis for accounting

The Bank parent company's stand-alone financial statements are prepared in accordance with the accounting rules of the Swiss Federal Law on Banks and Savings Banks (Bank Law), the corresponding Implementing Ordinance and FINMA circular 2015/1, "Accounting rules for banks, securities dealers, financial groups and conglomerates" (Swiss GAAP statutory) as applicable for the preparation of reliable assessment statutory single-entity financial statements *(Statutarischer Einzelabschluss mit zuverlässiger Darstellung)*. Supplemental information on unsecured senior debt and structured notes as provided by Note 19 is not a required disclosure under these rules.

The consolidated financial statements of Credit Suisse AG and its subsidiaries (Bank) are prepared in accordance with accounting principles generally accepted in the US (US GAAP), which differ in certain material respects from Swiss GAAP statutory.

> Refer to "Note 1 – Summary of significant accounting policies" in VIII – Consolidated financial statements – Credit Suisse (Bank) for a detailed description of the Bank's accounting and valuation principles.

> Refer to "Note 39 – Significant valuation and income recognition differences between US GAAP and Swiss GAAP banking law (true and fair view)" in VIII – Consolidated financial statements – Credit Suisse (Bank) for information on significant valuation and income recognition differences between US GAAP and Swiss GAAP banking law (true and fair view).

The financial year for the Bank parent company ends on December 31.

Certain changes were made to the prior year's financial statements to conform to the current year's presentation and had no impact on net profit/(loss) or total shareholders' equity.

Recording of transactions

Transactions are generally recognized on a trade date basis at the point in time when they become legally binding unless specific guidance is provided for settlement date accounting, such as for issuances of debt and structured notes.

Foreign currency translations

The Bank parent company's functional currency is Swiss francs (CHF). Transactions denominated in currencies other than the functional currency are recorded using the foreign exchange rates at the date of the transaction.

Receivables and payables denominated in foreign currency are translated to Swiss francs using spot rates as of the balance sheet date. Gains and losses from foreign exchange rate differences are recorded in the statements of income in net income/(loss) from trading activities and fair value option. Participations, tangible fixed assets and intangible

assets denominated in foreign currency are translated to Swiss francs using the historical exchange rates.
Assets and liabilities of foreign branches are translated to Swiss francs using spot rates as of the balance sheet date. Income and expense items of foreign branches are translated at weighted-average exchange rates for the year. All foreign exchange translation effects are recognized in the statements of income in net income/(loss) from trading activities and fair value option.

The following table provides the foreign exchange rates applied for the preparation of the Bank parent company's stand-alone financial statements.

Foreign exchange rates

		End of
	2018	2017
1 USD / 1 CHF	0.99	0.98
1 EUR / 1 CHF	1.13	1.17
1 GBP / 1 CHF	1.26	1.32
100 JPY / 1 CHF	0.89	0.87

Cash and other liquid assets

Cash and other liquid assets are recognized at their nominal value.

Due from banks

Amounts due from banks, including interest due but not paid, are recognized at their nominal value less any necessary valuation adjustments.

Due from customers and mortgage loans

Amounts due from customers and mortgage loans, including interest due but not paid, are recognized at their nominal value less any necessary valuation adjustments.

All customer loans are assessed individually for default risks and, where necessary, valuation adjustments are recorded in accordance with internal policies. These valuation adjustments take into account the value of the collateral and the financial standing of the borrower (counterparty risk). The Bank parent company evaluates many factors when determining valuation adjustments, including the volatility of default probabilities, rating changes, the magnitude of potential loss, internal risk ratings, and geographic, industry and other economic factors.

Valuation adjustments are netted with the corresponding assets.

Trading assets and liabilities

In order to qualify as trading activity, positions (assets and liabilities) have to be actively managed with the objective of realizing gains from fluctuations in market prices which includes an ongoing willingness to increase, decrease, close or hedge risk positions. Trading positions also include positions held with the intention of generating gains from arbitrage. The designation as trading position has to be made, and documented accordingly, upon conclusion of the transaction.

Trading securities are carried at fair value with changes in fair value recorded in the statements of income in net income/(loss) from trading activities and fair value option. The fair value is determined using either the price set on a price-efficient and liquid market or a price calculated using a valuation model.

Interest and dividend income resulting from trading positions is recorded in gross income from interest activities. Refinancing costs are not charged to net income from trading activities and fair value option.

Reclassifications between trading assets, financial investments and participations are allowed. Such reclassifications are recorded at the fair value valid at the time when the decision to reclassify is made. Resulting gains or losses are recognized applying the same accounting principles as for the recognition of results from the disposal of such assets.

Derivative financial instruments and hedge accounting

Derivative financial instruments consist of trading and hedging instruments.

Positive and negative replacement values of outstanding derivative financial instruments arising from transactions for the Bank parent company's own account are disclosed as separate line items in the balance sheet, with related fair value changes recorded in net income from trading activities and fair value option.

Replacement values of derivative financial instruments arising from transactions for the account of customers are recognized only if a risk exists that a customer or other counterparty (e.g., exchange, exchange member, issuer of the instrument, broker) of a transaction is no longer able to meet its obligations resulting in an exposure to loss for the Bank parent company during the remaining term of the contract.

Hedge accounting is determined, tested for effectiveness and disclosed in accordance with US GAAP as allowed under Swiss GAAP statutory accounting rules. Derivative financial instruments used as hedging instruments in hedging relationships are always recorded at fair value.

For fair value hedges, to the extent these hedges are effective, the gains and losses resulting from the valuation of the hedging instruments are recorded in the same statements of income line items in which gains and losses from the

hedged items are recognized. Gains and losses resulting from fair valuing the risk being hedged of the hedged items are not recorded as an adjustment to the carrying value of the hedged items but are recorded in the compensation account included in other assets or other liabilities. Any changes in fair value representing hedging ineffectiveness are recorded in net income from trading activities and fair value option.
For cash flow hedges, to the extent these hedges are effective, gains and losses resulting from the valuation of the hedging instruments are deferred and recorded in the compensation account included in other assets or other liabilities. The deferred amounts are released and recorded in the statements of income in the same period when the cash flows from the hedged transactions or hedged items are recognized in earnings. Any changes in fair value representing hedging ineffectiveness are recorded in net income from trading activities and fair value option.

Other financial instruments held at fair value and liabilities from other financial instruments held at fair value

Financial instruments which are not part of the trading portfolio may be measured at fair value and classified in other financial instruments held at fair value or liabilities from other financial instruments held at fair value if all of the following conditions are met:

The financial instruments are valued at fair value and are subject to risk management corresponding to that for trading positions including a documented risk management and investment strategy which ensures appropriate recognition, measurement and limitation of the miscellaneous risks.

An economic hedging relationship between the financial instruments on the asset side and the financial instruments on the liability side exists and gains and losses from the fair valuation of these financial instruments are largely offset (avoidance of an accounting mismatch).

Impacts of changes in own credit spreads on the fair value of an issued debt instrument following initial recognition cannot be reflected in the statements of income. Impacts of changes in own credit spreads are recognized in the compensation account.

Changes in fair value are recorded in net income from trading activities and fair value option.

Participations

Equity securities in a company, which are owned by the Bank parent company, qualify as a participation if these securities are held for the purpose of permanent investment, irrespective of the percentage of voting shares held, or, if these equity securities are in a banking and financial market infrastructure enterprise, in particular participations in joint organizations. Participations can be held by the Bank parent company in Switzerland and its foreign branches. Participations are measured at acquisition cost less any impairments. Goodwill and intangible assets related to the acquisition of a participation are part of the participation's historical cost under Swiss GAAP statutory and not separately identified and recorded. For the purpose of impairment testing, the portfolio valuation method is applied. Impairment is assessed at each balance sheet date or at any point in time when facts and circumstances would indicate that an event has occurred which triggers an impairment review. The amount of impairment, if any, is assessed on the level of the entire portfolio of participations and not individually for each participation. An impairment is recorded if the carrying value exceeds the fair value of the participation portfolio. If the fair value of participations recovers significantly and is considered sustainable, a prior period impairment can be reversed up to the historical cost value of the participations.

Other assets and other liabilities

Other assets and other liabilities are generally recorded at cost or nominal value. Other assets and other liabilities include the net balance of the compensation accounts. The compensation account assets and liabilities include changes in the book values of assets and liabilities that are not recognized in the statement of income of a reporting period. In particular, the compensation accounts are used to record the hedge effectiveness, impacts from changes in own credit spreads and deferred gains or losses from the sale of debt securities held-to-maturity. The gross amounts of compensation account assets and liabilities are offset and reported net on the balance sheet either in other assets or in other liabilities.

Due to banks

Amounts due to banks are recognized at their nominal value.

Customer deposits

Amounts due in respect of customer deposits are recognized at their nominal value.

Bonds and mortgage-backed bonds

Bonds and mortgage-backed bonds are carried at amortized cost. Debt issuance costs are recorded in other assets and other liabilities, respectively.

Provisions

Provisions are recorded to cover specific risks related to a past event prior to the balance sheet date. Provisions represent a probable obligation for which amount and/or due date are uncertain but can be reasonably estimated. Where the time factor has a material impact, the amount of the provision is discounted.

Provisions which are no longer economically necessary and which are not used in the same reporting period to cover probable obligations of the same nature are released to income:

tax provisions through line item taxes;

provisions for pension benefit obligations and staff-related restructuring provisions through personnel expenses; and

provisions for off-balance sheet related default risks and other provisions including litigation provisions through line item increase/(release) of provisions and other value adjustments, and losses.

Commission income

Commission income is recognized when arrangements exist, services have been rendered, the revenue is fixed or determinable and collectability is reasonably assured. As applicable, commissions and fees are recognized ratably over the service period and either accrued or deferred in the balance sheet in the line items accrued income and prepaid expenses and accrued expenses and deferred income, respectively.

Commission income and commission expense are generally recorded on a gross basis in the statements of income.

Income tax accounting

Income taxes are based on the tax laws of each tax jurisdiction and are expensed in the period in which the taxable profits are made.

Tax provisions are recognized in the statements of income in line item taxes and included in provisions on the balance sheet.
In line with the accounting rules for single-entity statutory financial statements, deferred tax assets on net operating losses are not recognized. Deferred taxation items for temporary differences between the carrying value of an asset or a liability under Swiss GAAP statutory and the respective value for tax reporting, i.e., its tax base, are also not recognized.
Extraordinary income and expense
The recognition of extraordinary income or expense is limited to transactions which are non-recurring and non-operating, such as the disposal of fixed assets or participations, or income and expense related to other reporting periods if they account for the correction of errors with regard to non-operating transactions of prior periods.
Contingent liabilities and irrevocable commitments
Contingent liabilities are recorded as off-balance sheet transactions at their maximum potential payment amounts. Irrevocable commitments are recorded as off-balance sheet transactions at their nominal values, except for irrevocable commitments with a remaining maturity of less than six weeks which are excluded from the disclosure. As necessary, related provisions are recorded on the balance sheet in line item provisions.
Capital adequacy disclosures
Capital adequacy disclosures for the Group and the Bank parent company are presented in the publications “Pillar 3 and regulatory disclosures – Credit Suisse Group AG” and “Regulatory disclosures – Subsidiaries”, respectively, which will be available on the Group’s website *credit-suisse.com/regulatorydisclosures*.
New accounting policies to be adopted in future periods
Individual valuation of participations
Under the revised Banking Ordinance of April 30, 2014, which entered into force on January 1, 2015, certain regulations, such as the individual valuation of participations, tangible fixed assets and intangible assets are subject to transitional provisions until the full implementation of the regulation effective January 1, 2020. The requirements regarding individual valuation of tangible fixed assets and intangible assets are met by the Bank parent company’s current accounting policies. For participations, the Bank parent company is currently assessing the impact of a change in valuation principle from the portfolio valuation method to the individual valuation method. It has not yet elected the adoption date for this new valuation principle.
As of December 31, 2018, the carrying value of participations included total unrealized losses on certain participations of CHF 9,034 million, which were netted with unrealized gains on other participations of the same amount in accordance with the portfolio method applied under the current accounting policy.
Prior period information
The number of employees for 2017 has been corrected from 12,090 to 10,620 to adjust for employees who were transferred to other Group entities during the course of 2017.
In connection with the transfer of several businesses and related inventories from Credit Suisse Securities (USA) LLC to the New York branch of the Bank parent company in 2017, trading assets transferred under securities lending and borrowing and repurchase agreements were disclosed in “Note 16 – Pledged assets” instead of “Note 10 – Assets and liabilities from securities lending and borrowing, repurchase and reverse repurchase agreements”. Prior year numbers have been corrected to reflect a disclosure reclassification of these trading assets in the amount of CHF 25.6 billion.
In “Note 6 – Personnel expenses”, the disclosure of variable compensation expenses for 2018 has been changed to include deferred variable compensation expenses. For the purpose of comparison, variable compensation expenses disclosed for 2017 has been corrected by CHF 291 million.
In “Note 7 – General and administrative expenses”, occupancy expenses for 2018 included an amount of CHF 23 million related to prior periods reflecting a change in accounting for lease expenses.
3 Risk management, derivatives and hedging activities
Risk management
Prudent risk taking in line with the strategic priorities of the Bank parent company and its consolidated subsidiaries (the Bank) is fundamental to its business. The primary objectives of risk management are to protect the Bank’s financial strength and reputation, while ensuring that capital is well deployed to support business growth and activities. The Bank’s risk management framework is based on transparency, management accountability and independent oversight. Risk management is an integral part of the Bank’s business planning process with strong senior

management and Board of Directors (Board) involvement.

On February 26, 2019, an organizational change relating to the compliance functions was announced, effective immediately. The regulatory affairs function was separated from the compliance organization and integrated into the office of the CEO with the Global Head of Regulatory Affairs now reporting directly to the CEO. The remaining functions within the compliance organization are managed by the Chief Compliance Officer (CCO), and

that office continues to be represented on the Group's Executive Board.
Risk governance
The Bank's risk governance framework is based on a "three lines of defense" governance model, where each line has a specific role with defined responsibilities and works in close collaboration to identify, assess and mitigate risks.
The first line of defense is the front office, which is responsible for pursuing suitable business opportunities within the strategic risk objectives and compliance requirements of the Bank. Its primary responsibility is to ensure compliance with relevant legal and regulatory requirements and maintain effective internal controls.
The second line of defense includes functions such as risk management, compliance, legal and product control. It articulates standards and expectations for the effective management of risk and controls, including advising on applicable legal and regulatory requirements and publishing related policies, and monitors and assesses compliance with regulatory and internal standards. The second line of defense is separate from the front office and includes independent control functions responsible for reviewing, measuring and challenging front office activities and producing independent assessments and risk management reporting for senior management and regulatory authorities.
The third line of defense is the internal audit function, which monitors the effectiveness of controls across various functions and operations, including risk management and governance practices.
Risk management of the Bank is aligned to the overall risk management governance of the Group. All members of the Board and the Executive Board of the Bank are also members of the Board and the Executive Board of the Group. The Bank's governance includes a committee structure and a comprehensive set of corporate policies which are developed, reviewed and approved by the Board, the Executive Board, their respective committees, the Group Chief Risk Officer (CRO) and the Group Chief Compliance and Regulatory Affairs Officer (CCRO), or the CCO since the organizational change on February 26, 2019, and the board of directors of significant subsidiaries, in accordance with their respective responsibilities and levels of authority.
Board of Directors
The Board is responsible for the Bank's strategic direction, supervision and control, and for defining the Bank's overall tolerance for risk. For this purpose, the Board approves the risk management framework and sets overall risk appetite in consultation with its Risk Committee.
The **Risk Committee** is responsible for assisting the Board in fulfilling its oversight responsibilities by periodically reviewing the Bank's risk management function, its resources and key risks.
The **Audit Committee** is responsible for assisting the Board in fulfilling its oversight responsibilities by monitoring management's approach with respect to financial reporting, internal controls, accounting and legal and regulatory compliance. Additionally, the Audit Committee is responsible for monitoring the independence and performance of internal and external auditors.
In 2018, the Board decided to establish the **Conduct and Financial Crime Control Committee**, which became effective in 2019. The Conduct and Financial Crime Control Committee assists the Board in fulfilling its oversight duties with respect to the Bank's exposure to financial crime risk. It is tasked with monitoring and assessing the effectiveness of financial crime compliance programs and initiatives.
Executive Board
The Executive Board is responsible for developing and implementing the Bank's strategic business plans, subject to approval by the Board. It further reviews and coordinates significant initiatives for the risk management function and establishes Bank-wide risk policies. The Group CRO and CCRO, or the CCO since the organizational change on February 26, 2019, are members of the Executive Board and represent the risk management and compliance functions, respectively, reporting to the Group Chief Executive Officer (CEO) and, at least annually, to the Board.
Executive Board committees
The Capital Allocation & Risk Management Committee (CARMC) is responsible for overseeing and directing the Bank's risk profile, recommending risk limits at the Bank level to the Risk Committee and the Board, establishing and allocating risk appetite among the various businesses, reviewing new significant business strategies or changes in business strategies including business migrations, making risk-related decisions on escalations, and for applying measures, methodologies and tools to monitor and manage the risk portfolio. CARMC meets monthly and conducts reviews according to the following three rotating cycles. The asset & liability management cycle reviews the funding and balance sheet trends and activities, plans and monitors regulatory and business liquidity requirements and internal and regulatory capital adequacy, provides governance and oversight over all material business migrations and ensures

that legal entity strategic initiatives are within the Group's risk appetite and appropriately supported and controlled. The market & credit risks cycle defines and implements risk management strategies for the Bank businesses, sets and approves risk appetite within Board-approved limits and other appropriate measures to monitor and manage the risk profile of the Bank and allocates liquidity resources and sets liquidity risk limits. The internal control system cycle monitors and analyzes significant legal and compliance risks, reviews and approves the business continuity program's alignment with the corporate strategy on an annual basis, sets limits, caps and triggers on specific businesses to control significant operational risk exposure, and reviews and assesses the appropriateness and efficiency of the internal control systems.

The Valuation Risk Management Committee (VARMC) is responsible for establishing policies regarding the valuation of certain material assets and the policies and calculation methodologies applied in the valuation process. Further, VARMC is responsible for monitoring and assessing valuation risks, reviewing inventory valuation conclusions and directing the resolution of significant inventory valuation issues.
The Risk Processes & Standards Committee (RPSC) reviews major risk management processes, issues general instructions, standards and processes concerning risk management, approves material changes in market, credit and operational risk management standards, policies and related methodologies, and approves the standards of the Bank's internal models used for calculating regulatory capital.
The Reputational Risk & Sustainability Committee (RRSC) sets policies and reviews processes and significant cases relating to reputational risks and sustainability issues. It also ensures adherence to the Bank's reputational and sustainability policies and oversees their implementation.
Risk appetite framework
The Bank maintains a comprehensive Bank-wide risk appetite framework, which is governed by a global policy and provides a robust foundation for risk appetite setting and management across the Bank. A key element of the framework is a detailed statement of the Board-approved risk appetite which is aligned to the Bank's financial and capital plans. The framework also encompasses the processes and systems for assessing the appropriate level of risk appetite required to constrain the Bank's overall risk profile.
The Bank risk appetite framework is governed by an overarching global policy that encompasses the suite of specific policies, processes and systems with which the risk constraints are calibrated and the risk profile is managed. The framework is guided by the following strategic risk objectives:
- maintaining Bank-wide capital adequacy above minimum regulatory requirements under both normal and stressed conditions;
- promoting stability of earnings to support performance in line with financial objectives;
- ensuring sound management of liquidity and funding risk in normal and stressed conditions;
- proactively controlling concentration risks;
- managing operational and compliance risk within the Bank's enterprise risk and control framework (ERCF) to ensure sustainable performance;
- minimizing reputational risk; and
- managing and mitigating conduct risk.

Bank-wide risk appetite is determined in partnership with the financial and capital planning process on an annual basis, based on bottom-up forecasts that reflect planned risk-usage by the businesses and top-down, Board-driven strategic risk objectives and risk appetite. Scenario stress testing of financial and capital plans is an essential element in the risk appetite calibration process as a key means through which the Bank's strategic risk objectives, financial resources and business plans are aligned. The capital plans are also analyzed using the Bank's economic capital coverage ratio, which provides a further means of assessing bottom-up risk plans with respect to available capital resources. The risk appetite is approved through a number of internal governance forums, including joint approval by the Group CRO and the Chief Financial Officer (CFO), the Risk Appetite Review Committee (a sub-committee of CARMC), CARMC and, subsequently, by the Board.
The risk appetite statement is the formal plan, approved by the Board, for Bank-wide risk appetite. Key divisional allocations are cascaded from the Bank and approved in divisional risk management committees. Legal entity risk appetites are set by the local legal entity board of directors within the limits established by the Bank.
A core aspect of the Bank's risk appetite framework is a sound system of integrated risk constraints to maintain the Bank's risk profile within its overall risk appetite. The Bank's risk appetite framework utilizes a suite of different types of risk constraints to reflect the aggregate risk appetite of the Bank and to further cascade risk appetite across its organization, including among business divisions and legal entities. The risk constraints restrict the Bank's maximum balance sheet and off-balance sheet exposure given the market environment, business strategy and financial resources available to absorb losses.
Risk coverage and management
The Bank uses a wide range of risk management practices to address the variety of risks that arise from its business activities. Policies, processes, standards, risk assessment and measurement methodologies, risk appetite constraints, and risk monitoring and reporting are key components of its risk management practices. The Bank's risk management

practices complement each other in the Bank's analysis of potential loss, support the identification of interdependencies and interactions of risks across the organization and provide a comprehensive view of its exposures. The Bank regularly reviews and updates its risk management practices to ensure consistency with its business activities and relevance to its business and financial strategies. The Bank's key risk types, their definitions and key risk evaluation methods are summarized in the table "Key risk types overview".
It is important to both evaluate each risk type separately and assess the risk types' combined impact on the Bank, which helps ensure that the Bank's overall risk profile remains within the Bank-wide risk appetite.
The primary evaluation methods used to assess Bank-wide quantifiable risks include economic risk capital and stress testing.

Economic risk capital

Economic risk capital is used as a consistent and comprehensive tool for capital management, limit monitoring and performance management. Economic risk capital is the core Bank-wide risk management tool for measuring and reporting the combined impact from quantifiable risks such as market, credit, operational, pension and expense risks, each of which has an impact on the Bank's capital position.

Under the Basel framework, the Bank is required to maintain a robust and comprehensive framework for assessing capital adequacy, defining internal capital targets and ensuring that these capital targets are consistent with its overall risk profile and the current operating environment. The Bank's economic risk capital model represents its internal view of the amount of capital required to support its business activities.

With effect from January 1, 2018, the Bank implemented a revised economic risk capital framework. The Bank redeveloped the position risk methodology by introducing new and enhancing previously used credit and market risk models. The redesigned credit risk model is based on a multi-factor Monte-Carlo-simulation, compared to the single-factor model used previously.

During 2018, the Bank further embedded the new economic risk capital framework into its risk appetite and risk management framework. The new framework should enable the Bank to better assess, monitor and manage capital adequacy and solvency risk in both "going concern" and "gone concern" scenarios.

Stress testing

Stress testing or scenario analysis provides an additional approach to risk management and formulates hypothetical questions, including what would happen to the Bank's portfolio if, for example, historic or adverse forward-looking events were to occur.

Stress testing is a fundamental element of the Bank-wide risk appetite framework included in overall risk management to ensure that the Bank's financial position and risk profile provide sufficient resilience to withstand the impact of severe economic conditions. Stress testing results are monitored against limits, and are used in risk appetite discussions and strategic business planning and to support the Bank's internal capital adequacy assessment. Within the risk appetite framework, CARMC sets Bank-wide and divisional stressed position loss limits to correspond to minimum post-stress capital ratios.

Liquidity and funding risks

The Bank's liquidity and funding profile reflects its strategy and risk appetite and is driven by business activity levels and the overall operating environment. The liquidity and funding strategy is approved by CARMC and overseen by the Board. The implementation and execution of the funding and liquidity strategy is managed within the Group's CFO division by Treasury and the global liquidity group. The global liquidity group was established in the second quarter of 2018 to centralize control of liability and collateral management with the aim of optimizing liquidity sourcing, funding costs and high quality liquid assets portfolio on behalf of Treasury. Treasury ensures adherence to the Bank's funding policy and the global liquidity group is focused on the efficient coordination of the short-term unsecured and secured funding desks. This approach enhances the Bank's ability to manage potential liquidity and funding risks and to promptly adjust its liquidity and funding levels to meet stress situations. The Bank's liquidity and funding profile is regularly reported to CARMC and the Board, who define the Bank's risk tolerance, including liquidity risk, and set parameters for the balance sheet and funding usage of its businesses.

Market risk

Market risk is the risk of financial loss arising from movements in market risk factors. The movements in market risk factors that generate financial losses are considered to be adverse changes in interest rates, credit spreads, foreign exchange rates, equity and commodity prices and other factors, such as market volatility and the correlation of market prices across asset classes. A typical transaction or position in financial instruments may be exposed to a number of different market risk factors. The Bank's trading portfolios (trading book) and non-trading portfolios (banking book) have different sources of market risk.

The classification of assets and liabilities into trading book and banking book portfolios determines the approach for analyzing the Bank's market risk exposure. This classification reflects the business and risk management perspective with respect to trading intent, and may be different from the classification of these assets and liabilities for financial reporting purposes.

Market risks from the trading book relate to trading activities, primarily in the divisions Global Markets (which includes International Trading Solutions), Asia Pacific and the Strategic Resolution Unit.

Market risks from the banking book primarily relate to asset and liability mismatch exposures, equity participations and investments in bonds and money market instruments. The Bank's businesses and the treasury function have non-trading portfolios that carry market risks, mainly related to changes in interest rates but also to changes in foreign exchange rates, equity prices and, to a lesser extent, commodity prices.

The Bank uses market risk measurement and management methods capable of calculating comparable exposures across its many activities and employs focused tools that can model unique characteristics of certain instruments or portfolios. The tools are used for internal market risk management, internal market risk reporting and external disclosure purposes. The Bank's principal market risk measurement for the trading book is value-at-risk (VaR). In addition, the Bank's market risk exposures are reflected in scenario analysis, as included in the stress testing framework, position risk, as included in economic risk capital, and sensitivity analysis. Each market risk measurement aims to estimate the potential loss that the Bank can incur due to an adverse market movement with varying degrees of severity. VaR, scenario analysis, position risk and sensitivity analysis complement each other in the Bank's market risk assessment and are used to measure market risk at the level of the Bank. For example, interest rate risk on banking book positions is measured by estimating the impact resulting from a one basis point parallel increase in yield curves on the present value of interest rate-sensitive banking book positions and other measures including the potential value change resulting from a significant change in yield curves.

In the banking book, savings accounts and many other retail banking products have no contractual maturity date or direct market-linked interest rate and are risk-managed on a pooled basis using replication portfolios on behalf of the private banking, corporate and institutional businesses. The replication portfolios approximate the interest rate characteristics of the underlying products. This particular source of market risk is monitored on a daily basis.

The majority of non-trading foreign exchange risk is associated with the Bank's net investment in foreign branches, subsidiaries and affiliates denominated in currencies other than Swiss francs. This exposure is actively managed to hedge capital and leverage ratios and is governed within the Bank's risk appetite framework.

Credit risk

Credit risk is the risk of financial loss arising as a result of a borrower or counterparty failing to meet its financial obligations or as a result of deterioration in the credit quality of the borrower or counterparty.

Credit risk arises from the execution of the Bank's business strategy in the divisions and reflects exposures directly held in the form of lending products (including loans and credit guarantees) or derivatives, shorter-term exposures such as underwriting commitments, and settlement risk related to the exchange of cash or securities outside of typical delivery versus payment structures.
The Bank uses a credit risk management framework which provides for the consistent evaluation, measurement, and management of credit risk across the Bank. Assessment of credit risk exposures for internal risk estimates and risk-weighted assets are calculated based on probability of default (PD), loss given default (LGD) and exposure at default (EAD) models approved by the Bank's main regulators. The credit risk framework incorporates the following core elements:

- counterparty and transaction assessments: application of internal credit ratings (PD), assignment of LGD and EAD values in relation to counterparties and transactions;
- credit limits: establishment of credit limits, subject to approval by delegated authority holders, to serve as primary risk controls on exposures and to prevent risk concentrations;
- risk mitigation: active management of risk mitigation provided in relation to credit exposures, including through the use of cash sales, participations, collateral or guarantees or hedging instruments; and
- credit monitoring, impairments and provisions: processes to support the ongoing monitoring and management of credit exposures, supporting the early identification of deterioration and any subsequent impact.

Counterparty and transaction assessments
The Bank evaluates and assesses counterparties and clients to whom it has credit exposures, primarily using internal rating models that have been approved by the Bank's main regulators. The Bank uses these models to determine internal credit ratings which are intended to reflect the PD of each counterparty. For a majority of counterparties and clients, internal ratings are based on internally developed statistical models which are backtested against internal experience, validated by a function independent of model development and approved by the Bank's main regulators for application in the regulatory capital calculation under the A-IRB approach of the Basel framework. Findings from backtesting serve as a key input for any future rating model developments.
Internal statistical rating models are based on a combination of quantitative factors (e.g., financial fundamentals and market data) and qualitative factors (e.g., credit history and economic trends).
For the remaining counterparties where statistical rating models are not used, internal credit ratings are assigned on the basis of a structured expert approach using a variety of inputs such as peer analyses, industry comparisons, external ratings and research as well as the judgment of expert credit officers.
In addition to counterparty ratings, credit risk management also assesses the risk profile of individual transactions and assigns transaction ratings which reflect specific contractual terms such as seniority, security and collateral.
Internal credit ratings may differ from external credit ratings, where available, and are subject to periodic review.
Internal ratings are mapped to a PD band associated with each rating which is calibrated to historical default experience using internal data and external data sources.
The Bank uses internal rating methodologies consistently for the purposes of approval, establishment and monitoring of credit limits and credit portfolio management, credit policy, management reporting, risk-adjusted performance measurement, economic risk capital measurement and allocation and financial accounting.
Credit limits
Credit exposures are managed at the counterparty and ultimate parent level in accordance with credit limits which apply in relation to current and potential future exposures. Credit limits to counterparties and groups of connected companies are subject to formal approval under delegated authority within the divisions where the credit exposures are generated, and, where significant in terms of size or risk profile, are subject to further escalation to the Group chief credit officer or Group CRO.
In addition to counterparty and ultimate parent exposures, credit limits and tolerances are also applied at the portfolio level to monitor and manage risk concentrations such as to specific industries, countries or products. In addition, credit risk concentration is regularly supervised by credit and risk management committees.
Risk mitigation
The Bank actively manages its credit exposure by taking financial and non-financial collateral supported by enforceable legal documentation, as well as by utilizing credit hedging techniques. Financial collateral in the form of cash, marketable securities (e.g., equities, bonds or funds) and guarantees serves to mitigate the inherent risk of credit

loss and to improve recoveries in the event of a default. Financial collateral is subject to controls on eligibility and is supported by frequent market valuation depending on the asset class to ensure exposures remain adequately collateralized. Depending on the quality of the collateral, appropriate haircuts are applied for risk management purposes.
Non-financial collateral such as residential and commercial real estate, tangible assets (e.g., ships or aircraft), inventories and commodities are valued at the time of credit approval and periodically thereafter depending on the type of credit exposure and collateral coverage ratio.
In addition to collateral, the Bank also utilizes credit hedging in the form of protection provided by single-name and index credit default swaps as well as structured hedging and insurance products. Credit hedging is used to mitigate risks arising from the loan portfolio, loan underwriting exposures and counterparty credit risk. Hedging is intended to reduce the risk of loss from a specific counterparty default or broader downturn in markets that impact the

overall credit risk portfolio. Credit hedging contracts are typically bilateral or centrally cleared derivative transactions and are subject to collateralized trading arrangements. The Bank evaluates hedging risk mitigation to ensure that basis or tenor risk is appropriately identified and managed.
In addition to collateral and hedging strategies, the Bank also actively manages its loan portfolio and may sell or sub-participate positions in the loan portfolio as a further form of risk mitigation.
Credit monitoring, impairments and provisions
A rigorous credit quality monitoring process provides an early identification of possible changes in the creditworthiness of clients and includes regular asset and collateral quality reviews, business and financial statement analysis, and relevant economic and industry studies. Regularly updated watch lists and review meetings are used for the identification of counterparties that could be subject to adverse changes in creditworthiness.
In the event of a default, credit exposures are transferred to recovery management functions within credit risk management and are subject to formal reporting to the quarterly recovery review committee. Changes in the exposure profile and expectations for recovery form the basis to determine the allowance for credit losses which are discussed with the Group chief credit officer. Any decision to make full or partial write-offs require the approval of the Group chief credit officer.
The review of the credit quality of clients and counterparties does not depend on the accounting treatment of the asset or commitment. The appropriateness of allowances for credit losses is regularly reviewed by the Bank's credit portfolio & provisions review committee.
The Bank maintains specific valuation allowances on loans valued at amortized cost, which are considered a reasonable estimate of losses identified in the existing credit portfolio. Provisions for loan losses are established based on a regular and detailed analysis of all counterparties, taking collateral value into consideration, where applicable. If uncertainty exists as to the repayment of either principal or interest, a specific valuation allowance is either created or adjusted accordingly. The specific allowance for loan losses is revalued by credit risk management at least annually or more frequently depending on the risk profile of the borrower or credit relevant events.
An inherent loss allowance is estimated for all loans not specifically identified as impaired and that, on a portfolio basis, are considered to contain inherent losses. The method for determining the inherent loss in the lending portfolios of Global Markets and Investment Banking & Capital Markets is based on a market-implied model using long-term industry-wide historical default and recovery data taking into account the credit rating and industry of each counterparty. A separate component of the calculation reflects the current market conditions in the allowance for loan losses. Depending on the nature of the exposures, this method may also be applied for the lending portfolios in Swiss Universal Bank, International Wealth Management, Asia Pacific and the Strategic Resolution Unit. For all other exposures, inherent losses in the lending portfolios of these divisions are determined based on current internal risk ratings, collateral and exposure structure, applying historical default and loss experience in the ratings and loss parameters. Qualitative adjustments to reflect current market conditions or any other factors not captured by the model are approved by management and reflected in the allowance for loan losses. A provision for inherent losses on off-balance sheet lending-related exposure, such as contingent liabilities and irrevocable commitments, is also determined, using a methodology similar to that used for the loan portfolio.
Model risk
Model risk is the risk of adverse consequences from decisions made based on model results that may be incorrect, misinterpreted or used inappropriately. All quantitative models are imperfect approximations that are subject to varying degrees of uncertainty in their output depending on, among other factors, the model's complexity and its intended application. As a result, modeling errors are unavoidable and can result in inappropriate business decisions, financial loss, regulatory and reputational risk and incorrect or inadequate capital reporting. Model errors, intrinsic uncertainty and inappropriate use are the primary contributors to aggregate, Bank-wide model risk.
Through the global model risk management and governance framework the Bank seeks to identify, measure and mitigate all significant risks arising from the use of models embedded within the Bank's global model ecosystem. Model risks can then be mitigated through a well-designed and robust model risk management framework, encompassing both model governance policies and procedures in combination with model validation best practices.
Operational, compliance and regulatory risk
Operational risk is the risk of financial loss arising from inadequate or failed internal processes, people or systems, or from external events. Operational risk does not include strategic and reputational risks. However, some operational

risks can lead to reputational issues and as such operational and reputational risks may be closely linked. Operational risk is inherent in most aspects of the Bank's business, including the systems and processes that support its activities. It comprises a large number of disparate risks that can manifest in a variety of ways. Examples of operational risk include the risk of damage to physical assets, business disruption, failures relating to third-party processes, data integrity and trade processing, cyber attacks and fraudulent or unauthorized transactions. Operational risk can arise from human error, inappropriate conduct, failures in systems, processes and controls, deliberate attack or natural and man-made disasters.

Compliance and regulatory risk is the risk from the failure to comply with laws, regulations, rules or market standards that may have a negative effect on the Bank's franchise and clients it serves. It includes the risk that changes in laws, regulations, rules or market standards may limit the Bank's activities and have a negative effect on the Bank's business or its ability to implement

strategic initiatives, or can result in an increase in operating costs for the business or make its products and services more expensive for clients. Examples of sources of compliance risks include cross-border activities, the risk of money laundering, improper handling of confidential information, conflicts of interest, improper gifts and entertainment and failure in duties to clients.
To effectively manage operational and compliance risks, the Bank-wide ERCF was introduced in 2016 focusing on the early identification, recording, assessment, monitoring, prevention and mitigation of these risks, as well as timely and meaningful management reporting. Over the past three years, the Bank has further improved the integration of previously separate operational risk processes, providing a more coherent and systematic approach to managing all aspects of the operational risk landscape. Under the ERCF, the Bank integrated the operational risk framework and all of its components with the compliance risk components to further harmonize the Bank's approach to non-financial risk. The assessment processes for operational and compliance risks are closely coordinated, resulting in an enhanced risk and control self-assessment that covers both risk types in a more consistent manner. Also, standardized Bank-wide role descriptions define the responsibilities for identifying, assessing, reporting and managing risks across the organization. In 2018, continued progress was made in rolling out a systematic key control activities framework as part of the ERCF. This framework applies consistent standards and approaches to the identification, documentation and assessment of key controls across the Bank.
The ERCF provides a structured approach to managing operational and compliance risks. It seeks to apply consistent standards and techniques for evaluating risks across the Bank while providing individual businesses with sufficient flexibility to tailor specific components to their own needs, as long as they meet Bank-wide minimum standards.
The Bank has used an internal model to calculate the regulatory capital requirement for operational risk under the advanced measurement approach (AMA) since 2008. This model was replaced with an enhanced AMA internal model in 2014, which has been approved by FINMA. In 2018, the Bank updated the treatment of historic losses relating to divested businesses in the model, particularly those relating to its private banking business in the US. In addition, the Bank increased the coverage provided by its operational risk insurance policy.
In addition to managing and mitigating operational risks under the ERCF through business- and risk-related processes and organization, the Bank also transfers the risk of potential loss from certain operational risks to third-party insurance companies in certain instances.
Conduct risk
The Bank considers conduct risk to be the risk that improper behavior or judgment by the Bank's employees may result in a negative financial, non-financial or reputational impact to its clients, employees or the Bank or negatively impact the integrity of the financial markets. Conduct risk may arise from a wide variety of activities and types of behaviors. A Bank-wide definition of conduct risk supports the efforts of the Bank's employees to have a common understanding of and consistently manage, minimize and mitigate its conduct risk. Further, it promotes standards of responsible conduct and ethics in its employees. Managing conduct risk includes consideration of the risks generated by each business and the strength of the associated mitigating controls. Conduct risk is also assessed by reviewing and learning from past incidents within the Bank and at other firms in the financial services sector. Compliance oversees conduct risk for the Bank.
Technology risk
Technology risk deserves particular attention given the complex technological landscape that covers the Bank's business model. Ensuring that confidentiality, integrity and availability of information assets are protected is critical to the Bank's operations.
Technology risk is the risk that technology-related failures, such as service outages or information security incidents, may disrupt business. Technology risk is inherent not only in IT assets of the Bank, but also in the people and processes that interact with them including through dependency on third-party suppliers and the worldwide telecommunications infrastructure. The Bank seeks to ensure that the data used to support key business processes and reporting is secure, complete, accurate, available, timely and meets appropriate quality and integrity standards. The Bank requires its critical IT systems to be identified, secure, resilient and available and support its ongoing operations, decision-making, communications and reporting. The Bank's systems must also have the capability, capacity, scalability and adaptability to meet current and future business objectives, the needs of customers and regulatory and legal expectations.

Cyber risk, which is part of technology risk, is the risk that the Bank will be compromised as a result of cyber attacks, security breaches, unauthorized access, loss or destruction of data, unavailability of service, computer viruses or other events that could have an adverse security impact.

Technology risks are managed through the Bank's technology risk management program, business continuity management plan and business contingency and resiliency plans and feature in the Bank's overall operational risk assessment. Technology risks are included as part of the Bank's overall enterprise risk and control assessment based upon a forward-looking approach focusing on the most significant risks in terms of potential impact and likelihood.

Legal risk

Legal risk is the risk of loss or imposition of damages, fines, penalties or other liability or any other material adverse impact arising from circumstances including the failure to comply with legal obligations, whether contractual, statutory or otherwise, changes in enforcement practices, the making of a legal challenge or claim against the Bank, its inability to enforce legal rights or the failure to take measures to protect its rights.

Reputational risk

Reputational risk is the risk that negative perception by the Bank's stakeholders, including clients, counterparties, employees, shareholders, regulators and the general public, may adversely impact client acquisition and damage the Bank's business relationships with clients and counterparties, affecting staff morale and reducing access to funding sources.

Reputational risk may arise from a variety of sources, including, but not limited to, the nature or purpose of a proposed transaction or service, the identity or activity of a potential client, the regulatory or political climate in which the business will be transacted, and the potentially controversial environmental or social impacts of a transaction or significant public attention surrounding the transaction itself. The risk may also arise from reputational damage in the aftermath of an operational risk incident, such as cyber crime or the failure by employees to meet expected conduct and ethical standards.

Reputational risk is included in the Bank's risk appetite framework to ensure that risk-taking is aligned with the approved risk appetite. The Bank highly values its reputation and is fully committed to protecting it through a prudent approach to risk-taking and a responsible approach to business. This is achieved through the use of dedicated processes, resources and policies focused on identifying, evaluating, managing and reporting potential reputational risks. This is also achieved by applying the highest standards of personal accountability and ethical conduct as set out in the Group's Code of Conduct and the Group's approach to conduct and ethics. Reputational risk potentially arising from proposed business transactions and client activity is assessed in the reputational risk review process. The Group's global policy on reputational risk requires employees to be conservative when assessing potential reputational impact and, where certain indicators give rise to potential reputational risk, the relevant business proposal or service must be submitted through the reputational risk review process.

The RRSC, on a global level, and the reputational risk committees, on a divisional or legal entity level, are the governing bodies responsible for the oversight and active discussion of reputational risk and sustainability issues. At the Board level, the Risk Committee and Audit Committee jointly assist the Board in fulfilling its reputational risk oversight responsibilities by reviewing and approving the Bank's risk appetite framework as well as assessing the adequacy of the management of reputational risks.

Fiduciary risk

Fiduciary risk is the risk of financial loss arising when the Bank or its employees, acting in a fiduciary capacity as trustee, investment manager or as mandated by law, do not act in the best interest of the client in connection with the advice and management of its client's assets including from a product-related market, credit, liquidity, counterparty and operational risk perspective.

Assessing investment performance and reviewing forward-looking investment risks in discretionary client portfolios and investment funds is central to the Bank's oversight program. This program targets daily, monthly or quarterly monitoring of all portfolio management activities with independent analysis provided to senior management. Formal review meetings are in place to ensure that investment performance and risks are in line with expectations and adequately supervised.

Strategic risk

Strategic risk is the risk of financial loss or reputational damage arising from inappropriate strategic decisions, ineffective implementation of business strategies or an inability to adapt business strategies in response to changes in the business environment. A wide variety of financial, risk, client and market analyses are used by the Bank to monitor the effectiveness of its strategies and the performance of its businesses against their strategic objectives. These include an analysis of current and expected operating conditions, an analysis of current and target market positioning, and detailed scenario planning.

Strategic plans are developed by each division annually and aggregated into a Bank plan, which is reviewed by the CRO, CFO and Chief Executive Officer (CEO) before presentation to the full Executive Board. Following approval by the Executive Board, the Bank plan is submitted for review and approval to the Board. In addition, there is an annual strategic review at which the Board evaluates the Bank's performance against strategic objectives and sets the overall strategic direction for the Bank. From time to time, the Board and the Executive Board conduct more fundamental in-depth reviews of the Bank's strategy.

> Refer to "Strategy" in I – Information on the company for further information.

Climate-related risks

In response to the recommendations from the FSB's Task Force on Climate-related Financial Disclosures (TCFD), the Bank has established a climate change program with the overall goal of addressing recommendations related to external disclosures of climate-linked risks and opportunities. The program team has worked to formalize climate-related governance and definitions in the Bank's key policies and to define the principles for climate risk strategy and management.

Use of derivative financial instruments and hedge accounting

Business policy for use of derivative financial instruments

Derivatives are generally either privately negotiated OTC contracts or standard contracts transacted through regulated exchanges. The Bank parent company's most frequently used freestanding derivative products, entered into for trading and risk management purposes, include interest rate, credit default and cross-currency swaps, interest rate and foreign exchange options, foreign exchange forward contracts and foreign exchange and interest rate futures.

On the date a derivative contract is entered into, the Bank parent company designates it as belonging to one of the following categories: trading activities; a risk management transaction that does not qualify as a hedge under accounting standards (referred to as an economic hedge); a hedge of the fair value of a recognized asset or liability; or a hedge of the variability of cash flows to be received or paid relating to a recognized asset or liability or a forecasted transaction.

Economic hedges

Economic hedges arise when the Bank parent company enters into derivative contracts for its own risk management purposes, but the contracts entered into do not qualify for hedge accounting. These economic hedges include the following types:

- interest rate derivatives to manage net interest rate risk on certain core banking business assets and liabilities;
- foreign exchange derivatives to manage foreign exchange risk on certain core banking business revenue and expense items, core banking business assets and liabilities; as well as selected foreign participations against adverse movements in foreign exchange rates;
- credit derivatives to manage credit risk on certain loan portfolios; and
- futures to manage risk on equity positions including convertible bonds.

Derivatives used in economic hedges are included as trading assets or trading liabilities in the balance sheets.

Hedge accounting

Hedge accounting for the Bank parent company is determined, recorded and disclosed in accordance with US GAAP as allowed under Swiss GAAP statutory accounting rules.

> Refer to “Note 13 – Derivative financial instruments” for further information on hedge accounting.

Fair value hedges

The Bank parent company designates fair value hedges as part of an overall interest rate risk management strategy that incorporates the use of derivative instruments to minimize fluctuations in earnings that are caused by interest rate volatility. In addition to hedging changes in fair value due to interest rate risk associated with fixed rate loans, repurchase agreements and long-term debt instruments, the Bank parent company uses:

- cross-currency swaps to convert foreign-currency-denominated fixed rate assets or liabilities to floating rate functional currency assets or liabilities; and
- foreign exchange forward contracts to hedge the foreign exchange risk associated with available-for-sale securities.

Cash flow hedges

The Bank parent company designates cash flow hedges as part of its strategy to mitigate its risk to variability of cash flows on loans, deposits and other debt obligations by using interest rate swaps to convert variable rate assets or liabilities to fixed rates. The Bank parent company also uses cross-currency swaps to convert foreign-currency-denominated fixed and floating rate assets or liabilities to fixed rate assets or liabilities based on the currency profile to which the Bank parent company elects to be exposed. Further, the Bank parent company uses derivatives to hedge its cash flows associated with forecasted transactions.

Hedge effectiveness assessment

The Bank parent company assesses the effectiveness of hedging relationships both prospectively and retrospectively. The prospective assessment is made both at the inception of a hedging relationship and on an ongoing basis, and requires the Bank parent company to justify its expectation that the relationship will be highly effective over future periods. The retrospective assessment is also performed on an ongoing basis and requires the Bank parent company to determine whether or not the hedging relationship has actually been effective. If the Bank parent company concludes, through a retrospective evaluation, that hedge accounting is appropriate for the current period, then it measures the amount of hedge ineffectiveness to be recognized in earnings.

4 Net income from interest activities

Negative interest income and expense

in	2018	2017
CHF million		
Negative interest income debited to interest income	(279)	(258)
Negative interest expenses credited to interest expense	104	86

Negative interest income is debited to interest income and negative interest expense is credited to interest expense.

5 Net income/(loss) from trading activities and fair value option

in	2018	2017
By risk of underlying instruments (CHF million)		
Interest rate instruments [1]	(1,614)	(24)
Equity instruments [1]	244	168
Foreign exchange	567	217
Precious metals	70	55
Commodities [2]	6	5
Credit instruments	(130)	(721)
Other instruments	(10)	101
Net income/(loss) from trading activities and fair value option	**(867)**	**(199)**
of which net income/(loss) from fair value option	7,406	(4,750)
of which net income/(loss) from liabilities valued under the fair value option	7,406	(4,750)

1 Includes trading income/(loss) from related fund investments.

2 Includes energy products.

Trading activities at the Bank parent company level are only monitored and managed for entity-specific capital adequacy purposes and are not measured along divisional or individual business lines. The trading activities of the divisions or individual businesses are only monitored and managed at the Group level based on US GAAP metrics.

6 Personnel expenses

in	2018	2017
CHF million		
Salaries	1,681	2,128
of which variable compensation expenses [1]	466	648
Social benefit expenses	297	321
of which pension and other post-retirement expenses	186	192
Other personnel expenses	86	99
Personnel expenses	**2,064**	**2,548**

1 Includes current and deferred variable compensation expenses. Prior period has been corrected.

7 General and administrative expenses

in	2018	2017
CHF million		
Occupancy expenses	104	109
Information and communication technology expenses	70	136
Furniture and equipment	10	21
Fees to external audit companies	30	31
of which fees for financial and regulatory audits [1]	28	29[2]
of which fees for other services	2	2[2]

Other operating expenses [3]	3,497	2,773
General and administrative expenses	**3,711**	**3,070**

1
Represents total fees for financial statement, regulatory and related audit services paid by legal entity Credit Suisse AG to external audit companies.
2
Prior period has been corrected.
3
Partially related to operating expenses charged by affiliated companies for services provided to the Bank parent company.

8 Increase/(release) of provisions and other valuation adjustments, losses and extraordinary income and expenses

Increase/(release) of provisions and other valuation adjustments, and losses

in	2018	2017
CHF million		
Increase/(release) of provisions	65[1]	153[2]
Other losses	4	3
Increase/(release) of provisions and other valuation adjustments, and losses	**69**	**156**

1
Primarily related to an increase in litigation provisions.
2
Primarily related to increases in off-balance sheet provisions and litigation provisions.

Extraordinary income and expenses

in	2018	2017
CHF million		
Gains realized from the disposal of participations	9	362[1]
Gains realized from the disposal of tangible fixed assets [2]	29	2
Extraordinary income	**38**	**364**
Losses realized from the disposal of participations	0	(5)[3]
Extraordinary expenses	**0**	**(5)**

1
Primarily related to the merger of Credit Suisse (Channel Islands) Limited, the sale of Credit Suisse (Monaco) S.A.M. and the merger of another participation.
2
Includes realized gains from the sale of real estate (bank premises).
3
Primarily related to the liquidation of a participation.

9 Taxes

in	2018	2017
CHF million		
Current income tax (expense)/benefit	(196)	(324)
Non-income-based taxes (expense)/benefit [1]	(70)	(79)
Taxes	**(266)**	**(403)**

1
Includes capital taxes and other non-income based taxes such as UK bank levy expenses.

For the financial year ended December 31, 2018 and 2017, the average tax rate, defined as income tax expense divided by the sum of profit before income tax, was (43)% and 59%, respectively. Income tax expense for the financial year ended December 31, 2018 and 2017 reflected a benefit of CHF 256 million and CHF 249 million, respectively, from the utilization of tax losses carried forward. The calculation is based on statutory tax rates applied to the taxable profit against which tax loss carry forwards were utilized.

10 Assets and liabilities from securities lending and borrowing, repurchase and reverse repurchase agreements

end of	2018	2017
CHF million		
Carrying value of receivables from cash collateral paid for securities borrowed and reverse repurchase agreements – gross	81,220	75,668
Impact from master netting agreements	(11,452)	(8,991)
Carrying value of receivables from cash collateral paid for securities borrowed and reverse repurchase agreements – net	**69,768**	**66,677**

Carrying value of liabilities from cash collateral received for securities lent and repurchase agreements – gross	67,258	70,055
Impact from master netting agreements	(11,452)	(8,991)
Carrying value of liabilities from cash collateral received for securities lent and repurchase agreements – net	**55,806**	**61,064**
Carrying value of securities transferred under securities lending and borrowing and repurchase agreements	24,732	29,488[1]
of which transfers with the right to resell or repledge	3,160	667
Fair value of securities received under securities lending and borrowing and reverse repurchase agreements with the right to resell or repledge	237,257	188,142
of which repledged	182,019	139,572
of which resold	3,070	688

1 Prior period has been corrected.

11 Collateral and impaired loans

Collateralization of loans

end of	Mortgages	Other collateral	Secured[1] Total	Unsecured	Total
2018 (CHF million)					
Due from customers	73	83,034	83,107	94,929	178,036
Residential property	3,976	0	3,976	0	3,976
Offices and commercial property	1,058	0	1,058	0	1,058
Manufacturing and industrial property	134	0	134	0	134
Other	12	0	12	0	12
Mortgage loans	5,180	0	5,180	0	5,180
Gross loans	**5,253**	**83,034**	**88,287**	**94,929**	**183,216**
Allowance for loan losses	(18)	(79)	(97)	(853)	(950)
Net loans	**5,235**	**82,955**	**88,190**	**94,076**	**182,266**
of which due from customers	73	82,955	83,028	94,076	177,104
of which mortgage loans	5,162	0	5,162	0	5,162
2017 (CHF million)					
Due from customers	43	90,359	90,402	103,588	193,990
Residential property	3,867	0	3,867	0	3,867
Offices and commercial property	890	0	890	0	890
Manufacturing and industrial property	256	0	256	0	256
Other	63	0	63	0	63
Mortgage loans	5,076	0	5,076	0	5,076
Gross loans	**5,119**	**90,359**	**95,478**	**103,588**	**199,066**
Allowance for loan losses	(25)	(351)	(376)	(533)	(909)
Net loans	**5,094**	**90,008**	**95,102**	**103,055**	**198,157**
of which due from customers	43	90,008	90,051	103,055	193,106
of which mortgage loans	5,051	0	5,051	0	5,051

1 Includes the market value of collateral up to the amount of the outstanding related loans. For mortgage loans, the market value of collateral is determined at the time of granting the loan and thereafter regularly reviewed according to the Bank parent company's risk management policies and directives, with maximum review periods determined by property type, market liquidity and market transparency. For impaired mortgage loans, the market value of collateral is determined annually or more frequently by credit risk management within the impairment review process.

Collateralization of off-balance sheet transactions

end of	Mortgages	Other collateral	Secured[1] Total	Unsecured	Total
2018 (CHF million)					
Contingent liabilities	0	6,393	6,393	26,048[2]	32,441
Irrevocable commitments	293	48,202	48,495	50,254	98,749
Obligations for calls on shares and additional payments	0	0	0	97	97
Off-balance sheet transactions	**293**	**54,595**	**54,888**	**76,399**	**131,287**
2017 (CHF million)					

Contingent liabilities	1	8,273	8,274	66,603[2]	74,877
Irrevocable commitments	439	33,698	34,137	51,402	85,539
Obligations for calls on shares and additional payments	0	0	0	57	57
Off-balance sheet transactions	**440**	**41,971**	**42,411**	**118,062**	**160,473**

1
Includes the market value of collateral up to the notional amount of the related off-balance sheet transaction. For mortgage-backed off-balance sheet exposures, the market value of collateral is determined at the time of granting the credit facility and thereafter regularly reviewed according to the Bank parent company's risk management policies and directives, with maximum review periods determined by property type, market liquidity and market transparency. For impaired exposures, the market value of collateral is determined annually or more frequently by credit risk management within the impairment review process.

2
A majority of contingent liabilities are related to guarantees issued in favor of Group companies.

Impaired loans

end of	Gross amount outstanding	Estimated realizable collateral value[1]	Net amount outstanding	Specific allowance
2018 (CHF million)				
Impaired loans	1,984	873	1,111	731
2017 (CHF million)				
Impaired loans	2,112	1,096	1,016	732

1 Represents the estimated realizable collateral value up to the related gross amount outstanding.

Changes in impaired loans

	2018			2017		
	Due from customers	Mortgage loans	Total	Due from customers	Mortgage loans	Total
CHF million						
Balance at beginning of period	**1,976**	**136**	**2,112**	**3,087**	**71**	**3,158**
Change in organization	–	–	–	–	7	7
New impaired loan balances	824	58	882	1,536	110	1,646
Increase of existing impaired loan balances	60	2	62	88	13	101
Reclassifications to performing loans	(45)	(14)	(59)	(182)	(24)	(206)
Repayments	(325)	(20)	(345)	(1,235)[1]	(27)	(1,262)
Liquidation of collateral, insurance and guarantee payments	(122)	(62)	(184)	(186)	(11)	(197)
Write-offs	(228)	(6)	(234)	(846)	0	(846)
Sales	(264)	0	(264)	(177)	(3)	(180)
Foreign exchange translation impact	14	0	14	(109)	0	(109)
Balance at end of period	**1,890**	**94**	**1,984**	**1,976**	**136**	**2,112**

Changes in impaired loan classification during the year are reflected on a gross basis.

1 Includes CHF 115 million relating to the conversion of a loan into derivative financial instruments.

12 Trading assets and liabilities and other financial instruments held at fair value

Trading assets and other financial instruments held at fair value

end of	2018	2017
CHF million		
Debt securities, money market instruments and money market transactions	36,711	41,826
of which exchange-traded	2,363	2,256
Equity securities	5,529	5,403
Precious metals and commodities	541	1,400
Trading assets	**42,781**	**48,629**
Debt securities	0	105
Other	0	217

Other financial instruments held at fair value	**0**	**322**
Total trading assets and other financial instruments held at fair value	**42,781**	**48,951**
of which carrying value determined based on a valuation model	26,673	36,731
of which securities eligible for repurchase transactions in accordance with liquidity regulations	149	1,105

Trading liabilities and liabilities from other financial instruments held at fair value

end of	2018	2017
CHF million		
Debt securities, money market instruments and money market transactions	3,511	3,418
of which exchange-traded	531	260
Equity securities	2,438	2,948
Trading liabilities	**5,949**	**6,366**
Structured products	54,645	60,945
Liabilities from other financial instruments held at fair value	**54,645**	**60,945**
Trading liabilities and liabilities from other financial instruments held at fair value	**60,594**	**67,311**
of which carrying value determined based on a valuation model	55,033	64,157

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13 Derivative financial instruments

	Trading			Hedging[1]		
end of 2018	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)
CHF million						
Forwards and forward rate agreements	518,397	2,081	2,246	0	0	0
Swaps	3,883,432	11,164	12,330	18,710	121	0
Options bought and sold (OTC)	495,660	2,562	2,315	0	0	0
Futures	30,069	0	0	0	0	0
Options bought and sold (exchange-traded)	2,876	0	0	0	0	0
Interest rate products	**4,930,434**	**15,807**	**16,891**	**18,710**	**121**	**0**
Forwards and forward rate agreements	1,110,675	8,921	9,501	0	0	0
Swaps [2]	134,067	2,084	2,243	0	0	0
Options bought and sold (OTC)	300,461	2,892	2,778	0	0	0
Futures	71	0	0	0	0	0
Foreign exchange products	**1,545,274**	**13,897**	**14,522**	**0**	**0**	**0**
Forwards and forward rate agreements	9,232	150	111	0	0	0
Options bought and sold (OTC)	8,448	110	93	0	0	0
Precious metal products	**17,680**	**260**	**204**	**0**	**0**	**0**
Forwards and forward rate agreements	153	6	1	0	0	0
Swaps	84,558	1,556	3,903	0	0	0
Options bought and sold (OTC)	108,042	3,380	3,078	0	0	0
Futures	2,241	0	0	0	0	0
Options bought and sold (exchange-traded)	24,344	963	1,196	0	0	0
Equity/index-related products	**219,338**	**5,905**	**8,178**	**0**	**0**	**0**
Credit default swaps	21,636	282	661	0	0	0
Total return swaps	8,661	252	628	0	0	0
Other credit derivatives	7,907	131	44	0	0	0
Credit derivatives	**38,204**	**665**	**1,333**	**0**	**0**	**0**
Swaps	9,663	1,405	372	0	0	0
Options bought and sold (OTC)	2,367	66	55	0	0	0
Other derivative products	**12,030**	**1,471**	**427**	**0**	**0**	**0**
Derivative financial instruments [3]	**6,762,960**	**38,005**	**41,555**	**18,710**	**121**	**0**
of which replacement value determined based on a valuation model	–	34,024	37,376	–	121	0

1 Relates to derivative financial instruments that qualify for hedge accounting.

2 Including combined interest rate and foreign exchange swaps.

3
Before impact of master netting agreements.
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Derivative financial instruments (continued)

	Trading			Hedging[1]	
end of 2017	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)	Notional amount	Positive replacement value (PRV)	Negative replacement value (NRV)
CHF million						
Forwards and forward rate agreements	398,951	324	298	0	0	0
Swaps	4,345,760	7,474	8,334	25,481	271	0
Options bought and sold (OTC)	189,387	725	848	0	0	0
Futures	64,875	0	0	0	0	0
Options bought and sold (exchange-traded)	38,640	0	0	0	0	0
Interest rate products	**5,037,613**	**8,523**	**9,480**	**25,481**	**271**	**0**
Forwards and forward rate agreements	1,314,397	9,440	10,394	0	0	0
Swaps [2]	86,161	1,414	1,366	319	223	0
Options bought and sold (OTC)	369,530	2,799	2,639	0	0	0
Futures	179	0	0	0	0	0
Foreign exchange products	**1,770,267**	**13,653**	**14,399**	**319**	**223**	**0**
Forwards and forward rate agreements	7,459	47	62	0	0	0
Options bought and sold (OTC)	10,858	146	78	0	0	0
Precious metal products	**18,317**	**193**	**140**	**0**	**0**	**0**
Forwards and forward rate agreements	3	0	0	0	0	0
Swaps	66,915	2,091	1,398	0	0	0
Options bought and sold (OTC)	104,895	4,724	4,442	0	0	0
Futures	1,488	0	0	0	0	0
Options bought and sold (exchange-traded)	6,821	41	417	0	0	0
Equity/index-related products	**180,122**	**6,856**	**6,257**	**0**	**0**	**0**
Credit default swaps	19,054	233	656	0	0	0
Total return swaps	5,717	219	68	0	0	0
Other credit derivatives	14,418	62	18	0	0	0
Credit derivatives	**39,189**	**514**	**742**	**0**	**0**	**0**
Swaps	12,603	1,437	371	0	0	0
Options bought and sold (OTC)	97	11	4	0	0	0
Options bought and sold (exchange-traded)	3	0	0	0	0	0
Other derivative products	**12,703**	**1,448**	**375**	**0**	**0**	**0**
Derivative financial instruments [3]	**7,058,211**	**31,187**	**31,393**	**25,800**	**494**	**0**
of which replacement value determined based on a valuation model	–	30,774	30,962	–	494	0

1 Relates to derivative financial instruments that qualify for hedge accounting.

2
Including combined interest rate and foreign exchange swaps.
3
Before impact of master netting agreements.
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Positive and negative replacement values before and after consideration of master netting agreements

end of	2018	2017
Before consideration of master netting agreements (CHF million)		
Positive replacement values – trading and hedging	38,126	31,681
Negative replacement values – trading and hedging	41,555	31,393
After consideration of master netting agreements		
Positive replacement values – trading and hedging[1]	8,023	9,046
Negative replacement values – trading and hedging[1]	7,215	8,373

1 Netting includes counterparty exposure and cash collateral netting.

Positive replacement values by counterparty type

end of	2018	2017
CHF million		
Central clearing counterparties	1,126	736
Banks and securities dealers	4,401	6,093
Other counterparties [1]	2,496	2,217
Positive replacement values	**8,023**	**9,046**

1 Primarily related to bilateral OTC derivative contracts with clients.

Fair value hedges

in	2018	2017
Gains/(losses) on derivative financial instruments recognized in income (CHF million)		
Interest rate products	(348)	(327)
Gains/(losses) on derivative financial instruments recognized in income	**(348)**	**(327)**
Gains/(losses) on hedged items recognized in income		
Interest rate products	348	328
Gains/(losses) on hedged items recognized in income	**348**	**328**
Details of fair value hedges		
Net gains/(losses) on the ineffective portion	0	1

All gains/(losses) are recognized in net income/(loss) from trading activities and fair value option.

Cash flow hedges

in	2018	2017
Deferred unrealized gains/(losses) on derivative financial instruments related to cash flow hedges (CHF million) [1]		
Balance at beginning of period	**(61)**	**(25)**
Interest rate products	(67)	(50)
Gains/(losses) on derivative financial instruments deferred during reporting period	**(67)**	**(50)**
Interest rate products [2]	(79)	(14)
Deferred gains/(losses) on derivative financial instruments reclassified into income	**(79)**	**(14)**
Balance at end of period	**(49)**	**(61)**
Details of cash flow hedges		
Net gains/(losses) on the ineffective portion [2]	0	(2)

1 Included in the compensation account within other assets or other liabilities.

2

Included in net income/(loss) from trading activities and fair value option.

As of December 31, 2018, the net loss associated with cash flow hedges expected to be reclassified from other assets and other liabilities to the statement of income within the next 12 months was CHF 24 million.

As of December 31, 2018, the maximum length of time over which the Bank parent company hedged its exposure to the variability in future cash flows for forecasted transactions, excluding those forecasted transactions related to the payment of variable interest on existing financial instruments, was five years.

> Refer to “Use of derivative financial instruments and hedge accounting” in Note 3 – Risk management, use of derivative financial instruments and hedge accounting for further information.

14 Financial investments

end of	2018 Carrying value	2018 Fair value	2017 Carrying value	2017 Fair value
CHF million				
Debt securities	30,058	29,949	17,498	17,515
of which held-to-maturity	25,130	25,021	13,505	13,522
of which available-for-sale	4,928	4,928	3,993	3,993
Equity securities	651	659	1,026	1,048
of which qualified participations [1]	365	372	821	841
Real estate [2]	5	5	38	38
Other [3]	59	59	29	29
Financial investments	**30,773**	**30,672**	**18,591**	**18,630**
of which securities eligible for repurchase transactions in accordance with liquidity regulations	0	–	6	–

1
Includes participations held in financial investments with at least 10% in capital or voting rights.
2
Real estate acquired from the lending business (repossessed assets) and classified as held-for-sale is carried at lower of cost and liquidation value.
3
Includes other non-financial assets acquired from the lending business (repossessed assets) such as commodities, vehicles and other goods.

Debt securities by counterparty rating

end of	2018	2017
CHF million		
AAA to AA–	4,409	3,993
BBB+ to BBB–	55	0
BB+ to B–	0	55
No rating [1]	25,594	13,450
Debt securities	**30,058**	**17,498**

Ratings are based on external data from Standard & Poor's.
1
Mainly related to funding in the form of bail-in capital and other capital instruments issued to subsidiaries.

15 Other assets and other liabilities

end of	2018	2017
CHF million		
Compensation account [1]	1,309	1,831
Indirect taxes and duties	256	136
Other [2]	256	407
Other assets	**1,821**	**2,374**
Indirect taxes and duties	28	24
Other [3]	290	540
Other liabilities	**318**	**564**

1
Includes changes in the book value of assets and liabilities that are not recognized in the statement of

income, such as hedge effectiveness, impacts from changes in own credit spreads and deferred gains or losses from the sale of debt securities held-to-maturity.

2 Includes receiveables from settlement accounts, security deposits and guarantee funds, coupons, internal clearing accounts and other miscellaneous assets.

3 Includes payables from settlement accounts, accounts payable for goods and services purchased, internal clearing accounts and other miscellaneous liabilities.

16 Assets pledged

	2018		2017	
end of	Carrying value	Actual liabilities	Carrying value	Actual liabilities
CHF million [1]				
Due from banks	9	9	0	0
Due from customers	19	19	94	94
Trading assets	911	348	1,378[2]	764[2]
Assets pledged	**939**	**376**	**1,472**	**858**

1 Excludes assets pledged in connection with securities lending and borrowing, repurchase agreements and reverse-repurchase agreements.

2 Prior period has been corrected.

17 Pension plans

As of December 31, 2018 and 2017, the Bank parent company's did not have any liabilities due to own pension plans.

> Refer to "Note 29 – Pension and other post-retirement benefits" in VIII –Consolidated financial statements – Credit Suisse (Bank) for further information.

Swiss pension plan

The Bank parent company's employees are covered by the pension plan of the "Pensionskasse der Credit Suisse Group (Schweiz)" (the Swiss pension plan). Most of the Group parent company's Swiss subsidiaries and a few companies that have close business and financial ties with the Group parent company participate in this plan. The Swiss pension plan is an independent self-insured pension plan set up as a trust and qualifies as a defined contribution plan (savings plan) under Swiss law.

The Swiss pension plan's annual financial statements are prepared in accordance with Swiss GAAP FER 26 based on the full population of covered employees. Individual annual financial statements for each participating company are not prepared. As a multi-employer plan with unrestricted joint liability for all participating companies, the economic interest in the Swiss pension plan's over- or underfunding is allocated to each participating company based on an allocation key determined by the plan.

International pension plans

The Bank parent company's international employees are covered by mandatory and supplementary pension plans in various locations. These are defined benefit and defined contribution plans, which cover benefits such as disability, old age and death, termination and sickness.

Employer contribution reserves

	Employer contribution reserves – notional		Amount subject to waiver		Employer contribution reserves – net[1]		Increase/(Release) of employer contribution reserves included in personnel expenses	
end of / in	2018	2017	2018	2017	2018	2017	2018	2017
CHF million								
Swiss pension plan	15[2]	20	0	0	15[2]	20	0	0
Total	**15**	**20**	**0**	**0**	**15**	**20**	**0**	**0**

1 In line with Swiss GAAP statutory accounting guidance, contributions to the employer contribution reserves are not recorded in the Bank parent company's statutory balance sheet.

2 Reflects the transfer of employer contribution reserves from the Bank parent company to Credit Suisse Services AG and Credit Suisse Asset Management (Schweiz) AG as of January 1, 2018.

Pension plan economic benefit/(obligation), pension contributions and pension expenses

	Over/(Under) -funding		Economic benefit/ (obligation) recorded by Bank parent company[2]			Pension contributions		Pension expenses included in personnel expenses	
end of / in	2018	2017	2018	2017	Change	2018	2017	2018	2017
CHF million									
Swiss pension plan – status overfunded	677[1]	887[1]	–	–	–	166	182	168	182
	(15)	(20)	(15)	(20)	5	1	0	(2)	(11)

International pension plans – underfunded									
International pension plans – without over-/underfunding	0	0	0	0	0	20	21	20	21
Total	**662**	**867**	**(15)**	**(20)**	**5**	**187**	**203**	**186**	**192**

1
Represents the Bank parent company's share of 39% in the total over/(under)funding of the Swiss pension plan of CHF 1,735 million and CHF 2,275 million as of December 31, 2018 and 2017, respectively.

2
In line with Swiss GAAP statutory accounting guidance, the Bank parent company's economic benefit from its share in the overfunding of the Swiss pension plan is not recorded in the Bank parent company's statutory balance sheet.

18 Issued structured products

	2018				2017			
	Not bifurcated[1] Liabilities from other financial instruments held at fair value[2]	Bifurcated		Total	Not bifurcated[1] Liabilities from other financial instruments held at fair value[2]	Bifurcated		Total
end of		Value of underlying instrument	Value of derivative[1]			Value of underlying instrument	Value of derivative[1]	
Carrying value of issued structured products by underlying risk of the embedded derivative (CHF million)								
Interest rates								
Structured products with own debt	13,087	0	0	13,087	14,414	0	0	14,414
Structured products without own debt	716	0	0	716	773	0	0	773
Equity								
Structured products with own debt	34,601	0	0	34,601	37,694	0	0	37,694
Foreign exchange								
Structured products with own debt	1,083	0	0	1,083	644	0	0	644
Structured products without own debt	0	695	(3)	692	0	528	(2)	526
Commodities / precious metals								
Structured products with own debt	1,483	0	0	1,483	2,226	0	0	2,226
Structured products without own debt	0	66	(1)	65	0	56	0	56
Credit								
Structured products with own debt	3,596	143	(1)	3,738	5,082	0	0	5,082
Other [3]								
Structured products with own debt	79	0	0	79	112	0	0	112
Total	**54,645**	**904**	**(5)**	**55,544**	**60,945**	**584**	**(2)**	**61,527**

1
Carried at fair value.
2
Reflects balance sheet classification.

3
Includes structured products where the underlying risk relates to hedge funds or other products with multiple underlying risks.

19 Unsecured senior debt and structured notes

	2018			2017		
end of	Original maturity up to 1 year	Original maturity greater than 1 year	Total	Original maturity up to 1 year	Original maturity greater than 1 year	Total
CHF million						
Unsecured senior debt [1, 2]	8,183	74,228[3]	**82,411**	7,662	81,107[3]	**88,769**
of which recorded in bonds and mortgage-backed bonds			82,411			88,769
Unsecured structured notes [4]	6,905	47,338	**54,243**	10,116	50,171	**60,287**
of which recorded in liabilities from other financial instruments held at fair value			53,929			60,172
of which recorded in bonds and mortgage-backed bonds			314			115

1
Includes guaranteed debt and payables related to fully funded swaps.
2
Excludes senior unsecured debt included in due to banks and customer deposits as well as certificates of deposits and bankers acceptances.
3
Includes bail-in instruments of CHF 14,788 million and CHF 9,572 million as of December 31, 2018 and 2017, respectively, with Credit Suisse Group AG. Prior period has been corrected.
4
For structured notes that include a put option, maturity is determined based on the first date at which a noteholder can request repayment. Structured notes with market triggering features are always reflected in accordance with original maturity.

20 Provisions and valuation adjustments

2018	Balance at beginning of period	Change in organization	Utilized for purpose	Reclassifications	Foreign exchange translation differences	Recoveries, interest past due	New charges to income statement	Releases to income statement	Balance at end of period
CHF million									
Provisions for pension benefit obligations	20	0	0	0	(1)	0	1	(5)	15[1]
Provisions for off-balance sheet default risks	153	0	(12)	0	2	0	239	(224)	158[2,3]
Provisions for other business risks	30	(1)	(16)	4	0	0	2	(1)	18[2]
Restructuring provisions	14	0	(60)	0	0	0	56	(1)	9[4]
Other provisions	331	(6)	(83)	2	(5)	0	68	(48)	259[5]
Provisions	**548**	**(7)**	**(171)**	**6**	**(4)**	**0**	**366**	**(279)**	**459**
Valuation adjustments for default and country risks [6]	**909**	**0**	**(239)**	**0**	**4**	**25**	**640**	**(388)**	**951**
of which valuation adjustments for default risks from impaired receivables	732	0	(239)	0	3	24	306	(96)	730
of which valuation adjustments for inherent risks	177	0	0	0	1	1	334	(292)	221

1
Discounted at rates between 1.50% and 8.20%.
2
Provisions are not discounted due to their short-term nature.
3
Provisions are mainly related to irrevocable loan commitments and guarantees.
4
Partially discounted at rates between 0.06% and 1.35%.
5
Includes provisions in respect of litigation claims of CHF 240 million and CHF 275 million as of December 31, 2018 and 2017, respectively; partially discounted at rates between 2.32% and 6.00%.
6
Changes in impaired loan classification during the year and related movements in valuation adjustments are reflected on a gross basis.

21 Composition of share capital, conversion and reserve capital

	2018	2017

end of	Quantity	Total nominal value (CHF million)	Quantity	Total nominal value (CHF million)
Share capital				
Registered shares (at CHF 1 par value per share)	4,399,680,200	4,400[1]	4,399,680,200	4,400[1]
Total share capital		**4,400**		**4,400**
Conversion and reserve capital [2]				
Unlimited conversion capital (at CHF 1 par value per share) [3]	unlimited	unlimited	unlimited	unlimited
Reserve capital (at CHF 1 par value per share) [4]	4,399,665,200	4,400	4,399,665,200	4,400
of which used for capital increases	0	0	0	0
of which reserved for planned capital increases	0	0	0	0

1
The dividend eligible capital equals the total nominal value. As of December 31, 2018 and 2017, the total nominal value of registered shares was CHF 4,399,680,200 and fully paid.

2
Represents authorized capital.

3
For information on principal characteristics of unlimited conversion capital, refer to Article 4d in the Articles of Association of the Bank parent company.

4
For information on principal characteristics of reserve capital, refer to Article 4e in the Articles of Association of the Bank parent company.

Non-distributable reserves

As of December 31, 2018 and 2017, the amount of non-distributable reserves in accordance with the Swiss Code of Obligations and the Bank parent company's articles of association was CHF 2,200 million. Not reflected in this amount are reserves which the Bank parent company is required to retain in order to meet the regulatory capital requirements as a going concern.

Transactions with shareholders

In 2018, there were no non-cash transactions or transactions not carried out on an arm's length basis with shareholders in their capacity as shareholder.

22 Significant shareholders and groups of shareholders

	2018			2017		
end of	Number of shares (million)	Total nominal value (CHF million)	Share-holding (%)	Number of shares (million)	Total nominal value (CHF million)	Share-holding (%)
Direct shareholders						
Credit Suisse Group AG	4,400[1]	4,400	100.00	4,400[1]	4,400	100.00
Indirect shareholders through Credit Suisse Group AG [2]						
Chase Nominees Ltd. [3]	668	668	15.19	567	567	12.88
Nortrust Nominees Ltd. [3]	257	257	5.84	242	242	5.49

1
All shares with voting rights.
2
Pro-forma numbers calculated based on the percentage interest held in Group shares as per the share register of the Group on December 31 of the reporting period. Includes shareholders registered as nominees.
3
Nominee holdings exceeding 2% are registered with a right to vote only if the nominee confirms that no individual shareholder holds more than 0.5% of the outstanding share capital or if the nominee discloses the identity of any beneficial owner holding more than 0.5% of the outstanding capital.

Information received from shareholders of the Group not registered in the share register

In addition to the shareholdings registered in the share register of the Group, the Group has obtained and reported to the SIX Swiss Exchange (SIX) information from its shareholders in accordance with the notification requirements of the Swiss Federal Act on Financial Market Infrastructures and Market Conduct in Securities and Derivatives Trading. These shareholders may hold their shareholdings in Group shares through a nominee. The following shareholder notifications relate to registered voting rights exceeding 5% of all voting rights, which are subject to disclosure in the notes to the financial statements in accordance with Swiss GAAP statutory.

In a disclosure notification that the Group published on November 9, 2013, the Group was notified that as of November 4, 2013, Harris Associates L.P. held 81.5 million shares, or 5.17% of the voting rights, of the registered Group shares issued as of the date of the notified transaction. No further disclosure notification has been received from Harris Associates L.P. relating to holdings of registered Group shares since 2013. This position includes the reportable position of Harris Associates Investment Trust (4.97% of the voting rights), as published by the SIX on August 1, 2018.

In a disclosure notification that the Group published on September 6, 2018, the Group was notified that as of August 24, 2018, Qatar Holding LLC held 133.2 million shares, or 5.21% of the voting rights, of the registered Group shares issued as of the date of the notified transaction.

In 2018, the Group received disclosure notifications from Norges Bank that their holdings of registered Group shares and voting rights had fallen below the 5% threshold. The Olayan Group and BlackRock, Inc.'s holdings of registered Group shares and voting rights remained below the 5% threshold both as of December 31, 2018 and as of December 31, 2017.

Shareholders with a qualified participation

As of December 31, 2018, Credit Suisse Group AG as direct shareholder of Credit Suisse AG is the only shareholder with a qualified participation in accordance with Bank Law.

> Refer to "Note 24 – Amounts receivable from and amounts payable to related parties" for further information on shareholders with a qualified participation.

23 Shareholdings of the Board of Directors, Executive Board and employees and information on compensation plans

> Refer to “V – Compensation” for a comprehensive disclosure of compensation to the Board of Directors and the Executive Board of Credit Suisse Group AG.

> Refer to “Note 22 – Shareholdings of the Board of Directors, Executive Board and employees” in VII –Parent company financial statements – Credit Suisse Group for information on shareholdings of the Board of Directors and the Executive Board of the Bank parent company.

Share-based awards outstanding

	2018		2017	
end of	Number of share-based awards outstanding in million	Fair value in CHF million	Number of share-based awards outstanding in million	Fair value in CHF million
Share-based awards [1]				
Employees	22.4	242	21.7	377
Share-based awards outstanding	**22.4**	**242**	**21.7**	**377**

1 All share-based compensation plans of the Bank parent company are plans based on virtual shares and either settled in shares of the Group or in cash on the basis of the fair value of the Group shares.

All members of the Board of Directors and the Executive Board of the Bank parent company are also members of the Board of Directors and the Executive Board of the Group parent company. Compensation to members of the Executive Board is determined by the Group parent company on the basis of their overall function and responsibilities in the Group and paid by different legal entities of the Group depending on work location, local contracts, laws and regulations. A presentation of deferred share-based compensation awards to members of the Executive Board recorded by the Bank parent company would not appropriately reflect the Executive Board of the Bank parent company, as it would only consider those members for whom compensation is administrated by the Bank parent company.

As of December 31, 2018 and 2017, the Bank parent company did not have any option plans with outstanding options.

Compensation plans

For 2017, the Bank parent company granted share awards, performance share awards and Contingent Capital Awards (CCA) as deferred compensation in February 2018.

Deferred compensation is awarded to employees with total compensation greater than or equal to CHF/USD 250,000 or the local currency equivalent. Employees with total compensation below CHF/USD 250,000 or the local currency equivalent received variable incentive compensation in the form of an immediate cash award. Performance share awards were granted to managing directors and material risk takers and controllers, CCA were granted to managing directors and directors.

In 2018 and 2017, the Bank parent company’s total expenses related to deferred compensation plans were CHF 107 million and CHF 249 million, respectively.

For 2018 and 2017, all share-based compensation plans of the Bank parent company were either settled in shares of the Group parent company (Group shares) or in cash on the basis of the fair value of the Group shares.

Share awards

Share awards granted in February 2018 are similar to those granted in February 2017. Each share award granted entitles the holder of the award to receive one Group share, subject to service conditions. Share awards vest over three years with one third of the share awards vesting on each of the three anniversaries of the grant date (ratable vesting), with the exception of awards granted to individuals classified as risk managers or senior managers under the UK PRA Remuneration Code or similar regulations in other jurisdictions. Share awards granted to risk managers vest over five years with one fifth of the award vesting on each of the five anniversaries of the grant date, while share awards

granted to senior managers vest over five years commencing on the third anniversary of the grant date, with one fifth of the award vesting on each of the third to seventh anniversaries of the grant date. Share awards are expensed over the service period of the awards. The value of the share awards is solely dependent on the Group share price at the time of delivery.
The share awards include other awards, such as blocked shares and special awards, which may be granted to new employees. These awards entitle the holder to receive one Group share, are subject to continued employment with the Bank parent company, contain restrictive covenants and cancellation provisions and generally vest between zero and five years.
On February 15, 2018, the Bank parent company granted 6.5 million share awards with a total value of CHF 114 million. The number of share awards granted to employees was generally determined by dividing the deferred component of variable compensation being granted as share awards by the average price of a Group share over the ten consecutive trading days ended February 28, 2018. The fair value of each share award was CHF 17.22, the Group share price on the grant date. The majority of share awards granted include the right to receive dividend equivalents on vested shares.
Performance share awards
Managing directors and all material risk takers and controllers (employees whose activities are considered to have a potentially material impact on the Group's risk profile) received a portion of their deferred variable compensation in the form of performance share awards. Performance share awards are similar to share awards, except that the full balance of outstanding performance

share awards, including those awarded in prior years, are subject to performance-based malus provisions. Performance share awards granted from 2016 and onward are subject to a negative adjustment in the event of a divisional loss by the division in which the employees worked as of December 31, 2018, or a negative ROE of the Group, whichever results in a larger adjustment. For employees in corporate functions and the Strategic Resolution Unit, the negative adjustment only applies in the event of a negative return on equity (ROE) of the Group and is not linked to the performance of the divisions. The basis for the ROE calculation may vary from year to year, depending on the Compensation Committee's determination for the year in which the performance shares are granted.
On February 15, 2018, the Bank parent company granted 4.6 million performance share awards with a total value of CHF 80 million. The number of performance share awards granted to employees was generally determined by dividing the deferred component of variable compensation being granted as performance share awards by the average price of a Group share over the ten consecutive trading days ended February 28, 2018. The fair value of each performance share award was CHF 17.22, the Group share price on the grant date. The majority of performance share awards granted include the right to receive dividend equivalents on vested shares.
There was no negative adjustment applied to performance share awards granted in 2018 or in previous years.
Contingent Capital Awards
CCA were granted in February 2018 and February 2017 to managing directors and directors as part of the 2017 and 2016 deferred variable compensation and have rights and risks similar to those of certain contingent capital instruments issued by the Group in the market. CCA are scheduled to vest on the third anniversary of the grant date, other than those granted to individuals classified as risk managers or senior managers under the UK PRA Remuneration Code, where CCA vest on the fifth and seventh anniversaries of the grant date, respectively, and will be expensed over the vesting period. CCA generally provide a conditional right to receive semi-annual cash payments of interest equivalents until settled, with rates being dependent upon the vesting period and currency of denomination:

- CCA granted in 2018 and 2017 that are denominated in US dollars and vest three years from the date of grant receive interest equivalents at a rate of 3.05% and 4.27%, respectively, per annum over the six-month US dollar London Interbank Offered Rate (LIBOR);
- CCA granted in 2018 and 2017 that are denominated in Swiss francs and vest three years from the date of grant receive interest equivalents at a rate of 2.24% and 3.17%, respectively, per annum over the six-month Swiss franc LIBOR;
- CCA granted in 2017 that are denominated in US dollars and vest five or seven years from the date of grant receive interest equivalents at a rate of 4.27% per annum over the six-month US dollar LIBOR; and
- CCA granted in 2017 that are denominated in Swiss francs and vest five or seven years from the date of grant receive interest equivalents at a rate of 3.03% and 2.93%, respectively, per annum over the six-month Swiss franc LIBOR.

The rates were set in line with market conditions at the time of grant and existing high-trigger and low-trigger contingent capital instruments that the Group has issued. For CCA granted in February 2018, employees who received compensation in Swiss francs received CCA denominated in Swiss francs and all other employees received CCA denominated in US dollars.
As CCA qualify as going-concern loss-absorbing capital of the Group, the timing and form of distribution upon settlement is subject to approval by FINMA. At settlement, employees will receive either a contingent capital instrument or a cash payment based on the fair value of the CCA. The fair value will be determined by the Group. In the case of a cash settlement, the CCA award will be converted into the local currency of each respective employee. CCA have loss-absorbing features such that prior to settlement, the principal amount of the CCA would be written down to zero and forfeited if any of the following trigger events were to occur:

- the Group's reported common equity tier 1 (CET1) ratio falls below 7%; or
- FINMA determines that cancellation of the CCA and other similar contingent capital instruments is necessary, or that the Group requires public sector capital support, in either case to prevent it from becoming insolvent or otherwise failing.

On February 15, 2018, the Bank parent company awarded CHF 25 million and USD 23 million of CCA that are expensed over the vesting period from the grant date.
Contingent Capital share awards
The Group executed a voluntary exchange offer, under which employees had the right to voluntarily convert all or a portion of their respective CCA into Contingent Capital share awards at a conversion price of CHF 14.57. Each

Contingent Capital share award had a grant-date fair value of CHF 14.45 and contains the same contractual term, vesting period, performance criteria and other terms and conditions as the original CCA.

Other cash awards

Other cash awards include certain share and performance share awards settled in cash.

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24 Amounts receivable from and amounts payable to related parties

	2018		2017	
end of	Amounts receivable	Amounts payable	Amounts receivable	Amounts payable
CHF million				
Shareholders with a qualified participation	4,100	25,039	3,514	22,790
Group companies	180,310	115,453	210,033	141,812
Affiliated companies	1,288	410	688	561
Members of governing bodies [1]	42	78	37	103

1 Includes both the governing bodies of the Bank parent company (Credit Suisse AG) and the governing bodies of the Group holding company (Credit Suisse Group AG). Governing bodies include members of the Board of Directors, the Executive Board and the statutory auditors and companies controlled by members of each of these bodies.

Significant off-balance sheet transactions

As part of the normal course of business, the Bank parent company issues guarantees, loan commitments and enters into other agreements with group companies which are recorded as off-balance sheet transactions by the Bank parent company. As of December 31, 2018 and 2017, the Bank parent company had contingent liabilities of CHF 27,572 million and CHF 70,015 million, respectively, and irrevocable loan commitments of CHF 7,581 million and CHF 3,395 million, respectively, of which substantially all were related to transactions with group companies.

As shareholder of Credit Suisse International, an unlimited company incorporated in England and Wales, the Bank parent company has joint and several unlimited obligations to meet any insufficiency in the assets in the event of liquidation.

Additional information on related party transactions

Transactions (such as securities transactions, payment transfer services, borrowings and compensation for deposits) with related parties are carried out on an arm's length basis.

> Refer to "Off-balance sheet transactions", "Statement of changes in equity" and "Note 1 – Business activities, developments and subsequent events" for further information on related party transactions.

Sales and Trading Services

On November 20, 2016, with retrospective effect between the parties as of August 1, 2016, the Bank parent company entered into a contractual relationship with Credit Suisse (Schweiz) AG. The purpose of this contractual relationship was to collaboratively operate the Swiss portion of the former STS business. With effect from September 30, 2018, this contractual relationship has been discontinued by both parties.

25 Total assets by country rating

	2018		2017	
end of	CHF million[2]	%	CHF million[2]	%
Internal country rating [1]				
AAA	42,099	7.9%	165,966	28.8%
AA	334,577	62.8%	253,537	44.0%
A	35,970	6.8%	34,106	5.9%
BBB	19,513	3.7%	13,190	2.3%
BB	7,621	1.4%	9,103	1.6%
B	8,480	1.6%	5,227	0.9%
CCC	6,789	1.3%	6,943	1.2%
C	56	0.0%	41	0.0%
D	193	0.0%	156	0.0%
Foreign assets	455,298	85.5%	488,269	84.7%
Domestic assets	77,518	14.5%	87,949	15.3%
Total assets	**532,816**	**100.0%**	**576,218**	**100.0%**

1
Internal ratings are calibrated to the long-term issuer credit ratings of Standard & Poor's for the respective sovereigns. Internal country ratings may differ from Standard & Poor's respective country ratings.

2
Net balance sheet exposure by country rating of risk domicile.

26 Fiduciary transactions

end of	2018	2017
CHF million		
Fiduciary placements with third-party institutions	3,040	2,729
Fiduciary transactions	**3,040**	**2,729**

27 Assets under management

Assets under management

Assets under management include assets for which the Bank parent company provides investment advisory or discretionary asset management services, investment fund assets and assets invested in other investment-fund-like pooled investment vehicles managed by the Bank parent company. The classification of assets under management is conditional upon the nature of the services provided by the Bank parent company and the clients' intentions. Assets are individually assessed on the basis of each client's intentions and objectives and the nature of the banking services provided to that client. In order to be classified as assets under management, the Bank parent company must currently or in the foreseeable future expect to provide a service where the involvement of the Bank parent company's banking or investment expertise (e.g., as asset manager or investment advisor) is not purely executional or custodial in nature. Assets under custody are client assets held mainly for execution-related or safekeeping/custody purposes only and therefore are not considered assets under management since the Bank parent company does not generally provide asset allocation or financial advice.

Assets of corporate clients and public institutions that are used primarily for cash management or transaction executional purposes for which no investment advice is provided are classified as commercial assets or assets under custody and therefore do not qualify as assets under management.

For the purpose of classifying assets under management, clients with multiple accounts are assessed from an overall relationship perspective. Accounts that are clearly separate from the remainder of the client relationship and represent assets held for custody purposes only are not included as assets under management.

The initial classification of the assets may not be permanent as the nature of the client relationship is reassessed on an on-going basis. If changes in client intent or activity warrant reclassification between client asset categories, the required reclassification adjustments are made immediately when the change in intent or activity occurs. Reclassifications between assets under management and assets held for transaction-related or custodial purposes result in corresponding net asset inflows or outflows.

The Group reviews relevant policies regarding client assets on a regular basis. Following such reviews in 2018, with effect from January 1, 2019, the Group updated its assets under management policy primarily to introduce more specific criteria to evaluate whether client assets qualify as assets under management. The introduction of this updated policy for the Bank parent company is expected to result in a reclassification of approximately CHF 19 billion of assets under management to assets under custody which will be reflected as a structural effect in 2019.

A portion of the Bank parent company's assets under management results from double counting. Double counting arises when assets under management are subject to more than one level of asset management services. Each separate advisory or discretionary service provides additional benefits to the client and represents additional income for the Bank parent company. Specifically, double counting primarily results from the investment of assets under management in collective investment instruments managed by the Bank parent company. The extent of double counting is disclosed in the following table.

Assets under management end of	2018	2017
CHF billion		
Assets in collective investment instruments managed by Credit Suisse AG	0.1	0.2
Assets with discretionary mandates	84.9	88.5
Other assets under management	381.6	391.3
Assets under management (including double counting)	**466.6**	**480.0**
of which double counting	–	–

Changes in assets under management

	2018	2017
CHF billion		
Balance at beginning of period [1]	**480.0**	**581.1**
Net new assets/(Net asset outflows)	23.8	28.0
Market movements, interest, dividends and foreign exchange	(26.0)	31.3
of which market movements, interest and dividends [2]	(21.9)	33.2
of which foreign exchange	(4.1)	(1.9)
Other effects	(11.2)[3]	(160.4)[4]
Balance at end of period [1]	**466.6**	**480.0**

1
Including double counting.

2
Net of commissions and other expenses and net of interest expenses charged.

3
Includes structural effect outflows of CHF 5.2 billion related to the impact of US sanctions involving Russia and CHF 4.6 billion related to transfers to subsidiaries.

4
Includes a reduction in assets under management of CHF 167.6 billion related to the transfer of the Swiss-related asset management business from the Bank parent company to Credit Suisse Asset Management (Schweiz) AG.

Net new assets

Net new assets measure the degree of success in acquiring assets under management or changes in assets under management through warranted reclassifications. The calculation is based on the direct method, taking into account individual cash payments, security deliveries and cash flows resulting from loan increases or repayments. Interest and

dividend income credited to clients and commissions, interest and fees charged for banking services are not taken into account when calculating net new assets, as such charges are not directly related to the Bank parent company's success in acquiring assets under management. Similarly, changes in assets under management due to currency and market volatility as well as asset inflows and outflows due to the acquisition or divestiture of businesses are not part of net new assets.

Proposed appropriation of reserves and retained earnings

Proposed appropriation of voluntary income reserves

	2018
Voluntary income reserves (CHF million)	
Balance at end of year	**610**
Transfer to retained earnings	(610)
Balance after transfer	**0**

Proposed appropriation of retained earnings

	2018
Retained earnings (CHF million)	
Retained earnings carried forward	215
Net profit/(loss)	(647)
Transfer from voluntary income reserves	610
Retained earnings available for appropriation	**178**
Dividend	(10)
Retained earnings to be carried forward	**168**

Proposed appropriation of capital contribution reserves

	2018
Capital contribution reserves (CHF million)	
Balance at end of year	**37,913**
Appropriation [1]	(2)
Balance after appropriation	**37,911**

1 Related to a planned transfer of certain employees and the related assets and liabilities to Credit Suisse Services AG.

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X – Additional information
Statistical information
Other information

Statistical information

Statistical information – Group

Set forth below is statistical information for the Group required under the US Securities and Exchange Commission's (SEC) specialized industry guide for bank holding companies – Industry Guide 3. The tables are based on information in VI – Consolidated financial statements – Credit Suisse Group.

Average balances and interest rates

	2018			2017			2016		
in	Average balance[1]	Interest income	Average rate	Average balance[1]	Interest income	Average rate	Average balance[1]	Interest income	Average rate
Assets (CHF million, except where indicated)									
Cash and due from banks									
Switzerland	828	(155)[2]	(18.72)%[2]	1,074	(195)[2]	(18.16)%[2]	369	(75)[2]	(20.33)%[2]
Foreign	37,882	574	1.52%	31,058	302	0.97%	44,196	199	0.45%
Interest-bearing deposits with banks									
Switzerland	55	0	0.00%	37	0	0.00%	16	0	0.00%
Foreign	950	6	0.63%	693	3	0.43%	796	5	0.63%
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions [3]									
Switzerland	4,169	49	1.18%	4,236	39	0.92%	2,122	21	0.99%
Foreign	132,532	2,807	2.12%	144,817	2,476	1.71%	146,474	2,746	1.87%
Trading assets									
Switzerland	748	45	6.02%	1,047	46	4.39%	1,078	51	4.73%
Foreign	128,069	7,086	5.53%	146,817	6,651	4.53%	169,850	7,432	4.38%
Investment securities									
Switzerland	309	1	0.32%	513	2	0.39%	633	2	0.32%
Foreign	2,044	79	3.86%	1,966	45	2.29%	2,133	58	2.72%
Loans									
Switzerland	155,535	2,530	1.63%	154,621	2,543	1.64%	154,357	2,487	1.61%
Foreign	130,336	4,240	3.25%	122,524	3,436	2.80%	121,145	3,142	2.59%
Other interest-earning assets									
Switzerland	2,211	28	1.27%	1,105	19	1.72%	1,932	39	2.02%
Foreign	61,797	2,323	3.76%	62,925	1,690	2.69%	82,307	1,267	1.54%
Interest-earning assets	**657,465**	**19,613**	2.98%	**673,433**	**17,057**	2.53%	**727,408**	**17,374**	2.39%
Specific allowance for losses	(5,061)			(5,209)			(4,827)		
Non-interest-earning assets	203,860			205,759			205,424		
Total assets	**856,264**			**873,983**			**928,005**		

Percentage of assets attributable to foreign activities	78.01%	78.04%	79.06%

1
Monthly averages have been used where daily averages are unavailable.
2
Includes negative interest income from deposits placed with the Swiss National Bank due to negative interest rates beginning in 2015. The respective principal of such interest is reported under non-interest-earning assets.
3
Average balances of central bank funds sold, securities purchased under resale agreements and securities borrowing transactions are reported net in accordance with ASC Topic 210 - Balance sheet, while interest income excludes the impact of ASC Topic 210 - Balance sheet.

Average balances and interest rates (continued)

in	2018 Average balance[1]	2018 Interest expense	2018 Average rate	2017 Average balance[1]	2017 Interest expense	2017 Average rate	2016 Average balance[1]	2016 Interest expense	2016 Average rate
Liabilities (CHF million, except where indicated)									
Deposits of banks									
Switzerland	1,143	(4)	(0.35)%	2,031	(5)	(0.25)%	1,497	(3)	(0.20)%
Foreign	15,327	213	1.39%	14,998	122	0.81%	20,798	121	0.58%
Deposits of non-banks									
Switzerland	163,478	134	0.08%	165,821	94	0.06%	157,038	86	0.05%
Foreign	198,438	1,944	0.98%	187,205	1,143	0.61%	186,970	840	0.45%
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions [2]									
Switzerland	1,612	77	4.78%	2,589	77	2.97%	2,624	66	2.52%
Foreign	37,566	1,800	4.79%	46,091	1,207	2.62%	55,419	1,322	2.39%
Trading liabilities									
Switzerland	330	13	3.94%	337	10	2.97%	291	15	5.15%
Foreign	37,409	3,441	9.20%	40,648	3,533	8.69%	38,241	3,587	9.38%
Short-term borrowings									
Switzerland	79	0	0.00%	68	0	0.00%	880	0	0.00%
Foreign	27,989	359	1.28%	16,610	166	1.00%	12,195	84	0.69%
Long-term debt									
Switzerland	38,716	1,372	3.54%	30,936	917	2.96%	28,857	640	2.22%
Foreign	128,638	2,445	1.90%	157,614	2,726	1.73%	171,543	2,879	1.68%
Other interest-bearing liabilities									
Switzerland	647	7	1.08%	1,315	8	0.61%	2,491	19	0.76%
Foreign	46,489	803	1.73%	51,100	502	0.98%	72,020	156	0.22%
Interest-bearing liabilities	**697,861**	**12,604**	1.81%	**717,363**	**10,500**	1.46%	**750,864**	**9,812**	1.31%
Non-interest-bearing liabilities	115,738			114,253			133,081		
Total liabilities	**813,599**			**831,616**			**883,945**		
Shareholders' equity	42,665			42,367			44,060		
Total liabilities and shareholders' equity	**856,264**			**873,983**			**928,005**		
Percentage of liabilities attributable to foreign activities	73.68%			74.75%			77.29%		

1 Monthly averages have been used where daily averages are unavailable.

2

Average balances of central bank funds purchased, securities sold under repurchase agreements and securities lending transactions are reported net in accordance with ASC Topic 210 - Balance sheet, while interest expense excludes the impact of ASC Topic 210 - Balance sheet.

Net interest income and interest rate spread

	2018		2017		2016	
in	Net interest income in CHF million	Interest rate spread in %	Net interest income in CHF million	Interest rate spread in %	Net interest income in CHF million	Interest rate spread in %
Net interest income and interest rate spread						
Switzerland	899	0.70	1,353	1.00	1,702	1.20
Foreign	6,110	1.30	5,204	1.10	5,860	1.00
Total net	**7,009**	**1.20**	**6,557**	**1.00**	**7,562**	**1.10**

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The average rates earned and paid on related assets and liabilities can fluctuate within wide ranges and are influenced by several key factors. The most significant factor is changes in global interest rates. Additional factors include changes in the geographic and product mix of the Group's business, and foreign exchange rate movements between the Swiss franc and the currency of the underlying individual assets and liabilities.

Selected margin information

in	2018	2017	2016
Selected margin information (average rate in %)			
Switzerland	0.55	0.83	1.06
Foreign	1.24	1.02	1.03
Net interest margin	**1.07**	**0.97**	**1.04**

The US Federal Reserve successively raised the target range of the federal funds rate to 1.50% to 1.75% in March 2018, 1.75% to 2.00% in June 2018, 2.00% to 2.25% in September 2018 and 2.25% to 2.50% in December 2018.

The Swiss National Bank set the three-month Swiss franc London Interbank Offered Rate, which was (0.75)% at the end of December 2018.

The European Central Bank set the fixed rate tenders, which stood at 0.00% at the end of 2018.

The Bank of England set the bank rate at 0.50% in 2017 and changed the bank rate to 0.75% in August 2018.

Analysis of changes in net interest income

	2018 vs 2017			2017 vs 2016		
		Increase/(decrease) due to changes in			Increase/(decrease) due to changes in	
in	Average volume	Average rate	Net change	Average volume	Average rate	Net change
Assets (CHF million)						
Cash and due from banks						
Switzerland	45	(5)	40	(143)	23	(120)
Foreign	66	206	272	(59)	162	103
Interest-bearing deposits with banks						
Switzerland	0	0	0	0	0	0
Foreign	1	2	3	(1)	(1)	(2)
Central bank funds sold, securities purchased under resale agreements and securities borrowing transactions						
Switzerland	(1)	11	10	21	(3)	18
Foreign	(210)	541	331	(31)	(239)	(270)
Trading assets						
Switzerland	(13)	12	(1)	(1)	(4)	(5)
Foreign	(849)	1,284	435	(1,009)	228	(781)
Investment securities						
Switzerland	(1)	0	(1)	0	0	0
Foreign	2	32	34	(5)	(8)	(13)
Loans						
Switzerland	15	(28)	(13)	4	52	56
Foreign	219	585	804	36	258	294
Other interest-earning assets						
Switzerland	19	(10)	9	(17)	(3)	(20)
Foreign	(30)	663	633	(298)	721	423
Interest-earning assets						

Switzerland	64	(20)	44	(136)	65	(71)
Foreign	(801)	3,313	2,512	(1,367)	1,121	(246)
Change in interest income	**(737)**	**3,293**	**2,556**	**(1,503)**	**1,186**	**(317)**

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Analysis of changes in net interest income (continued)

	2018 vs 2017 Increase/(decrease) due to changes in			2017 vs 2016 Increase/(decrease) due to changes in		
in	Average volume	Average rate	Net change	Average volume	Average rate	Net change
Liabilities (CHF million)						
Deposits of banks						
Switzerland	2	(1)	1	(1)	(1)	(2)
Foreign	3	88	91	(34)	35	1
Deposits of non-banks						
Switzerland	(1)	41	40	4	4	8
Foreign	69	732	801	1	302	303
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions						
Switzerland	(29)	29	0	(1)	12	11
Foreign	(223)	816	593	(223)	108	(115)
Trading liabilities						
Switzerland	0	3	3	2	(7)	(5)
Foreign	(281)	189	(92)	226	(280)	(54)
Short-term borrowings						
Switzerland	0	0	0	0	0	0
Foreign	114	79	193	30	52	82
Long-term debt						
Switzerland	230	225	455	46	231	277
Foreign	(501)	220	(281)	(234)	81	(153)
Other interest-bearing liabilities						
Switzerland	(4)	3	(1)	(9)	(2)	(11)
Foreign	(45)	346	301	(46)	392	346
Interest-bearing liabilities						
Switzerland	198	300	498	41	237	278
Foreign	(864)	2,470	1,606	(280)	690	410
Change in interest expense	**(666)**	**2,770**	**2,104**	**(239)**	**927**	**688**
Change in interest income						
Switzerland	(134)	(320)	(454)	(177)	(172)	(349)
Foreign	63	843	906	(1,087)	431	(656)
Total change in net interest income	**(71)**	**523**	**452**	**(1,264)**	**259**	**(1,005)**

Carrying value of financial investments end of	2018	2017	2016
Debt securities (CHF million)			
Debt securities issued by Swiss federal, cantonal or local governmental entities	2	212	259
Debt securities issued by foreign governments	828	1,236	1,343
Corporate debt securities	649	238	287
Residential mortgage-backed securities	1,430	207	497
Commercial mortgage-backed securities	2	173	14
Total debt securities	**2,911**	**2,066**	**2,400**

As of December 31, 2018, no aggregate investment in debt securities of a specific counterparty was in excess of 10% of consolidated shareholders' equity.

Maturities and weighted-average yields of debt securities included in financial investments

	Within 1 year		1 to 5 years		5 to 10 years		Over 10 years		Total	
end of 2018	Amount in CHF million	Yield in %	Amount in CHF million	Yield in %	Amount in CHF million	Yield in %	Amount in CHF million	Yield in %	Amount in CHF million	Yield in %
Debt securities										
Debt securities issued by the Swiss federal, cantonal or local governmental entities	0	–	2	3.55	0	–	0	–	2	3.55
Debt securities issued by foreign governments	652	0.78	0	–	169	0.67	0	–	821	0.76
Corporate debt securities	192	0.49	6	4.50	451	0.90	0	–	649	0.81
Residential mortgage-backed securities	0	–	0	–	0	–	1,430	2.45	1,430	2.45
Commercial mortgage-backed securities	0	–	0	–	0	–	2	0.0	2	–
Total debt securities	**844**	0.72	**8**	4.30	**620**	0.83	**1,432**	2.45	**2,904**	1.61

Since substantially all investment securities are taxable securities, the yields presented above are on a tax-equivalent basis.

The values above are based upon amortized cost, whereas certain financial investments are carried at fair value in the consolidated balance sheets.

Details of the loan portfolio

end of	2018	2017	2016	2015	2014
Loan portfolio (CHF million, except where indicated)					
Mortgages	103,684	101,856	100,776	99,216	95,201
Loans collateralized by securities	4,626	4,436	4,510	3,988	3,899
Consumer finance	3,095	2,985	2,820	2,874	3,241
Consumer	111,405	109,277	108,106	106,078	102,341
Real estate	22,749	22,816	23,408	23,418	25,440
Commercial and industrial loans	24,106	22,691	23,439	22,344	22,928
Financial institutions	1,490	2,205	3,011	3,100	4,041
Governments and public institutions	694	707	802	831	1,017
Corporate & institutional	49,039	48,419	50,660	49,693	53,426
Switzerland	**160,444**	**157,696**	**158,766**	**155,771**	**155,767**
Mortgages	4,161	4,183	3,559	3,948	3,601
Loans collateralized by securities	37,408	37,580	32,758	33,958	35,919
Consumer finance	810	1,257	670	892	1,082
Consumer	42,379	43,020	36,987	38,798	40,602
Real estate	3,978	3,783	2,608	3,033	3,758
Commercial and industrial loans	61,592	58,979	60,301	55,423	52,118
Financial institutions	17,004	13,492	14,910	18,234	18,302
Governments and public institutions	3,199	3,167	3,471	2,747	2,874

Corporate & institutional	85,773	79,421	81,290	79,437	77,052
Foreign	**128,152**	**122,441**	**118,277**	**118,235**	**117,654**
Gross loans	**288,596**	**280,137**	**277,043**	**274,006**	**273,421**
of which held at amortized cost	273,723	264,830	257,515	253,186	250,508
of which held at fair value	14,873	15,307	19,528	20,820	22,913
Net (unearned income)/deferred expenses	(113)	(106)	(129)	(145)	(112)
Allowance for loan losses	(902)	(882)	(938)	(866)	(758)
Net loans	**287,581**	**279,149**	**275,976**	**272,995**	**272,551**
Percentage of allowance for loan losses [1]	0.3%	0.3%	0.3%	0.3%	0.3%

1 Calculated based on net loans which are not carried at fair value.

Loan portfolio by industry end of	2018	2017
Loan portfolio by industry (CHF million)		
Banks	1,039	1,007
Other financial services	17,455	14,690
Real estate companies	26,727	26,599
Other services	32,345	31,452
Manufacturing	11,087	9,289
Wholesale and retail trade	10,663	10,540
Construction	3,361	2,620
Transportation	18,897	19,615
Health and social services	2,835	2,511
Hotels and restaurants	1,454	1,660
Agriculture and mining	3,517	2,404
Telecommunications	758	817
Governments, public institutions and non-profit organizations	4,674	4,636
Corporate & institutional	134,812	127,840
Consumer	153,784	152,297
Gross loans	**288,596**	**280,137**
Net (unearned income)/deferred expenses	(113)	(106)
Allowance for loan losses	(902)	(882)
Net loans	**287,581**	**279,149**

Details of the loan portfolio by time remaining until contractual maturity by category

end of 2018	1 year or less	1 year to 5 years	After 5 years	Loans with no stated maturity[1]	Self-amortizing loans[2]	Total
Loan portfolio (CHF million)						
Mortgages	28,873	47,176	26,850	785	0	103,684
Loans collateralized by securities	3,775	556	294	1	0	4,626
Consumer finance	302	7	1	0	2,785	3,095
Consumer	32,950	47,739	27,145	786	2,785	111,405
Real estate	13,665	6,100	2,903	63	18	22,749
Commercial and industrial loans	16,350	3,459	1,837	80	2,380	24,106
Financial institutions	907	296	90	3	194	1,490
Governments and public institutions	354	181	152	0	7	694
Corporate & institutional	31,276	10,036	4,982	146	2,599	49,039
Switzerland	**64,226**	**57,775**	**32,127**	**932**	**5,384**	**160,444**
Mortgages	2,037	1,931	41	8	144	4,161
Loans collateralized by securities	33,026	3,423	959	0	0	37,408
Consumer finance	703	3	48	0	56	810
Consumer	35,766	5,357	1,048	8	200	42,379
Real estate	1,765	1,668	347	0	198	3,978
Commercial and industrial loans	32,509	16,920	8,382	12	3,769	61,592

Financial institutions	7,315	8,397	825	0	467	17,004
Governments and public institutions	476	1,263	910	0	550	3,199
Corporate & institutional	42,065	28,248	10,464	12	4,984	85,773
Foreign	**77,831**	**33,605**	**11,512**	**20**	**5,184**	**128,152**
Gross loans	**142,057**	**91,380**	**43,639**	**952**	**10,568**	**288,596**
of which fixed rate	85,405	50,792	34,334	0	5,177	175,708
of which variable rate [3]	56,652	40,588	9,305	952	5,391	112,888
Net (unearned income)/deferred expenses						(113)
Allowance for loan losses						(902)
Net loans						**287,581**

1
Loans with no stated maturity include primarily certain loan products within Switzerland without a stated maturity within the original loan agreement.

2
Self-amortizing loans include loans with monthly or quarterly interest and principal payments and are primarily related to lease financings.

3
Includes rollover loans with interest fixing periods up to 12 month.

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Non-performing and non-interest-earning loans

in / end of	2018	2017	2016	2015	2014	Interest income which would have been recognized 2018	Interest income which would have been recognized 2017	Interest income which was recognized 2018	Interest income which was recognized 2017
Non-performing and non-interest-earning loans (CHF million)									
Switzerland	410	499	401	374	389	16	16	3	2
Foreign	793	549	835	609	364	31	45	7	10
Non-performing loans [1]	**1,203**	**1,048**	**1,236**	**983**	**753**	**47**	**61**	**10**	**12**
Switzerland	124	76	79	100	87	8	7	0	1
Foreign	176	147	186	172	192	9	7	2	2
Non-interest-earning loans [1]	**300**	**223**	**265**	**272**	**279**	**17**	**14**	**2**	**3**
Total non-performing and non-interest-earning loans	**1,503**	**1,271**	**1,501**	**1,255**	**1,032**	**64**	**75**	**12**	**15**

1 Refer to "Impaired loans" in VI – Consolidated financial statements – Credit Suisse Group – Note 19 – Loans, allowance for loan losses and credit quality for a definition of these terms.

Potential problem loans

end of	2018	2017	2016	2015	2014
Potential problem loans (CHF million)					
Switzerland	253	112	125	120	98
Foreign	137	437	488	316	89
Total potential problem loans	**390**	**549**	**613**	**436**	**187**

Restructured loans

in / end of	2018	2017	2016	2015	2014	Interest income which would have been recognized 2018	Interest income which would have been recognized 2017	Interest income which was recognized 2018	Interest income which was recognized 2017
Restructured loans (CHF million)									
Switzerland	77	99	26	21	4	1	1	1	1
Foreign	222	191	332	261	167	8	10	7	8
Total restructured loans	**299**	**290**	**358**	**282**	**171**	**9**	**11**	**8**	**9**

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Movements in the allowance for loan losses

	2018	2017	2016	2015	2014
Allowance for loan losses (CHF million, except where indicated)					
Balance at beginning of period	**882**	**938**	**866**	**758**	**869**
Switzerland	85	73	56	93	54
Foreign	116	117	193	202	91
Net movements recognized in the consolidated statements of operations	**201**	**190**	**249**	**295**	**145**
Mortgages	(2)	(2)	(4)	(3)	(2)
Loans collateralized by securities	(1)	(1)	(2)	(3)	(5)
Consumer finance	(50)	(52)	(59)	(67)	(88)
Consumer	(53)	(55)	(65)	(73)	(95)
Real estate	0	0	0	0	(3)
Commercial and industrial loans	(43)	(38)	(48)	(30)	(46)
Financial institutions	(1)	0	(3)	(1)	0
Corporate & institutional	(44)	(38)	(51)	(31)	(49)
Switzerland	(97)	(93)	(116)	(104)	(144)
Mortgages	(9)	0	(1)	(3)	(2)
Loans collateralized by securities	0	(1)	(5)	(1)	(2)
Consumer finance	(23)	(4)	(15)	(41)	(9)
Consumer	(32)	(5)	(21)	(45)	(13)
Real estate	0	0	(1)	0	0
Commercial and industrial loans	(140)	(169)	(136)	(58)	(179)
Financial institutions	0	(35)	(4)	(22)	(13)
Corporate & institutional	(140)	(204)	(141)	(80)	(192)
Foreign	(172)	(209)	(162)	(125)	(205)
Gross write-offs	**(269)**	**(302)**	**(278)**	**(229)**	**(349)**
Consumer finance	17	12	13	11	16
Consumer	17	12	13	11	16
Commercial and industrial loans	19	27	4	0	2
Corporate & institutional	19	27	4	0	2
Switzerland	36	39	17	11	18
Consumer finance	4	0	0	1	1
Consumer	4	0	0	1	1
Real estate	0	1	0	0	0
Commercial and industrial loans	16	12	46	16	18
Financial institutions	0	1	1	0	4
Governments and public institutions	2	0	2	0	0
Corporate & institutional	18	14	49	16	22
Foreign	22	14	49	17	23
Recoveries	**58**	**53**	**66**	**28**	**41**
Net write-offs	**(211)**	**(249)**	**(212)**	**(201)**	**(308)**
Provisions for interest	30	13	18	18	20
Foreign currency translation impact and other adjustments, net	0	(10)	17	(4)	32
Balance at end of period	**902**	**882**	**938**	**866**	**758**

Average loan balance	285,871	277,145	275,502	275,661	258,833
Ratio of net write-offs to average loans	0.07%	0.09%	0.08%	0.07%	0.12%

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Analysis of the allowance for loan losses by Switzerland, foreign and category

	2018		2017		2016		2015		2014	
end of	CHF million	% of allowance in each category to total loans	CHF million	% of allowance in each category to total loans	CHF million	% of allowance in each category to total loans	CHF million	% of allowance in each category to total loans	CHF million	% of allowance in each category to total loans
Analysis of the allowance for loan losses										
Mortgages	35	0.0%	48	0.0%	38	0.0%	42	0.0%	44	0.0%
Loans collateralized by securities	1	0.0%	2	0.0%	2	0.0%	2	0.0%	2	0.0%
Consumer finance	72	0.0%	76	0.0%	83	0.0%	97	0.0%	110	0.0%
Consumer	108	0.0%	126	0.0%	123	0.0%	141	0.1%	156	0.1%
Real estate	40	0.0%	42	0.0%	52	0.0%	52	0.0%	49	0.0%
Commercial and industrial loans	242	0.1%	197	0.1%	173	0.1%	169	0.1%	139	0.1%
Financial institutions	2	0.0%	0	0.0%	0	0.0%	3	0.0%	0	0.0%
Corporate & institutional	284	0.1%	239	0.1%	225	0.1%	224	0.1%	188	0.1%
Switzerland	**392**	**0.1%**	**365**	**0.1%**	**348**	**0.1%**	**365**	**0.1%**	**344**	**0.1%**
Mortgages	13	0.0%	10	0.0%	8	0.0%	10	0.0%	10	0.0%
Loans collateralized by securities	34	0.0%	47	0.0%	52	0.0%	12	0.0%	51	0.0%
Consumer finance	32	0.0%	37	0.0%	33	0.0%	52	0.0%	34	0.0%
Consumer	79	0.0%	94	0.0%	93	0.0%	74	0.0%	95	0.0%
Real estate	17	0.0%	6	0.0%	3	0.0%	5	0.0%	5	0.0%
Commercial and industrial loans	337	0.1%	363	0.1%	429	0.2%	326	0.1%	224	0.1%
Financial institutions	77	0.0%	54	0.0%	65	0.0%	96	0.0%	90	0.0%
Corporate & institutional	431	0.1%	423	0.2%	497	0.2%	427	0.2%	319	0.1%
Foreign	**510**	**0.2%**	**517**	**0.2%**	**590**	**0.2%**	**501**	**0.2%**	**414**	**0.2%**
Total allowance for loan losses	**902**	**0.3%**	**882**	**0.3%**	**938**	**0.3%**	**866**	**0.3%**	**758**	**0.3%**
of which on principal	807	0.3%	786	0.3%	848	0.3%	800	0.3%	686	0.3%
of which on interest	95	0.0%	96	0.0%	90	0.0%	66	0.0%	72	0.0%

Percentages may not add up due to rounding.

Gross write-offs of loans by industry

in	2018	2017	2016	2015	2014
Gross write-offs of loans (CHF million)					
Banks	0	1	0	0	0
Other financial services	1	34	8	24	14
Real estate companies	0	0	1	0	3
Other services	47	12	22	2	10
Manufacturing	10	24	12	8	112
Wholesale and retail trade	24	22	15	15	9
Construction	1	2	11	3	0
Transportation	78	87	53	35	62
Health and social services	2	0	0	0	1
Hotels and restaurants	0	0	0	3	0
Agriculture and mining	21	60	69	21	30
Telecommunications	0	0	1	0	0
Corporate & institutional	184	242	192	111	241
Consumer	85	60	86	118	108
Total gross write-offs	**269**	**302**	**278**	**229**	**349**

Cross-border outstandings

end of	Banks	Private	Public	Subtotal	Net local country assets over liabilities	Commit-ments	Total
2018 (CHF million)							
United States	6,572	51,068	19,073	76,713	44,194	75,194	196,101
United Kingdom	6,542	13,652	1,713	21,907	0	4,108	26,015
Cayman Islands	227	20,545	366	21,138	1,312	2,474	24,924
Luxembourg	6,804	6,736	1,013	14,553	53	3,757	18,363
France	1,472	4,136	7,410	13,018	0	1,623	14,641
Germany	1,536	5,409	1,517	8,462	8	3,941	12,411
Ireland	2,269	6,256	133	8,658	1,657	1,646	11,961
The Netherlands	1,042	4,755	2,135	7,932	0	3,299	11,231
South Korea	1,230	3,016	572	4,818	3,696	53	8,567
China	1,097	6,021	334	7,452	242	383	8,077
Hong Kong	718	6,183	0	6,901	0	1,043	7,944
Virgin Islands (Br.)	213	5,475	0	5,688	0	1,461	7,149
2017 (CHF million)							
United States	4,773	46,398	16,858	68,029	51,590	61,629	181,248
Luxembourg	5,984	7,180	1,648	14,812	4,045	3,329	22,186
Cayman Islands	160	17,072	223	17,455	0	2,761	20,216
United Kingdom	4,765	9,381	128	14,274	0	5,664	19,938
Germany	949	4,902	1,908	7,759	0	6,640	14,399
France	1,820	5,251	4,348	11,419	0	1,944	13,363
China	842	9,242	349	10,433	247	420	11,100
The Netherlands	1,188	5,727	411	7,326	0	2,703	10,029
Virgin Islands (Br.)	665	8,081	13	8,759	0	1,256	10,015
Ireland	2,149	4,933	41	7,123	0	1,099	8,222
Brazil	283	1,426	755	2,464	4,869	96	7,429
Singapore	194	3,770	2	3,966	1,909	1,367	7,242
South Korea	803	2,680	829	4,312	2,731	76	7,119
Japan	923	3,855	887	5,665	734	15	6,414
Canada	1,034	2,485	315	3,834	623	1,854	6,311
Hong Kong	816	4,340	20	5,176	0	784	5,960
2016 (CHF million)							
United States	4,404	48,306	18,122	70,832	63,264	74,641	208,737
Cayman Islands	428	19,935	349	20,712	1,464	3,848	26,024
Luxembourg	5,004	7,497	2,775	15,276	6,366	2,778	24,420
United Kingdom	2,753	11,696	205	14,654	0	5,058	19,712
Germany	1,843	5,011	2,621	9,475	0	6,044	15,519
The Netherlands	991	6,345	528	7,864	0	3,257	11,121
France	1,881	5,124	1,932	8,937	0	1,920	10,857
Brazil	755	2,152	1,160	4,067	6,057	329	10,453
Japan	713	4,644	507	5,864	3,840	11	9,715
Virgin Islands (Br.)	383	7,000	1	7,384	0	1,325	8,709
Australia	2,089	4,135	25	6,249	0	2,346	8,595
Hong Kong	510	4,040	11	4,561	2,671	1,210	8,442

Canada	1,271	3,389	273	4,933	753	2,341	8,027
Ireland	2,026	4,350	38	6,414	0	1,180	7,594
Italy	883	1,337	3,488	5,708	0	814	6,522

Cross-border outstandings represent net claims against non-local country counterparties for countries where the aggregate amount outstanding to borrowers exceeds 0.75% of total assets. Monetary assets are loans (including accrued interest), acceptances, interest-bearing deposits with other banks, other interest-bearing investments and any other monetary asset with a fixed exchange value for cash. To the extent local currency outstandings are hedged or funded by local currency borrowings, such amounts are excluded from cross-border outstandings.

Deposits in Switzerland and foreign offices

	2018			2017			2016		
in	Average balance	Interest expense	Average rate	Average balance	Interest expense	Average rate	Average balance	Interest expense	Average rate
Deposits (CHF million, except where indicated)									
Non-interest-bearing demand	3,214	–	–	3,308	–	–	3,539	–	–
Interest-bearing demand	127,469	(52)	0.0%	125,508	(46)	0.0%	124,349	(73)	(0.1)%
Savings deposits	64,285	73	0.1%	64,115	94	0.1%	63,505	131	0.2%
Time deposits	32,141	90	0.3%	36,210	22	0.1%	31,085	12	0.0%
Switzerland	**227,109**	**111**	**0.0%**	**229,141**	**70**	**0.0%**	**222,478**	**70**	**0.0%**
Non-interest-bearing demand	1,809	–	–	1,860	–	–	2,158	–	–
Interest-bearing demand	30,514	120	0.4%	33,658	63	0.2%	32,504	24	0.1%
Savings deposits	67	1	1.5%	27	0	0.0%	3	0	0.0%
Time deposits	123,910	2,055	1.7%	110,537	1,221	1.1%	114,857	950	0.8%
Foreign	**156,300**	**2,176**	**1.4%**	**146,082**	**1,284**	**0.9%**	**149,522**	**974**	**0.7%**
Total deposits	**383,409**	**2,287**	**0.6%**	**375,223**	**1,354**	**0.4%**	**372,000**	**1,044**	**0.3%**

Deposits by foreign depositors in Swiss offices amounted to CHF 61.2 billion, CHF 64.5 billion and CHF 65.1 billion as of December 31, 2018, 2017 and 2016, respectively.

Aggregate of individual time deposits in Switzerland and foreign offices

in 2018	Switzerland	Foreign	Total
Time deposits (CHF million)			
3 months or less	–	8,478	8,478
Over 3 through 6 months	–	9,485	9,485
Over 6 through 12 months	–	4,904	4,904
Over 12 months	–	71	71
Certificates of deposit	**–**	**22,938**	**22,938**
3 months or less	29,231	83,887	113,118
Over 3 through 6 months	817	9,948	10,765
Over 6 through 12 months	996	6,854	7,850
Over 12 months	569	1,322	1,891
Other time deposits	**31,613**	**102,011**	**133,624**
Total time deposits	**31,613**	**124,949**	**156,562**

Balances shown are the Swiss franc equivalent of amounts greater than USD 100,000 together with their remaining maturities.

Selected information on short-term borrowings in	2018	2017	2016
Central bank funds purchased, securities sold under repurchase agreements and securities lending transactions (CHF million)			
Outstanding as of December 31	24,623	26,496	33,016
Maximum amount outstanding at any month-end during the year	53,850	67,325	82,825
Approximate average amount outstanding during the year	39,178	48,680	58,044
Interest expense for the year ended December 31	1,877	1,284	1,387
Approximate weighted-average interest rate during the year	4.8%	2.6%	2.4%
Approximate weighted-average interest rate at year-end	3.4%	1.7%	1.1%
Commercial paper (CHF million)			
Outstanding as of December 31	13,292	14,003	10,749
Maximum amount outstanding at any month-end during the year	22,635	14,003	11,237
Approximate average amount outstanding during the year	15,394	10,525	9,340
Interest expense for the year ended December 31	343	146	77
Approximate weighted-average interest rate during the year	2.2%	1.4%	0.8%
Approximate weighted-average interest rate at year-end	2.6%	1.4%	0.7%
Other short-term borrowings (CHF million)			
Outstanding as of December 31	8,634	11,886	4,636
Maximum amount outstanding at any month-end during the year	15,019	11,886	4,742
Approximate average amount outstanding during the year	12,674	6,153	3,735
Interest expense for the year ended December 31	16	20	7
Approximate weighted-average interest rate during the year	0.1%	0.3%	0.2%
Approximate weighted-average interest rate at year-end	0.2%	1.4%	0.3%

Generally, original maturities of central bank funds purchased, securities sold under repurchase agreements and securities lending transactions are less than six months, commercial papers are less than six months and other short-term borrowings are one year or less.

Statistical information – Bank

Statistical information for the Group is required under the SEC's specialized industry guide for bank holding companies – Industry Guide 3. Statistical information for the Bank is not materially different, either in absolute amount or in terms of trends, from such statistical information for the Group. The principal differences relate to intercompany eliminations. Certain statistical information is also included in *VIII – Consolidated financial statements – Credit Suisse (Bank)*, including *Notes 5 – Net interest income*, *16 – Investment securities, 18 – Loans, allowance for loan losses and credit quality, 23 – Deposits, 24 – Long-term debt, 31 – Derivatives and hedging activities, 32 – Guarantees and commitments and 34 – Financial instruments*.

Other information

Exchange controls

There are no restrictions presently in force under our Articles of Association or Swiss law that limit the right of non-resident or foreign owners to hold our securities freely or, when entitled, to vote their securities freely. The Swiss federal government may from time to time impose sanctions, including exchange control restrictions, on particular countries, regimes, organizations or persons. A current list, in German, of such sanctions can be found at *www.seco-admin.ch*. Other than these sanctions, there are currently no Swiss exchange control laws or laws restricting the import or export of capital, including, but not limited to, the remittance of dividends, interest or other payments to non-resident holders of our securities.

American Depositary Shares

Under Swiss law, holders of American Depositary Shares (ADS) are not shareholders and are not recorded in our share register. A nominee for the ADS depositary is the registered holder of the shares underlying the ADS. Rights of ADS holders to exercise voting rights, receive dividends and other matters are governed by the deposit agreement pursuant to which the ADS are issued. For further information relating to our ADS, see our Registration Statement on Form F-6 filed with the SEC. Subject to any applicable law to the contrary, with respect to ADS for which timely voting instructions are not received by the ADS depositary in relation to any proposed resolution or for which voting instructions are received by the ADS depositary but do not specify how the ADS depositary shall vote in relation to any proposed resolution, the ADS depositary shall, or shall instruct the nominee to, vote such shares underlying the ADS in favor of such resolution if it has been proposed by the Board of Directors or otherwise in accordance with the recommendation of the Board of Directors.

Taxation

The following summary contains a description of the principal Swiss and US federal income tax consequences of the acquisition, ownership and disposition of our shares or ADS (Shares), but it does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a decision to own or dispose of Shares. In particular, the summary is directed only to holders that hold Shares as capital assets and does not address tax considerations applicable to investors that may be subject to special tax rules, such as banks, tax-exempt entities, insurance companies, dealers in securities or currencies, traders in securities electing to mark to market, persons that actually or constructively own a participation in our stock that qualifies for reduced taxation, persons that hold Shares as a position in a “straddle” or “conversion” transaction, or as part of a “synthetic security” or other integrated financial transaction, persons that own or are treated as owning 10% or more of our stock by vote or value, or persons that have a “functional currency” other than the Swiss franc or US dollar.

This summary is based on the current tax laws of Switzerland and the US, including the current “Convention Between the United States of America and the Swiss Confederation for the Avoidance of Double Taxation with Respect to Taxes on Income” (Treaty), the “Agreement on the Automatic Exchange of Information in Tax Matters with the European Union” and similar bilateral treaties with partner states, the US Internal Revenue Code of 1986, as amended (IR Code), existing and proposed regulations thereunder, published rulings and court decisions, all of which are subject to change, possibly with retroactive effect.

This discussion does not generally address any aspects of Swiss taxation other than income and capital taxation and stamp duties upon transfer of Shares or any aspects of US taxation other than federal income taxation. Prospective investors are urged to consult their tax advisors regarding the Swiss and the US federal, state and local and other tax consequences of acquiring, owning and disposing of Shares.

Swiss taxation

Swiss federal withholding tax on dividends and similar distributions

Dividends on Shares made or paid by us out of capital contribution reserves (*Reserven aus Kapitaleinlagen*), distributions on Shares made or paid by us based upon a reduction of nominal value of Shares (*Nennwertherabsetzung*) and purchase price for Shares bought back by us for a capital reduction against capital contribution reserves and nominal value of Shares are exempt from Swiss federal withholding tax. Other dividends, other cash or in-kind distributions (including scrip or stock dividends) on Shares made or paid by us and purchase price for Shares bought back by us for a capital reduction against reserves other than capital contribution reserves are subject to Swiss federal withholding tax at a rate of 35%. The withholding tax must be withheld by us on the gross amount of the dividend or distribution and be remitted to the Swiss Federal Tax Administration. Capital gains realized

on the sale of Shares are not subject to withholding tax.
Swiss-resident recipients
The relevant Swiss tax authority will refund or credit the Swiss federal withholding tax deducted by us on dividends or distributions on Shares or purchase price for Shares bought back by us for a capital reduction in full to holders of Shares who are individuals resident in Switzerland and to holders who hold the Shares as part of a trade or business in Switzerland, and who, in each case, among other things, are the beneficial owners of the Shares and the dividends or the distributions made or paid on the Shares or the beneficial owners of the Shares sold to us for a capital reduction and who duly report the dividend or distribution in their income tax return or their statutory financial statements, as applicable, for the relevant tax period.
Non-resident recipients
A holder who is not resident in Switzerland and who does not hold the Shares as part of a trade or business in Switzerland may be entitled to a full or partial refund of the Swiss federal withholding

tax deducted if the country in which the recipient resides for tax purposes has entered into a bilateral treaty for the avoidance of double taxation with Switzerland and the other conditions of such treaty are met. A reduction of the withholding tax at source is not provided for by Switzerland for portfolio holdings and, therefore, is not permissible. Holders of Shares should be aware that the procedures for claiming treaty benefits (and the time frame required for obtaining a tax refund) may differ from country to country and should consult their own legal, financial or tax advisors regarding the procedures for claiming a refund of the withholding tax.

Residents of the US

A holder who is a resident of the US for purposes of the Treaty without taxable presence in Switzerland to which the Shares are attributable or who is a qualified US pension fund and who, in each case, is the beneficial owner of the Shares and the dividend or distribution and who meets the other conditions of the Treaty may apply for a full refund of the withholding tax in the case of qualified US pension funds or in excess of the amount of the 15% treaty rate in all other cases. The claim for refund must be filed on Swiss Tax Form 82 (82C for corporations, 82I for individuals, 82E for other entities and 82R for regulated investment companies), which forms together with an instruction form may be obtained from any Swiss consulate general in the US, the Swiss Federal Tax Administration at the address below or be downloaded from the Swiss Federal Tax Administration's website. Four copies of the form must be duly completed, signed before a notary public of the US, and three of them must be sent to the Swiss Federal Tax Administration, Eigerstrasse 65, CH-3003, Bern, Switzerland. The form must be accompanied by suitable evidence of deduction of the Swiss federal withholding, such as certificates of deduction, bank vouchers or credit slips. The form must be filed no later than December 31 of the third year following the calendar year in which the dividend subject to the tax became payable.

Income and profit tax on dividends and similar distributions

Shares held by Swiss resident individuals as private investments

Dividends and other distributions on Shares made or paid by us out of capital contribution reserves (*Reserven aus Kapitaleinlagen*), distributions on Shares made or paid by us based upon a capital reduction (*Nennwertrückzahlungen*) and purchase price for Shares bought back by us for a capital reduction against capital contribution reserves and nominal value of Shares are exempt from Swiss federal, cantonal and communal income tax for holders of Shares who are individuals resident in Switzerland for tax purposes and who hold the Shares as private investments. For such holders, other dividends and distributions on Shares and purchase price for Shares bought back by us for a capital reduction to the extent made against reserves other than capital contribution reserves must be included in Swiss federal, cantonal and communal taxable income.

Shares held as assets of a Swiss business

For a holder who holds the Shares as part of a trade or business carried on in Switzerland, all dividends and distributions, including repayment of nominal value of Shares or distributions out of capital contribution reserves, made or paid by us on Shares and purchase price for Shares bought back by us for a capital reduction must be properly reported in the relevant taxation period for purposes of Swiss federal, cantonal and communal individual or corporate income tax. A Swiss corporation or co-operative or a non-Swiss corporation or co-operative holding Shares as part of a Swiss permanent establishment may benefit from relief from taxation of the dividends or other distributions, including capital repayments or distributions out of capital contribution reserves, by way of a participation exemption if the Shares held at the time of the dividend or other distribution have a market value of at least CHF 1 million.

Non-resident recipients

A holder of Shares who is not a resident of Switzerland for tax purposes, and who, during the respective tax year, has not engaged in a trade or business carried on through a permanent establishment situated in Switzerland for tax purposes, is not subject to any Swiss federal, cantonal or communal income tax as a result of the receipt of dividends or other distributions on Shares or payments for Shares bought back by us for a capital reduction.

> Refer to "Swiss federal withholding tax on dividends and similar distributions" for further information.

Capital gains tax realized on Shares

Shares held by Swiss resident individuals as private investments

A capital gain realized by a holder of Shares (other than a capital gain on the sale of Shares to us for a capital reduction) who is an individual resident in Switzerland for tax purposes and who holds the Shares as private investments classifies as a tax-exempt private capital gain and a capital loss as a non-tax deductible private capital loss for purposes of Swiss federal, cantonal and communal income tax.

> Refer to “Shares held as assets of a Swiss business” for information on the taxation of individuals classified as “professional securities dealers.”

> Refer to “Income and profit tax on dividends and similar distributions – Shares held by Swiss resident individuals as private investments” for information on the taxation of purchase price received for Shares bought back by us for capital reduction.

Shares held as assets of a Swiss business

For a holder who holds the Shares as part of a trade or business carried on in Switzerland, capital gain or loss realized on the sale of Shares must be included in, or deducted from, taxable income in the relevant tax period for purposes of Swiss federal, cantonal and communal individual or corporate income tax. This tax treatment also applies to Swiss resident private individuals who, for income tax purposes, are classified as “professional securities dealers” for reason of, among other things, frequent dealings and leveraged investments in securities.

Non-resident individuals and legal entities

Holders of Shares who are not resident in Switzerland for tax purposes, and who, during the respective tax year, have not engaged in a trade or business carried on through a permanent

establishment in Switzerland for tax purposes, will not be subject to any Swiss federal, cantonal or communal income tax as a result of gain realized on the sale or other disposition of Shares.

Net worth and capital taxes

Shares held by Swiss resident individuals as private investments

A holder of Shares who is an individual resident in Switzerland for tax purposes and who holds the Shares as private investments is required to include the Shares in taxable assets for purposes of cantonal and communal taxable wealth taxes.

Shares held as assets of a Swiss business

A holder who holds the Shares as part of a trade or business conducted in Switzerland is required to include the Shares in taxable wealth or taxable assets, as applicable, in the relevant tax period for purposes of cantonal and communal individual wealth tax or corporate capital tax, as applicable.

Non-resident individuals and legal entities

Holders of Shares who are not resident in Switzerland for tax purposes, and who, during the respective tax year, have not engaged in a trade or business carried on through a permanent establishment situated in Switzerland for tax purposes, will not be subject to any cantonal or communal wealth tax or capital tax as a result of the holding of Shares.

Stamp duties upon transfer of securities

Secondary market dealings in Shares where no Swiss domestic bank or no Swiss domestic securities dealer (as defined in the Swiss Federal Stamp Duty Act) is a party or an intermediary to the transaction will not be subject to Swiss federal stamp duty on dealings in securities. Where a Swiss domestic bank or a Swiss domestic securities dealer is a party or an intermediary to such a transaction, Swiss federal stamp duty on dealings in securities at a rate of 0.15% of the purchase price of the Shares will be payable if none of the exemptions provided for in the Swiss Federal Stamp Duty Act applies. Subject to applicable statutory exemptions in respect of the one or the other party to a transaction, generally half of the tax is charged to the one party to the transaction and the other half to the other party.

Common Reporting Standard / Automatic Exchange of Information

Switzerland has concluded a multilateral agreement with the EU on the automatic exchange of information (AEOI) in tax matters. The agreement became effective on January 1, 2017 and applies to all 28 member states of the EU as well as Gibraltar. Also, on January 1, 2017, the Multilateral Competent Authority Agreement on the Automatic Exchange of Financial Account Information (MCAA) and, based on the MCAA, a number of bilateral AEOI agreements with other countries became effective. Based on such agreements and the implementing laws of Switzerland, Switzerland commenced the collection of data in respect of financial assets, including, as the case may be, Shares, held in, and income derived thereon and credited to, accounts or deposits with a paying agent in Switzerland for the benefit of individuals resident in a EU member state or other treaty state from 2017 and commenced the exchange of such data from 2018. Switzerland has signed and intends to sign further AEOI agreements with other countries. An updated list of the AEOI agreements of Switzerland in effect or signed but yet to become effective, including dates of commencement of data collection and data exchange, can be found on the website of the Swiss State Secretariat for International Financial Matters.

Swiss Facilitation of the Implementation of the US Foreign Account Tax Compliance Act

Switzerland has concluded an intergovernmental agreement with the US to facilitate the implementation of FATCA. The agreement ensures that the accounts held by US persons with Swiss financial institutions, which accounts may include Shares and income derived thereon, are disclosed to the US tax authorities either with the consent of the account holder or by means of group requests within the scope of administrative assistance. Information will not be transferred automatically in the absence of consent, and instead will be exchanged only within the scope of administrative assistance on the basis of the Treaty. On October 8, 2014, the Swiss Federal Council approved a mandate for negotiations with the US on changing the current direct-notification-based regime to a regime where the relevant information is sent to the Swiss Tax Administration, which in turn provides the information to the US tax authorities. It is unclear when negotiations will continue and when any new regime would come into force.

US federal income tax

For purposes of this discussion, a “US Holder” is any beneficial owner of Shares that is: (i) a citizen or resident of the US; (ii) a corporation organized under the laws of the US or any political subdivision thereof; or (iii) any other person that is subject to US federal income tax on a net income basis in respect of Shares. A “Non-US Holder” is any beneficial

owner of Shares that is a foreign corporation or non-resident alien individual.
Taxation of dividends
US Holders
For US federal income tax purposes, a US Holder will be required to include the full amount (before reduction for Swiss withholding tax) of a dividend paid with respect to Shares, generally as ordinary income. Subject to certain exceptions for short-term and hedged positions, the US dollar amount of dividends received by an individual with respect to our Shares will be subject to taxation at a maximum rate of 20% if the dividends are “qualified dividends”. Dividends paid on the Shares will be treated as qualified dividends if we were not, in the year prior to the year in which the dividend was paid, and are not, in the year in which the dividend is paid, a passive foreign investment company (PFIC). Based on our audited consolidated financial statements, we believe that the Group was not treated as a PFIC for US federal income tax purposes with respect to our 2017 or 2018 taxable years. In addition, based on the audited consolidated financial statements of the Group and our current expectations regarding the value and

nature of our assets and the sources and nature of our income, we do not anticipate the Group becoming a PFIC for the 2019 taxable year. Holders of our Shares should consult their own tax advisors regarding the availability of the reduced dividend tax rate in light of the considerations discussed above and their own particular circumstances. For this purpose, a "dividend" will include any distribution paid by us with respect to Shares, but only to the extent such distribution is not in excess of our current and accumulated earnings and profits as defined for US federal income tax purposes. Such dividend will constitute income from sources outside of the US. Subject to the limitations and conditions provided in the IR Code, a US Holder may deduct from its US federal taxable income, or claim as a credit against its US federal income tax liability, the Swiss withholding tax withheld. Under the IR Code, dividend payments by us on Shares are not eligible for the dividends received deduction generally allowed to corporate shareholders. Any distribution that exceeds our earnings and profits will be treated as a non-taxable return of capital to the extent of the US Holder's tax basis in Shares and thereafter as capital gain. Because we do not intend to maintain calculations of our earnings and profits on the basis of US federal income tax principles, a US Holder should expect that any information reporting it receives may treat the full amount of any distribution paid as a dividend.

In general, a US Holder will be required to determine the amount of any dividend paid in Swiss francs by translating the Swiss francs into US dollars at the "spot rate" of exchange on the date of receipt. The tax basis of Swiss francs received by the US Holder generally will equal the US dollar equivalent of such Swiss francs, translated at the spot rate of exchange on the date such Swiss franc dividends are received. Upon a subsequent exchange of such Swiss francs for US dollars, or upon the use of such Swiss francs to purchase property, a US Holder will generally recognize ordinary income or loss in the amount equal to the difference between such US Holder's tax basis for the Swiss francs and the US dollars received or, if property is received, the fair market value of the property. In addition, a US Holder may be required to recognize US-source foreign currency gain or loss on the receipt of a refund in respect of Swiss withholding tax to the extent the US dollar value of the refund differs from the US dollar equivalent of the amount on the date of receipt of the underlying dividend.

Non-US Holders

Dividends paid to a Non-US Holder in respect of Shares will generally not be subject to US federal income tax unless such dividends are effectively connected with the conduct of a trade or business within the US by such Non-US Holder.

Capital gains tax upon disposal of shares

US Holders

A gain or loss realized by a US Holder on the sale or other disposition of Shares will be subject to US federal income taxation as a capital gain or loss in an amount equal to the difference between the US Holder's basis in Shares and the amount realized on the disposition. Such gain or loss will generally be a long-term capital gain or loss if the US Holder holds the Shares for more than one year. A long-term capital gain realized by a US Holder that is an individual generally is subject to taxation at reduced rates.

Non-US Holders

A Non-US Holder will generally not be subject to US federal income tax in respect of gains realized on a sale or other disposition of Shares unless the gain is effectively connected with a trade or business of the Non-US Holder in the US.

Backup withholding tax and information reporting requirements

Dividends paid on, and proceeds from the sale or other disposition of, Shares paid to a US Holder generally may be subject to the information reporting requirements of the IR Code and may be subject to backup withholding unless the holder: (i) establishes that it is an exempt holder; or (ii) provides an accurate taxpayer identification number on a properly completed US Internal Revenue Service (IRS) Form W-9 and certifies that no loss of exemption from backup withholding has occurred. The amount of any backup withholding from a payment to a holder will be allowed as a credit against the US Holder's US federal income tax liability and may entitle such holder to a refund, provided that certain required information is furnished to the IRS.

A Non-US Holder may be required to comply with certification and identification procedures in order to establish its exemption from information reporting and backup withholding.

Listing details

Credit Suisse Group's shares are listed on the SIX Swiss Exchange (SIX) under the symbol "CSGN". The Group's ADS are traded on the New York Stock Exchange (NYSE) under the symbol "CS".

The Group's shares are in registered form with a par value of CHF 0.04 per share.

Trading in our own shares

The Group buys and sells its own shares and derivatives on its own shares within its normal trading and market-making activities mainly through its Swiss broker-dealer operations. In the Swiss market, the Group buys and sells its shares and derivatives on these shares to facilitate customer orders, to provide liquidity as a market maker and to hedge derivative instruments.

The net long or short position held by the Group's Swiss bank subsidiaries in the Group's own shares remains at non-material levels relative to the number of the Group's outstanding shares, due in part to Swiss Financial Market Supervisory Authority FINMA (FINMA) regulations requiring a 100% capital charge to the relevant legal entity for the entire net position in the Group's shares. In addition to FINMA rules, the Group's trading in its own shares in the Swiss market is subject to regulation under the Swiss Federal Act on Financial Market Infrastructure and Market Conduct in Securities and Derivatives Trading, the rules of the SIX and the European Exchange electronic exchange, and the Swiss Bankers Association Code of Conduct for Securities Dealers. Trading is also limited by the Group's risk management limits, internal capital allocation rules, balance sheet requirements, counterparty restrictions and other internal regulations and guidelines. Swiss law further limits the Group's ability to hold or repurchase its own shares.

The Group may from time to time place orders for its own shares to satisfy obligations under various employee and management incentive share plans, and potentially for shares to be used as payment in acquisitions. In addition, the Group may purchase shares with the intent of cancellation. Typically in Switzerland, the purchase of shares for cancellation is done under a separate program from the repurchase of shares to be re-issued under employee and management incentive share plans.

> Refer to "Share repurchases" in III – Treasury, Risk, Balance sheet and Off-balance sheet – Capital management – Shareholders' equity and share metrics for further information on trading in the Group's shares and shares repurchases.

Property and equipment

Our principal executive offices, which we own, are located at Paradeplatz 8, Zurich, Switzerland. As of the end of 2018, we maintained 355 offices and branches worldwide, of which approximately 56% were located in Switzerland. As of the end of 2018, approximately 25% of our worldwide offices and branches were owned directly by us, with the remainder being held under commercial leases. With respect to those held under commercial leases, 52% of the related lease commitments expire after 2023. The book value of the ten largest owned properties was approximately CHF 0.8 billion as of the end of 2018. None of our principal facilities are subject to mortgages or other security interests granted to secure indebtedness to financial institutions.

We believe that our current facilities are adequate for existing operations. Management regularly evaluates our operating facilities for suitability, market presence, renovation and maintenance.

Appendix
Selected five-year information
Selected information – Group
Selected information – Bank
List of abbreviations
Glossary
Investor information
Financial calendar and contacts

Selected five-year information

Selected information – Group in / end of	2018	2017	2016	2015	2014
Condensed consolidated statements of operations (CHF million)					
Net revenues	**20,920**	**20,900**	**20,323**	**23,797**	**26,242**
Provision for credit losses	**245**	**210**	**252**	**324**	**186**
Total operating expenses	**17,303**	**18,897**	**22,337**	**25,895**	**22,429**
Income/(loss) from continuing operations before taxes	**3,372**	**1,793**	**(2,266)**	**(2,422)**	**3,627**
Income tax expense	1,361	2,741	441	523	1,405
Income/(loss) from continuing operations	**2,011**	**(948)**	**(2,707)**	**(2,945)**	**2,222**
Income from discontinued operations, net of tax	0	0	0	0	102
Net income/(loss)	**2,011**	**(948)**	**(2,707)**	**(2,945)**	**2,324**
Net income/(loss) attributable to noncontrolling interests	(13)	35	3	(1)	449
Net income/(loss) attributable to shareholders	**2,024**	**(983)**	**(2,710)**	**(2,944)**	**1,875**
of which from continuing operations	2,024	(983)	(2,710)	(2,944)	1,773
of which from discontinued operations	0	0	0	0	102
Earnings per share (CHF)					
Basic earnings/(loss) per share from continuing operations	0.79	(0.41)	(1.27)	(1.65)	0.93
Basic earnings/(loss) per share	0.79	(0.41)	(1.27)	(1.65)	0.99
Diluted earnings/(loss) per share from continuing operations	0.77	(0.41)	(1.27)	(1.65)	0.93
Diluted earnings/(loss) per share	0.77	(0.41)	(1.27)	(1.65)	0.99
Consolidated balance sheet (CHF million)					
Total assets	768,916	796,289	819,861	820,805	921,462
Share capital	102	102	84	78	64
Shareholders' equity	43,922	41,902	41,897	44,382	43,959
Shares outstanding (million)					
Shares outstanding	2,550.6	2,550.3	2,089.9	1,951.5	1,599.5
Dividend per share (CHF)					
Dividend per share	0.2625[1]	0.25	0.70	0.70	0.70
Ratios (%)					
Return on assets [2]	0.2	(0.1)	(0.3)	(0.3)	0.2
Return on equity	4.7	(2.3)	(6.1)	(6.8)	4.4
Dividend payout ratio	33.2	-	-	-	70.7
Equity to asset ratio	5.7	5.3	5.1	5.4	4.8

1 Proposal of the Board of Directors to the Annual General Meeting on April 26, 2019; to be paid out of capital contribution reserves.

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Based on amounts attributable to shareholders.

Selected information – Bank in / end of	2018	2017	2016	2015	2014
Condensed consolidated statements of operations (CHF million)					
Net revenues	**20,820**	**20,965**	**20,393**	**23,811**	**26,178**
Provision for credit losses	**245**	**210**	**252**	**324**	**186**
Total operating expenses	**17,719**	**19,202**	**22,630**	**26,136**	**22,772**
Income/(loss) from continuing operations before taxes	**2,856**	**1,553**	**(2,489)**	**(2,649)**	**3,220**
Income tax expense	1,134	2,781	400	488	1,343
Income/(loss) from continuing operations	**1,722**	**(1,228)**	**(2,889)**	**(3,137)**	**1,877**
Income from discontinued operations, net of tax	0	0	0	0	102
Net income/(loss)	**1,722**	**(1,228)**	**(2,889)**	**(3,137)**	**1,979**
Net income/(loss) attributable to noncontrolling interests	(7)	27	(6)	(7)	445
Net income/(loss) attributable to shareholder	**1,729**	**(1,255)**	**(2,883)**	**(3,130)**	**1,534**
of which from continuing operations	1,729	(1,255)	(2,883)	(3,130)	1,432
of which from discontinued operations	0	0	0	0	102
Consolidated balance sheet (CHF million)					
Total assets	772,069	798,372	822,065	822,736	923,406
Share capital	4,400	4,400	4,400	4,400	4,400
Shareholder's equity	45,296	42,670	42,789	45,412	44,731
Number of shares outstanding (million)					
Number of shares outstanding	4,399.7	4,399.7	4,399.7	4,399.7	4,399.7

List of abbreviations

A	
ABO	Accumulated benefit obligation
ABS	Asset-backed securities
ADS	American Depositary Shares
AEOI	Automatic Exchange of Information
AES®	Advanced execution services
AGM	Annual General Meeting
AIG	American International Group, Inc.
A-IRB	Advanced internal ratings-based approach
AMA	Advanced measurement approach
AMF	Asset Management Finance LLC
AoA	Articles of Association
AOCI	Accumulated other comprehensive income/(loss)
ARU	Asset Resolution Unit
ASC	Accounting Standards Codification
ASU	Accounting Standards Updates
B	
BA	Bachelor of Arts
BBSW	Bank Bill Swap Rate
BCBS	Basel Committee on Banking Supervision
BEAT	Base Erosion and Anti-abuse Tax
BIS	Bank for International Settlements
Board	Board of Directors
bp	basis points
BVG	Swiss Federal Law on Occupational Retirement, Survivors' and Disability Pension Plans
C	
CARMC	Capital Allocation and Risk Management Committee
CCA	Contingent Capital Awards
CCAR	Comprehensive Capital Analysis and Review
CCO	Chief Compliance Officer
CCRO	Chief Compliance and Regulatory Affairs Officer
CDO	Collateralized debt obligation
CDS	Credit default swap
CDX	Credit default swap index
CEB	Conduct and Ethics Board
CECL	Current expected credit loss
CET1	Common equity tier 1
CEO	Chief Executive Officer
CFO	Chief Financial Officer
CFTC	Commodity Futures Trading Commission
CLO	Collateralized loan obligation
CMBS	Commercial mortgage-backed securities
CMI	Continuous Mortality Investigation
CMS	Constant maturity swap
COF	Capital Opportunity Facility
COO	Chief Operating Officer
COSO	Committee of Sponsoring Organizations

	of the Treadway Commission
C (continued)	
CP	Commercial paper
CPR	Constant prepayment rate
CRD	Capital Requirements Directive
CRO	Chief Risk Officer
CRR	Capital Requirements Regulation
CSI	Credit Suisse International
CSSEL	Credit Suisse Securities (Europe) Limited
CVA	Credit valuation adjustment
D	
DFS	Department of Financial Services
DOJ	US Department of Justice
DVA	Debit valuation adjustment
E	
EAD	Exposure at default
EBITDA	Earnings before interest, taxes, depreciation and amortization
ECB	European Central Bank
EGM	Extraordinary General Meeting
EMEA	Europe, Middle East and Africa
EMIR	European Market Infrastructure Regulation
ERCF	Enterprise risk and control framework
ERISA	US Employee Retirement Income Security Act of 1974
EU	European Union
F	
FASB	Financial Accounting Standards Board
FATCA	Foreign Account Tax Compliance Act
FDIC	Federal Deposit Insurance Corporation
Fed	US Federal Reserve
FINMA	Swiss Financial Market Supervisory Authority FINMA
FINRA	Financial Industry Regulatory Authority
FMIA	Swiss Federal Act on Financial Market Infrastructure and Market Conduct in Securities and Derivatives Trading
FSA	UK Financial Services Authority
FSB	Financial Stability Board
FSMA	Financial Services and Markets Act 2000
FTQ Lite	Flight to quality lite
G	
G7	Group of seven leading industrial nations
G10	Group of Ten
G20	Group of Twenty Finance Ministers and Central Bank Governors
GAAP	Generally accepted accounting principles
GDP	Gross domestic product
GRI	Global Reporting Initiative
G-SIB	Global Systemically Important Bank
H	
HQLA	High quality liquid assets
HNWI	High-net-worth individuals

I	
IAF	Impact Advisory and Finance
IBOR	Interbank Offered Rate
ICE	Intercontinental Exchange
IFRS	International Financial Reporting Standards
IHC	US intermediate holding company
IPO	Initial public offering
IPRE	Income producing real estate
IRC	Incremental risk charge
IRS	Internal Revenue Service
ISDA	International Swaps and Derivatives Association, Inc.
IT	Information technology
ITS	International Trading Solutions
J	
JD	Juris Doctor
L	
LCR	Liquidity coverage ratio
LGD	Loss given default
LIBOR	London Interbank Offered Rate
LLM	Master of laws
LTI	Long-term incentive
LTV	Loan-to-value
M	
M&A	Mergers and acquisitions
MA	Master of Arts
MBA	Master of Business Administration
MiFID I	Markets in Financial Instruments Directive
MiFID II	Revised Markets in Financial Instruments Directive
MRTC	Material risk takers and controllers
MSRB	Municipal Securities Rulemaking Board
N	
Nasdaq	Nasdaq Stock Market
NAV	Net asset value
NCUA	National Credit Union Administration
NRV	Negative replacement value
NSFR	Net stable funding ratio
NYSE	New York Stock Exchange
O	
OCI	Other comprehensive income
OFAC	Office of Foreign Assets Control
OGR	Organizational Guidelines and Regulations
OIS	Overnight Index Swap rate
OTC	Over-the-counter
P	
PAF	2008 Partner Asset Facility
PAF2	2011 Partner Asset Facility
PBO	Projected benefit obligation
PD	Probability of default

PFIC	Passive foreign investment company
P (continued)	
PRA	Prudential Regulation Authority
PRV	Positive replacement value
PSA	Prepayment speed assumption
Q	
QIA	Qatar Investment Authority
R	
RCSA	Risk and control self-assessment
RMBS	Residential mortgage-backed securities
RNIV	Risk not in VaR
ROE	Return on equity
RoTE	Return on tangible equity
RPSC	Risk Processes & Standards Committee
RRP	Recovery and resolution plan
RRSC	Reputational Risk & Sustainability Committee
RTSR	Relative total shareholder return
RWA	Risk-weighted assets
S	
SAPS	Self-administered pension scheme
SEC	US Securities and Exchange Commission
SEI	Significant economic interest
SESTA	Swiss Federal Act on Stock Exchanges and Securities Trading
SFTQ	Severe flight to quality
SIBOR	Singapore Interbank Offered Rate
SIX	SIX Swiss Exchange
SNB	Swiss National Bank
SOFR	Secured Overnight Financing Rate
SOR	Singapore Swap Offer Rate
SOX	US Sarbanes-Oxley Act of 2002
SPE	Special purpose entity
SPIA	Single premium immediate annuity
STI	Short-term incentive
T	
TBVPS	Tangible book value per share
TCFD	Task Force on Climate-related Financial Disclosures
TLAC	Total loss-absorbing capacity
TRS	Total return swap
U	
UHNW	Ultra-high-net-worth
UHNWI	Ultra-high-net-worth individuals
UK	United Kingdom
US	United States of America
US GAAP	US generally accepted accounting principles
V	
VaR	Value-at-risk
VARMC	Valuation Risk Management Committee
VIE	Variable interest entity

VIX Chicago Board of Options Exchange Market Volatility Index

Glossary

A

Advanced execution services® (AES®)	AES® is a suite of algorithmic trading strategies, tools and analytics operated by Credit Suisse to facilitate global equity trading. By employing algorithms to execute client orders and limit volatility, AES® helps institutions and hedge funds reduce market impact. AES® provides access to exchanges in more than 35 countries worldwide via more than 45 leading trading platforms.
Advanced internal ratings-based approach (A-IRB)	Under the A-IRB approach, risk weights are determined by using internal risk parameters. We have received approval from FINMA to use, and have fully implemented, the A-IRB approach whereby we provide our own estimates for probability of default (PD), loss given default (LGD) and exposure at default (EAD). We use the A-IRB approach to determine our institutional credit risk and most of our retail credit risk.
Advanced measurement approach (AMA)	The AMA is used for measuring operational risk. The methodology is based upon the identification of a number of key risk scenarios that describe the major operational risks we face. Groups of senior staff review each scenario and discuss the likelihood of occurrence and the potential severity of loss. Internal and external loss data, along with certain business environment and internal control factors, such as self-assessment results and key risk indicators, are considered as part of this process. Based on the output from these meetings, we enter the scenario parameters into an operational risk model that generates a loss distribution from which the level of capital required to cover operational risk is determined. We have received approval from FINMA to use an internal model for the calculation of operational risk capital, which is aligned with the requirements of the AMA under the Basel framework.
Affluent and retail clients	We define affluent and retail clients as individuals having assets under management below CHF 1 million.
American Depositary Shares (ADS)	An ADS, which is evidenced by an American Depositary Receipt, is a negotiable certificate issued by a depositary bank that represents all or part of an underlying share of a foreign-based company held in custody.

B

Backtesting	Backtesting is one of the techniques used to assess the accuracy and performance of VaR models. Backtesting is used by regulators to assess the adequacy of regulatory capital held by a bank. It involves comparing of the results produced by the VaR model with the hypothetical trading revenues on the trading book. VaR models that experience less than five exceptions in a rolling 12-month period are considered by regulators to be classified in a defined "green zone". The "green zone" corresponds to backtesting results that do not themselves suggest a problem with the quality or accuracy of a bank's model.
Bank for International Settlements (BIS)	The Bank for International Settlements (BIS) serves central banks in their pursuit of monetary and financial stability, fosters international cooperation in those areas and acts as a bank for central banks.
Basel III	In December 2010, the Basel Committee on Banking Supervision (BCBS) issued the Basel III framework, which is a comprehensive set of reform measures to strengthen the regulation, supervision and risk management of the banking sector. These measures aim to improve the banking sector's ability to absorb shocks arising from financial and economic stress, whatever the source, improve risk management and governance and strengthen banks' transparency and disclosures. The phase-in period for Basel III was January 1, 2013 through January 1, 2019.

Basel Committee on Banking Supervision (BCBS)	The Basel Committee on Banking Supervision (BCBS) provides a forum for regular cooperation on banking supervisory matters. Its objective is to enhance the understanding of key supervisory issues and improve the quality of banking supervision worldwide. It seeks to do so by exchanging information on national supervisory issues, approaches and techniques, with a view to promoting common understanding. At times, the BCBS uses this common understanding to develop guidelines and supervisory standards in areas where they are considered desirable. In this regard, the BCBS is best known for its international standards on capital adequacy, the Core Principles for Effective Banking Supervision and the Concordat on cross-border banking supervision.
Booking center	Part of a legal entity of Credit Suisse AG that is registered with a domestic banking license where client assets are administered and booked.

C

Collateralized debt obligation (CDO)	A CDO is a type of structured asset-backed security whose value and payments are derived from a portfolio of underlying fixed-income assets.
Commercial mortgage-backed securities (CMBS)	CMBS are a type of mortgage-backed security that is secured by loans on commercial property and can provide liquidity to real estate investors and commercial lenders.
Commercial paper (CP)	Commercial paper is an unsecured money-market security with a fixed maturity of 1 to 364 days, issued by large banks and corporations to raise funds to meet short term debt obligations.
Constant prepayment rate (CPR)	CPR is a loan prepayment rate that is equal to the proportion of the principal of a pool of loans that is assumed to be paid off prematurely in each period. The calculation of this estimate is based on a number of factors such as historical prepayment rates for previous loans that are similar to ones in the pool and on future economic outlooks.
Credit default swap (CDS)	A CDS is a contractual agreement in which the buyer of the swap pays a periodic fee in return for a contingent payment by the seller of the swap following a credit event of a reference entity. A credit event is commonly defined as bankruptcy, insolvency, receivership, material adverse restructuring of debt or failure to meet payment obligations when due.
Credit valuation adjustment (CVA)	The CVA represents the market value of counterparty credit risk for uncollateralized OTC derivative instruments.

D

Debit valuation adjustment	The debit valuation adjustment represents the market value of our own credit risk for uncollateralized OTC derivative instruments.
Derivatives	Derivatives are financial instruments or contracts that meet all of the following three characteristics: (1) their value changes in response to changes in an underlying price, such as interest rate, security price, foreign exchange rate, credit rating/price or index; (2) they require no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors; and (3) their terms require or permit net settlement (US GAAP) or they settle at a future date (IFRS).

E

Exposure at default (EAD)	The EAD represents the expected amount of credit exposure in the event of a default and reflects the current drawn exposure and an expectation regarding the future evolution of the credit exposure. For loan exposures, a credit conversion factor is applied to project the additional drawn amount. The credit conversion factor related to traded products such as derivatives is based on a simulation using statistical models.

F

Fair value	The price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

G

G7	The G7 is a group of finance ministers from seven industrialized nations: the US, UK, France, Germany, Italy, Canada and Japan.
G10	The G10 is a group of 11 countries that have agreed to make resources available to the International Monetary Fund and includes Belgium, Canada, France, Italy, Japan, the Netherlands, the UK, the US, Germany, Sweden and Switzerland.

G20	The G20 is a group of finance ministers and central bank governors from 19 countries (Argentina, Australia, Brazil, Canada, China, France, Germany, India, Indonesia, Italy, Japan, Republic of Korea, Mexico, Russia, Saudi Arabia, South Africa, Turkey, the UK and the US) and the EU.
H	
Haircut	The percentage by which an asset's market value is reduced for the purpose of calculating capital, margin requirements and collateral levels. This is used to provide a cushion when lending against collateral to account for possible adverse movements in the value of the collateral.
Higher Trigger Capital Amount	The capital ratio write-down triggers for certain of our outstanding capital instruments take into account the fact that other outstanding capital instruments that contain relatively higher capital ratios as part of their trigger feature are expected to convert into equity or be written down prior to the write-down of such capital instruments. The amount of additional capital that is expected to be contributed by such conversion into equity or write-down is referred to as the Higher Trigger Capital Amount.
High-net-worth individuals (HNWI)	We define high-net-worth individuals as individuals having assets under management in excess of CHF 1 million.
I	
Incremental risk charge (IRC)	The IRC represents an estimate of the issuer default and migration risk of positions in the trading book over a one-year capital horizon at a 99.9% confidence level, taking into account the liquidity horizons of individual positions. This includes sovereign debt, but excludes securitizations and correlation products.

L

Liquidity coverage ratio (LCR)	The LCR aims to ensure that banks have a stock of unencumbered high-quality liquid assets available to meet liquidity needs for a 30-day time horizon under a severe stress scenario. The LCR is comprised of two components: the value of the stock of high quality liquid assets in stressed conditions and the total net cash outflows calculated according to specified scenario parameters. The ratio of liquid assets over net cash outflows should be at least 100%.
Lombard loan	A loan granted against pledged collateral in the form of securities.
London Interbank Offered Rate (LIBOR)	LIBOR is a daily reference rate based on the interest rates at which banks borrow unsecured funds from other banks in the London wholesale money market.
Loss given default (LGD)	LGD parameters consider seniority, collateral, counterparty industry and, in certain cases, fair value markdowns. LGD estimates are based on an empirical analysis of historical loss rates and are calibrated to reflect time and cost of recovery as well as economic downturn conditions. For much of the loan portfolio of private banking, corporate and institutional businesses, the LGD is primarily dependent upon the type and amount of collateral pledged. For other retail credit risk, predominantly loans secured by financial collateral, pool LGDs differentiate between standard and higher risks, as well as domestic and foreign transactions. The credit approval and collateral monitoring processes are based on loan-to-value (LTV) limits. For mortgages (residential or commercial), recovery rates are differentiated by type of property.

M

Match funded	Match funded balance sheet items consist of assets and liabilities with close to equal liquidity durations and value so that the liquidity and funding generated or required by the positions are substantially equivalent.
Material risk takers and controllers (MRTC)	MRTC are employees who, either individually or as a part of a group, are considered to have a potentially material impact on the Group's risk profile.

N

Negative replacement value (NRV)	NRV represents the negative fair value of a derivative financial instrument at a given financial reporting date. A negative replacement value reflects the amount payable to the counterparty if the derivative transaction were to be settled at the reporting date, or alternatively, the cost at a given reporting date to close an open derivative position with a fully offsetting transaction.
Net stable funding ratio (NSFR)	The NSFR is intended to ensure that banks maintain a structurally sound long-term funding profile beyond one year and is a complementary measure to the LCR. It is structured to ensure that illiquid assets are funded with an appropriate amount of stable long-term funds. The standard is defined as the ratio of available stable funding over the amount of required stable funding. The ratio should always be at least 100%.

N (continued)

Netting agreements	Netting agreements are contracts between two parties where under certain circumstances, such as insolvency, bankruptcy or any other credit event, mutual claims from outstanding business transactions can be offset against each other. The inclusion of a legally binding netting agreement reduces the default risk from a gross to a net amount.

O

Over-the-counter (OTC)	Over-the-counter securities and derivatives are not traded on an exchange but via private contracts between counterparties.

P

Position risk	Component of the economic capital framework, which is used to assess, monitor and report risk exposures throughout the Group. Position risk is the level of unexpected loss in economic value on our portfolio of positions over a one-year horizon which is exceeded with a given small probability (1% for risk management purposes; 0.03% for capital management purposes).
Positive replacement value (PRV)	PRV represents the positive fair value of a derivative financial instrument at a given reporting date. A positive replacement value reflects the amount receivable from the counterparty if the derivative transaction were to be settled at the reporting date, or alternatively, the cost at a given reporting date to enter into the exact same transaction for the residual term, if the existing counterparty should default.
Probability of default (PD)	PD parameters capture the risk of a counterparty defaulting over a one-year time horizon. PD estimates are based on time-weighted averages of historical default rates by rating grade, with low-default-portfolio estimation techniques applied for higher quality rating grades. Each PD reflects the internal rating for the relevant obligor.

R

Regulatory VaR	Regulatory VaR is a version of VaR that uses an exponential weighting technique that automatically increases VaR where recent short-term market volatility is greater than long-term volatility in the two-year dataset. Regulatory VaR uses an expected shortfall calculation based on average losses, and a ten-day holding period. This results in a more responsive VaR model, as the overall increases in market volatility are reflected almost immediately in the regulatory VaR model.
Repurchase agreements	Repurchase agreements are securities sold under agreements to repurchase substantially identical securities. These transactions normally do not constitute economic sales and are therefore treated as collateralized financing transactions and are carried in the balance sheet at the amount of cash received (liability) and cash disbursed (asset), respectively.
Residential mortgage-backed securities (RMBS)	RMBS are a type of mortgage-backed security composed of a wide array of different non-commercial mortgage debts. They securitize the mortgage payments of non-commercial real estate. Different residential mortgages with varying credit ratings are pooled together and sold in tranches to investors.

R (continued)

Reverse repurchase agreements	Reverse repurchase agreements are purchases of securities under agreements to resell substantially identical securities. These transactions normally do not constitute economic sales and are therefore treated as collateralized financing transactions and are carried in the balance sheet at the amount of cash received (liability) and cash disbursed (asset), respectively.
Risk management VaR	Risk management VaR is a version of VaR that uses an exponential weighting technique that automatically adjusts VaR where recent short-term market volatility differs from long-term volatility in the two-year dataset. Risk management VaR uses an expected shortfall calculation based on average losses, and a one-day holding period. This results in a more responsive VaR model, as the overall changes in market volatility are reflected almost immediately in the risk management VaR model.
Risk mitigation	Risk mitigation refers to measures undertaken by the Group or the Bank to actively manage its risk exposure. For credit risk exposure, such measures would normally include utilizing credit hedges and collateral, such as cash and marketable securities. Credit hedges represent the notional exposure that can be transferred to other market counterparties, generally through the use of credit default swaps. In addition, risk mitigation also includes the active management of a loan portfolio by selling or sub-participating positions.
Risk not in VaR (RNIV)	RNIV is a framework intended to ensure that capital is held to meet all risks which are not captured, or not captured adequately, by the Group’s VaR and stressed VaR models. These include, but are not limited to incomplete, missing and/or illiquid risk factors such as certain basis, correlation, higher-order and cross risks, and calibration parameters. The RNIV framework is continuously updated to incorporate new RNIVs.
Risk-weighted assets (RWA)	The value of the Group's assets weighted according to certain identified risks for compliance with regulatory provisions.

S

Stressed VaR	Stressed VaR replicates a VaR calculation on the current portfolio of the Group or the Bank, taking into account a one-year observation period relating to significant financial stress; it helps reduce the pro-cyclicality of the minimum capital requirements for market risk.
Swiss Financial Supervisory Authority FINMA (FINMA)	FINMA, as an independent supervisory authority, protects creditors, investors and policy holders, ensuring the smooth functioning of the financial markets and preserving their reputation. In its role as state supervisory authority, FINMA acts as an oversight authority of banks, insurance companies, exchanges, securities dealers, collective investment schemes, distributors and insurance intermediaries. It is responsible for combating money laundering and, where necessary, conducts restructuring and bankruptcy proceedings and issues operating licenses for companies in the supervised sectors. Through its supervisory activities, it ensures that supervised institutions comply with the requisite laws, ordinances, directives and regulations and continues to fulfill the licensing requirements. FINMA also acts as a regulatory body; it participates in legislative procedures, issues its own ordinances and circulars where authorized to do so, and is responsible for the recognition of self-regulatory standards.

T

“Too Big to Fail”	In 2011, the Swiss Parliament passed legislation relating to big banks. The legislation includes capital and liquidity requirements and rules regarding risk

	diversification and emergency plans designed to maintain systemically relevant functions even in the event of threatened insolvency.
Total loss-absorbing capacity (TLAC)	TLAC is a regulatory requirement designed to ensure that Global Systemically Important Banks (G-SIBs) have the loss-absorbing and recapitalization capacity so that, in an immediately following resolution, critical functions can continue without requiring taxpayer support or threatening financial stability.
Total return swap (TRS)	A TRS is a swap agreement in which one party makes payments based on a set rate, either fixed or variable, while the other party makes payments based on the return of an underlying asset, which includes both the income it generates and any capital gains. In total return swaps, the underlying asset, referred to as the reference asset, is usually an equity index, loans or bonds.
U	
Ultra-high-net-worth individuals (UHNWI)	Ultra-high-net-worth individuals have assets under management in excess of CHF 50 million or total wealth exceeding CHF 250 million.
V	
Value-at-risk (VaR)	VaR is a technique used to measure the potential loss in fair value of financial instruments based on a statistical analysis of historical price trends and volatilities. VaR as a concept is applicable for all financial risk types with adequate price histories; the use of VaR allows the comparison of risk across different businesses.

Investor information

Share data

in / end of	2018	2017	2016
Share price (common shares, CHF)			
Average	15.17	15.11	13.71
Minimum	10.45	13.04	9.92
Maximum	18.61	17.84	21.31
End of period	10.80	17.40	14.61
Share price (American Depositary Shares, USD)			
Average	15.50	15.35	13.88
Minimum	10.42	13.37	10.21
Maximum	19.98	18.02	21.36
End of period	10.86	17.85	14.31
Market capitalization			
Market capitalization (CHF million)	27,605	44,475	30,533
Market capitalization (USD million)	27,758	45,625	29,906
Dividend per share (CHF)			
Dividend per share	0.2625[1]	0.25[2]	0.70[2]

1 Proposal of the Board of Directors to the Annual General Meeting on April 26, 2019; to be paid out of capital contribution reserves.

2 Paid out of capital contribution reserves.

Ticker symbols / stock exchange listings

	Common shares	ADS[1]
Ticker symbols		
SIX Financial Information	CSGN	–
New York Stock Exchange	–	CS
Bloomberg	CSGN SW	CS US
Reuters	CSGN.S	CS.N
Stock exchange listings		
Swiss security number	1213853	570660
ISIN number	CH0012138530	US2254011081
CUSIP number	–	225 401 108

1
One American Depositary Share (ADS) represents one common share.

Credit ratings and outlook

as of March 21, 2019	Short-term debt	Long-term debt	Outlook
Credit Suisse Group AG			
Moody's	–	Baa2	Stable
Standard & Poor's	–	BBB+	Stable
Fitch Ratings	F2	A-	Positive
Rating and Investment Information	–	A	Stable
Credit Suisse AG			
Moody's	P-1	A1	Stable
Standard & Poor's	A-1	A	Positive
Fitch Ratings	F1	A	Positive

Foreign currency translation rates

	End of			Average in		
	2018	2017	2016	2018	2017	2016
1 USD / 1 CHF	0.99	0.98	1.02	0.98	0.98	0.99
1 EUR / 1 CHF	1.13	1.17	1.07	1.15	1.11	1.09
1 GBP / 1 CHF	1.26	1.32	1.26	1.30	1.27	1.34
100 JPY / 1 CHF	0.89	0.87	0.87	0.88	0.88	0.90

Financial calendar and contacts

Financial calendar	
First quarter results 2019	Wednesday, April 24, 2019
Annual General Meeting	Friday, April 26, 2019
Second quarter results 2019	Wednesday, July 31, 2019
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Internet	credit-suisse.com/news
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Results and financial information	credit-suisse.com/results
Printed copies	credit-suisse.com/publications
US share register and transfer agent	
ADS depositary bank	The Bank of New York Mellon
Shareholder correspondence address	BNY Mellon Shareowner Services P.O. Box 505000 Louisville, KY 40233-5000
Overnight correspondence address	BNY Mellon Shareowner Services 462 South 4th Street, Suite 1600 Louisville, KY 40202
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A-12

Cautionary statement regarding forward-looking information

This report contains statements that constitute forward-looking statements. In addition, in the future we, and others on our behalf, may make statements that constitute forward-looking statements. Such forward-looking statements may include, without limitation, statements relating to the following:

- our plans, targets or goals;
- our future economic performance or prospects;
- the potential effect on our future performance of certain contingencies; and
- assumptions underlying any such statements.

Words such as “believes,” “anticipates,” “expects,” “intends” and “plans” and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. We do not intend to update these forward-looking statements.

By their very nature, forward-looking statements involve inherent risks and uncertainties, both general and specific, and risks exist that predictions, forecasts, projections and other outcomes described or implied in forward-looking statements will not be achieved. We caution you that a number of important factors could cause results to differ materially from the plans, targets, goals, expectations, estimates and intentions expressed in such forward-looking statements. These factors include:

- the ability to maintain sufficient liquidity and access capital markets;
- market volatility and interest rate fluctuations and developments affecting interest rate levels;
- the strength of the global economy in general and the strength of the economies of the countries in which we conduct our operations, in particular the risk of continued slow economic recovery or downturn in the EU, the US or other developed countries or in emerging markets in 2019 and beyond;
- the direct and indirect impacts of deterioration or slow recovery in residential and commercial real estate markets;
- adverse rating actions by credit rating agencies in respect of us, sovereign issuers, structured credit products or other credit-related exposures;
- the ability to achieve our strategic goals, including those related to our targets and financial goals;
- the ability of counterparties to meet their obligations to us;
- the effects of, and changes in, fiscal, monetary, exchange rate, trade and tax policies, as well as currency fluctuations;
- political and social developments, including war, civil unrest or terrorist activity;
- the possibility of foreign exchange controls, expropriation, nationalization or confiscation of assets in countries in which we conduct our operations;
- operational factors such as systems failure, human error, or the failure to implement procedures properly;
- the risk of cyber attacks, information or security breaches or technology failures on our business or operations;
- the adverse resolution of litigation, regulatory proceedings and other contingencies;
- actions taken by regulators with respect to our business and practices and possible resulting changes to our business organization, practices and policies in countries in which we conduct our operations;
- the effects of changes in laws, regulations or accounting or tax standards, policies or practices in countries in which we conduct our operations;
- the potential effects of changes in our legal entity structure;
- competition or changes in our competitive position in geographic and business areas in which we conduct our operations;
- the ability to retain and recruit qualified personnel;
- the ability to maintain our reputation and promote our brand;
- the ability to increase market share and control expenses;
- technological changes;
- the timely development and acceptance of our new products and services and the perceived overall value of these products and services by users;

acquisitions, including the ability to integrate acquired businesses successfully, and divestitures, including the ability to sell non-core assets; and

other unforeseen or unexpected events and our success at managing these and the risks involved in the foregoing.

We caution you that the foregoing list of important factors is not exclusive. When evaluating forward-looking statements, you should carefully consider the foregoing factors and other uncertainties and events, including the information set forth in *I – Information on the company – Risk factors*.

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