JPMORGAN CHASE & CO Form 10-Q August 01, 2018

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM 10-Q
Quarterly report pursuant to Section 13 or 15(d) of
the Securities Exchange Act of 1934
For the quarterly period ended Commission file
June 30, 2018
number 1-5805

JPMorgan Chase & Co.

(Exact name of registrant as specified in its charter)

Delaware 13-2624428
(State or other jurisdiction of identification no.)

270 Park Avenue, New York, New York 10017 (Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (212) 270-6000

Indicate by check mark whether the registrant (1) has 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 registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

x Yes o No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files).

x Yes o No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer x

Accelerated filer o

Non-accelerated filer (Do not check if a smaller reporting company) o Smaller reporting company o

Emerging growth company o

If an emerging growth company, indicate by check mark if the registrant has 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. o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). o Yes x No

Number of shares of common stock outstanding as of June 30, 2018: 3,360,884,107

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_	Chase & Co ed financial				Six months 30,	s ended June
millions, except pe18 share, ratio, headcount data and where otherwise noted)	1Q18	4Q17	3Q17	2Q17	2018	2017
Selected income statement data Total						
\$27,753 revenue Total	\$27,907	\$24,457	\$25,578	\$25,731	\$55,660	\$50,670
in 6, 12 in the rest expense	16,080	14,895	14,570	14,767	32,051	30,050
Pre-provisi 11,782 profit Provision	on 11,827	9,562	11,008	10,964	23,609	20,620
for 1,210 credit	1,165	1,308	1,452	1,215	2,375	2,530
losses Income before income tax expense	10,662	8,254	9,556	9,749	21,234	18,090
Income	1,950	4,022	2,824	2,720	4,206	4,613
Net \$8,316 income	\$8,712	\$4,232	\$6,732	\$7,029	\$17,028	\$13,477

Earnings									
per									
share									
data									
Net \$2.31 income:	\$2.38 Basic	\$1.08	\$1.77		\$1.83		\$4.69	\$3.49	
2021 Puted	2.37	1.07	1.76		1.82		4.66	3.47	
Average									
3h416s2	3,458.3	3,489.7	3,534.7		3,574.1		3,436.7	3,587.9	
Basic									
3)4B4te7d	3,479.5	3,512.2	3,559.6		3,599.0		3,457.1	3,614.7	
Market									
and									
per									
common									
share									
data									
Market 350,204 capitaliza	374,423 tion	366,301	331,393		321,633		350,204	321,633	
Common									
shares 3,360.9 at	3,404.8	3,425.3	3,469.7		3,519.0		3,360.9	3,519.0	
period-en	d								
Share									
price:(a)									
1 311 g15 .15	\$119.33	\$108.46	\$95.88		\$92.65		\$119.33	\$93.98	
L03 v11	103.98	94.96	88.08		81.64		103.11	81.64	
CO4s2 0	109.97	106.94	95.51		91.40		104.20	91.40	
Book									
yalue 68.85 per	67.59	67.04	66.95		66.05		68.85	66.05	
share Tangible book									
value 55.14 per	54.05	53.56	54.03		53.29		55.14	53.29	
share ("TBVPS	(b)								
Cash									
dividends									
detot ared	0.56	0.56	0.56		0.50		1.12	1.00	
per									
share									
Selected									
ratios									
and									
metrics									
R €turn	% 15	%7	%11	%	12	%	14	%11	%
on									
common									
equity									

("ROE")								
Return								
on								
tangible common	19	8	13	14		18	14	
equity ("ROTCE)(c)							
Return								
ф128	1.37	0.66	1.04	1.10		1.32	1.07	
assets(c)								
Overhead 58 ratio	58	61	57	57		58	59	
Loans-to-d 65. ratio	eposits 63	64	63	63		65	63	
Liquidity								
coverage								
ilalt5 0	115	119	120	115		115	115	
("LCR")	`							
(average)(d	,							
Common equity								
Tier								
12.0	11.8	12.2	12.5	(h) 12.5	(h)12.0	12.5	(h)
("CET1")	11.0	12,2	12.3	(11) 12.3	(11))12.0	12.3	(11)
capital								
ratio ^(e)								
Tier								
136	13.5	13.9	14.1	(h) 14.2	(h)13.6	14.2	(h)
13.6 capital	13.3	13.7	17.1	(11) 14.2	(11))13.0	17.2	(11)
ratio ^(e)								
Total	15.0	15.0	16.1	16.0		15.5	16.0	
d5p5 tal	15.3	15.9	16.1	16.0		15.5	16.0	
ratio ^(e) Tier								
1 8.2 leverage	8.2	8.3	8.4	8.5		8.2	8.5	
ratio ^(e)								
Supplemen	itary							
	6.5	6.5	6.6	6.7		6.5	6.7	
leverage 6.5 ratio	0.5	0.3	0.0	0.7		0.3	0.7	
("SLR(1))								
Selected								
balance								
sheet								
data (period-end	4)							
_								
Trading \$418,799 assets	\$412,282	\$381,844	\$420,418	\$407,064		\$418,799	\$407,064	
Investment 233,015 securities	238,188	249,958	263,288	263,458		233,015	263,458	

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		_	_						
9.48 ;4614	934,424	930,697	913,761		908,767		948,414	908,767	
Core 889,433 loans	870,536	863,683	843,432		834,935		889,433	834,935	
Average 877,640 loans	861,089	850,166	837,522		824,583		869,410	815,034	
Total 2,590,050 assets	2,609,785	2,533,600	2,563,074	ļ	2,563,17	4	2,590,050	2,563,174	4
Depastra2	1,486,961	1,443,982	1,439,027	,	1,439,47	3	1,452,122	2 1,439,47	3
Long-term 273 1 14 debt	274,449	284,080	288,582		292,973		273,114	292,973	
Common 2001/31901 der equity	·230,133	229,625	232,314		232,415		231,390	232,415	
Total 2657.1415/8 1der	·256,201	255,693	258,382		258,483		257,458	258,483	
equity Prease and I	253,707	252,539	251,503		249,257		252,942	249,257	
Credit quality metrics Allowance									
for \$14,367 credit	\$14,482	\$14,672	\$14,648		\$14,480		\$14,367	\$14,480	
losses Allowance for loan									
losses	1.44 %	% 1.47 %	61.49	%	1.49	%	1.41	%1.49	%
total retained									
loans									
Allowance									
for									
loan									
losses									
to 1le22Ined	1.25	1.27	1.29		1.28		1.22	1.28	
loans	1.23	1.27	1.29		1.20		1.22	1.20	
excluding									
purchased									
credit-impa	ired								
loans(g)	nea								
Nonperform \$5,767 assets	ning \$6,364	\$6,426	\$6,154		\$6,432		\$5,767	\$6,432	
Net 1,252 charge-offs	1,335	1,264	1,265		1,204		2,587	2,858	(i)
Net Ohtage-off// rate		%0.55 %	60.56	%	0.54	%	0.56	%0.65	%(i)
1410									

Effective January 1, 2018, the Firm adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

- (a) Based on daily prices reported by the New York Stock Exchange.
 - TBVPS and ROTCE are non-GAAP financial measures. For a further discussion of these measures, refer to
- (b) Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Performance Measures on pages 15–17.
- (c)Quarterly ratios are based upon annualized amounts.
- For the six months ended June 30, 2017, the balance represents the Firm's reported average LCR per the U.S. LCR public disclosure requirements effective April 1, 2017.
- Ratios presented are calculated under the Basel III Transitional capital rules and for the capital ratios represent the lower of the Standardized or Advanced approach as required by the Collins Amendment of the (e) Dodd-Frank Act (the "Collins Floor"). Refer to Capital Risk Management on pages 43–47 for additional information on Basel III and the Collins Floor.
- Effective January 1, 2018, the SLR was fully phased-in under Basel III. The SLR is defined as Tier 1 capital (f) divided by the Firm's total leverage exposure. Ratios prior to March 31, 2018 were calculated under the Basel III Transitional rules.
- Excluded the impact of residential real estate purchased credit-impaired ("PCI") loans, a non-GAAP financial measure. For a further discussion of these measures, refer to Explanation and Reconciliation of (g) the Firm's Use of Non-GAAP Financial Measures and Key Performance Measures on pages 15–17. For a further discussion, refer to Allowance for credit losses on pages 67–69.
- (h) The prior period ratios have been revised to conform with the current period presentation.
- Excluding net charge-offs of \$467 million related to the student loan portfolio sale, the net charge-off rates for the six months ended June 30, 2017 would have been 0.54%.

INTRODUCTION

The following is management's discussion and analysis ("MD&A") of the financial condition and results of operations of JPMorgan Chase & Co. ("JPMorgan Chase" or the "Firm") for the second quarter of 2018.

This Form 10-Q should be read together with JPMorgan Chase's Annual Report on Form 10-K for the year ended December 31, 2017 ("2017 Annual Report" or "2017 Form 10-K"), to which reference is hereby made, and which is referred to throughout this document. Refer to the Glossary of terms and acronyms and line of business metrics on pages 172–179 for definitions of terms and acronyms used throughout this Form 10-Q.

The MD&A included in this Form 10-Q contains statements that are forward-looking within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based on the current beliefs and expectations of JPMorgan Chase's management and are subject to significant risks and uncertainties. Actual results may differ from those set forth in the forward-looking statements. For a further discussion of certain of those risks and uncertainties and the factors that could cause JPMorgan Chase's actual results to differ materially because of those risks and uncertainties, refer to Forward-looking Statements on page 83 of this Form 10-Q and Part I, Item 1A, Risk Factors, on pages 8–26 of JPMorgan Chase's 2017 Annual Report.

JPMorgan Chase & Co., a financial holding company incorporated under Delaware law in 1968, is a leading global financial services firm and one of the largest banking institutions in the United States of America ("U.S."), with operations worldwide; the Firm had \$2.6 trillion in assets and \$257.5 billion in stockholders' equity as of June 30, 2018. The Firm is a leader in investment banking, financial

services for consumers and small businesses, commercial banking, financial transaction processing and asset management. Under the J.P. Morgan and Chase brands, the Firm serves millions of customers in the U.S. and many of the world's most prominent corporate, institutional and government clients.

JPMorgan Chase's principal bank subsidiaries are JPMorgan Chase Bank, National Association ("JPMorgan Chase Bank, N.A."), a national banking association with U.S. branches in 23 states, and Chase Bank USA, National Association ("Chase Bank USA, N.A."), a national banking association that is the Firm's principal credit card-issuing bank. JPMorgan Chase's principal nonbank subsidiary is J.P. Morgan Securities LLC ("J.P. Morgan Securities"), a U.S. broker-dealer. The bank and non-bank subsidiaries of JPMorgan Chase operate nationally as well as through overseas branches and subsidiaries, and representative offices. The Firm's principal operating subsidiary in the United Kingdom ("U.K.") is J.P. Morgan Securities plc, a subsidiary of JPMorgan Chase Bank, N.A.

For management reporting purposes, the Firm's activities are organized into four major reportable business segments, as well as a Corporate segment. The Firm's consumer business segment is the Consumer & Community Banking ("CCB"). The Firm's wholesale business segments are Corporate & Investment Bank ("CIB"), Commercial Banking ("CB"), and Asset & Wealth Management ("AWM"). For a description of the Firm's business segments and the products and services they provide to their respective

client bases, refer to Note 31 of JPMorgan Chase's 2017 Form 10-K.

EXECUTIVE OVERVIEW

This executive overview of the MD&A highlights selected information and may not contain all of the information that is important to readers of this Form 10-Q. For a complete description of the trends and uncertainties, as well as the risks and critical accounting estimates affecting the Firm and its various lines of business, this Form 10-Q and and the 2017 Form 10-K should be read in their entirety.

Effective January 1, 2018, the Firm adopted several new accounting standards, of which the most significant to the Firm are the guidance related to revenue recognition, and recognition and measurement of financial assets. The revenue recognition guidance required gross presentation of certain costs that were previously offset against revenue. This change was adopted retrospectively and, accordingly, prior period amounts were revised, resulting in both total net revenue and total noninterest expense increasing with no impact to net income. The adoption of the recognition and measurement guidance resulted in \$505 million of fair value gains, which were recorded in total net revenue in the first quarter of 2018, on certain equity investments that were previously held at cost. For additional information, refer to Note 1.

Financial performance of JPMorgan Chase												
(unaudited)	Three months ended June 30,					Six months ended June 30,						
As of or for the period ended,	2018		2017		Change		2018		2017		Chang	A
(in millions, except per share data and ratios)	2010		2017		Change		2010		2017		Chang	C
Selected income statement data												
Total net revenue	\$27,753	3	\$25,731		8	%	\$55,660)	\$50,670)	10	%
Total noninterest expense	15,971		14,767		8		32,051		30,050		7	
Pre-provision profit	11,782		10,964		7		23,609		20,620		14	
Provision for credit losses	1,210		1,215				2,375		2,530		(6)
Net income	8,316		7,029		18		17,028		13,477		26	
Diluted earnings per share	\$2.29		\$1.82		26		\$4.66		\$3.47		34	
Selected ratios and metrics												
Return on common equity	14	%	12	%			14	%	11	%		
Return on tangible common equity	17		14				18		14			
Book value per share	\$68.85		\$66.05		4		\$68.85		\$66.05		4	
Tangible book value per share	55.14		53.29		3		55.14		53.29		3	
Capital ratios ^(a)												
CET1 ^(b)	12.0	%	12.5	%			12.0	%	12.5	%		
Tier 1 capital ^(b)	13.6		14.2				13.6		14.2			
Total capital	15.5		16.0				15.5		16.0			

Ratios presented are calculated under the Basel III Transitional capital rules and represent the Collins Floor. Refer to Capital Risk Management on pages 43–47 for additional information on Basel III.

⁽b) The prior period ratios have been revised to conform with the current period presentation.

Comparisons noted in the sections below are calculated for the second quarter of 2018 versus the second quarter of 2017, unless otherwise specified.

Firmwide overview

JPMorgan Chase reported strong results in the second quarter of 2018 with record net income of \$8.3 billion, or \$2.29 per share, on net revenue of \$27.8 billion. The Firm reported ROE of 14% and ROTCE of 17%.

Net income increased 18%, reflecting higher net revenue and the impact of the lower U.S. federal statutory income tax rate as a result of the Tax Cuts & Jobs Acts ("TCJA"), partially offset by an increase in noninterest expense.

Total net revenue increased 8%. Net interest income was \$13.5 billion, up 10%, predominantly driven by the impact of higher rates and loan growth, partially offset by lower Markets net interest income. Noninterest revenue was \$14.3 billion, up 6%, driven by higher Markets revenue, investment banking fees and auto lease income, partially offset by lower Card net interchange income. Card net interchange income includes a rewards liability adjustment of approximately \$330 million, driven by an increase in redemption rate assumptions, partially offset by higher card sales volumes.

Noninterest expense was \$16.0 billion, up 8%, driven by higher performance-related compensation expense, investments in technology, auto lease depreciation, volume-related transaction costs, and a loss of \$174 million on the liquidation of a legal entity.

The provision for credit losses was \$1.2 billion, flat compared with the prior year.

The total allowance for credit losses was \$14.4 billion at June 30, 2018, and the Firm had a loan loss coverage ratio, excluding the PCI portfolio, of 1.22%, compared with 1.28% in the prior year. The Firm's nonperforming assets totaled \$5.8 billion at June 30, 2018, a decrease from \$6.4 billion in the prior year.

Firmwide average core loans increased 6%, and excluding CIB, core loans increased 7%.

Selected capital-related metrics

The Firm's Basel III Fully Phased-In CET1 capital was \$185 billion, and the Standardized and Advanced CET1 ratios were 12.0% and 12.8%, respectively.

The Firm's fully phased-in SLR was 6.5% at June 30, 2018.

The Firm continued to grow tangible book value per share ("TBVPS"), ending the second quarter of 2018 at \$55.14, up 3%.

ROTCE and TBVPS are each non-GAAP financial measures. Core loans and each of the Fully Phased-In capital and certain leverage measures are all considered key performance measures. For a further discussion of each of these measures, refer to Explanation and Reconciliation of the Firm's Use of Non-GAAP Financial Measures and Key Performance Measures on pages 15–17, and Capital Risk Management on pages 43–47.

Lines of business highlights

Selected business metrics for each of the Firm's four lines of business are presented below for the second quarter of 2018.

Average core loans up 7%; average deposits up 5%

CCB

ROE 26%

Client investment assets of \$284 billion, up 12%

Credit card sales volume up 11% and merchant processing volume up 12%

#1 Global Investment Banking fees with 8.6% wallet share year-to-date

CIB

ROE 17% Markets revenue up 13%, with Equity Markets revenue of \$2.0 billion, up 24%

Treasury Services and Securities Services revenue each up 12%

Treasury Services and Securities Services revenue each up 12%

CB

ROE 21% Average loan balances up 4%

•

Strong credit quality with 7 bps net charge-off rate

•

AWM Average loan balances up 12%

ROE 33%

Assets under management ("AUM") of \$2.0 trillion, up 8%

For a detailed discussion of results by line of business, refer to the Business Segment Results on pages 18–40. Credit provided and capital raised

JPMorgan Chase continues to support consumers, businesses and communities around the globe. The Firm provided credit and raised capital of \$1.4 trillion for wholesale and consumer clients during the first six months of 2018:

\$114 billion of credit for consumers

\$11 billion of credit for U.S. small businesses

\$470 billion of credit for corporations

\$743 billion of capital raised for corporate clients and non-U.S. government entities

\$26 billion of credit and capital raised for U.S. government and nonprofit entities, including states, municipalities, hospitals and universities.

Recent events

On June 28, 2018, the Federal Reserve informed the Firm that it did not object, on either a quantitative or qualitative basis, to the Firm's 2018 capital plan, submitted under the Comprehensive Capital Analysis and Review ("CCAR"). As a result, the Firm announced that the Board of Directors intends to increase the quarterly common stock dividend to \$0.80 per share (up from the current \$0.56 per share), effective the third quarter of 2018 and has authorized gross common equity repurchases of up to \$20.7 billion between July 1, 2018 and June 30, 2019 under a new common equity repurchase program.

2018 outlook

At this time the Firm is not updating the outlook provided in the first quarter 2018 Form 10-Q.

CONSOLIDATED RESULTS OF OPERATIONS

This section provides a comparative discussion of JPMorgan Chase's Consolidated Results of Operations on a reported basis for the three and six months ended June 30, 2018 and 2017, unless otherwise specified. Factors that relate primarily to a single business segment are discussed in more detail within that business segment. For a discussion of the Critical Accounting Estimates Used by the Firm that affect the Consolidated Results of Operations, refer to pages 77–79 of this Form 10-Q and pages 138–140 of JPMorgan Chase's 2017 Annual Report.

Effective January 1, 2018, the Firm adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

Revenue

	Three mo	onths ended	d June 30,	Six months ended June 30,			
(in millions)	2018	2017	Change	2018	2017	Change	e
Investment banking fees	\$2,168	\$1,846	17 %	\$3,904	\$3,726	5	%
Principal transactions	3,782	3,137	21	7,734	6,719	15	
Lending- and deposit-related fees	1,495	1,482	1	2,972	2,930	1	
Asset management, administration and commissions	4,304	4,047	6	8,613	7,924	9	
Investment securities losses	(80) (34	(135)	(325)	(37) NM	
Mortgage fees and related income	324	404	(20)	789	810	(3)
Card income	1,020	1,167	(13)	2,295	2,081	10	
Other income ^(a)	1,255	1,474	(15)	2,881	2,245	28	
Noninterest revenue	14,268	13,523	6	28,863	26,398	9	
Net interest income	13,485	12,208	10	26,797	24,272	10	
Total net revenue	\$27,753	\$25,731	8 %	\$55,660	\$50,670	10	%

(a) 2017, respectively, and \$2.2 billion and \$1.7 billion for the six months ended June 30, 2018 and 2017, respectively. Quarterly results

Investment banking fees increased reflecting higher equity underwriting and advisory fees. The increase in equity underwriting fees was driven by a higher share of fees, primarily due to strong performance in the IPO and convertible markets. The increase in advisory fees was driven by a higher number of large completed transactions. For additional information, refer to CIB segment results on pages 25–30 and Note 5.

Principal transactions revenue increased reflecting higher client-driven market-making revenue in CIB as a result of strength across products in Equity Markets, predominantly in derivatives and prime brokerage. Fixed Income Markets also recorded solid performance with good client activity. For additional information, refer to CIB segment results on pages 25–30, and Note 5.

For information on lending- and deposit-related fees, refer to the segment results for CCB on pages 20–24, CIB on pages 25–30, CB on pages 31–34 and Note 5.

Asset management, administration and commissions revenue increased reflecting:

higher asset management fees in AWM and CCB driven by net long-term product inflows and higher market levels, partially offset by fee compression in AWM

higher brokerage commissions driven by higher volumes and higher asset-based fees in CIB driven by net client inflows and higher market levels.

For additional information, refer to AWM, CCB and CIB segment results on pages 35–38, pages 20–24 and pages 25–30, respectively, and Note 5.

Investment securities losses increased primarily due to sales related to the repositioning of the investment securities portfolio. For further information on the investment securities portfolio, refer to the Corporate segment discussion on pages 39–40 and Note 9.

Mortgage fees and related income decreased driven by lower net production revenue, reflecting lower margins, and lower servicing revenue, partially offset by higher MSR risk management results.

For further information, refer to CCB segment results on pages 20–24 and Note 14.

Card income decreased driven by:

lower net interchange income reflecting higher rewards costs and partner payments, partially offset by higher card sales volumes. The rewards costs included an adjustment to the credit card rewards liability of approximately \$330 million driven by an increase in redemption rate assumptions

the lower net interchange income was largely offset by

lower new account origination costs

higher merchant processing fees reflecting higher merchant processing volumes.

For further information, refer to CCB segment results on pages 20–24 and Note 5.

Other income reflects:

higher operating lease income from growth in auto operating lease volume in CCB

which was more than offset by

the absence of a \$645 million legal benefit in Corporate related to a settlement with the FDIC receivership for Washington Mutual and with Deutsche Bank as trustee to certain Washington Mutual trusts.

For further information, refer to Note 5.

Net interest income increased primarily driven by the net impact of higher rates and loan growth across the businesses, partially offset by declines in Markets net interest income in CIB. The Firm's average interest-earning assets were \$2.2 trillion, up \$45 billion from the prior year, and the net interest yield on these assets, on a fully taxable equivalent ("FTE") basis, was 2.46%, an increase of 15 basis points from the prior year.

Year-to-date results

Investment banking fees increased reflecting:

higher advisory and equity underwriting fees in CIB. The increase in advisory fees was driven by a higher number of large completed transactions. The increase in equity underwriting fees was driven by a higher share of fees, primarily due to strong performance in the IPO market

partially offset by

lower debt underwriting fees primarily driven by declines in industry-wide fee levels and a lower share in leveraged finance.

Principal transactions revenue increased primarily reflecting:

higher client-driven market-making revenue in CIB driven by strength across products in Equity Markets, predominantly derivatives and prime brokerage. Fixed Income Markets also recorded strong performance in Commodities and Currencies & Emerging Markets, largely offset by lower revenue in Credit the increase in client-driven market-making revenue in CIB was partially offset by

private equity losses of \$45 million compared with gains of \$153 million in the prior year on legacy investments in Corporate.

Asset management, administration and commissions revenue increased reflecting:

higher asset management fees in AWM and CCB driven by net long-term product inflows and higher market levels, partially offset by fee compression in AWM

higher brokerage commissions driven by higher volumes in CIB and AWM, and higher asset-based fees in CIB driven by net client inflows and higher market levels.

Investment securities losses increased primarily due to sales related to the repositioning of the investment securities portfolio.

Mortgage fees and related income decreased driven by lower net production revenue, reflecting lower margins, and lower servicing revenue, predominantly offset by higher MSR risk management results.

Card income increased driven by:

Nower new account origination costs

higher merchant processing fees reflecting higher merchant processing volumes

largely offset by

lower net interchange income reflecting higher rewards costs and partner payments, largely offset by higher card sales volumes. The rewards costs included an adjustment to the credit card rewards liability of approximately \$330 million driven by an increase in redemption rate assumptions.

Other income increased reflecting:

fair value gains of \$505 million recognized in the first quarter of 2018 related to the adoption of the new recognition and measurement accounting guidance for certain equity investments previously held at cost

higher operating lease income from growth in auto operating lease volume in CCB partially offset by

the absence of a legal benefit of \$645 million in Corporate related to a settlement with the FDIC receivership for Washington Mutual and with Deutsche Bank as trustee to certain Washington Mutual trusts.

Net interest income increased primarily driven by the net impact of higher rates and loan growth across the businesses, partially offset by declines in Markets net interest income in CIB. The Firm's average interest-earning assets were \$2.2 trillion, up \$44 billion from the prior year, and the net interest yield on these assets, on a FTE basis, was 2.47%, an increase of 15 basis points from the prior year.

Provision for credit losses

Three months ended June 30. Six months ended June 30.

				'			,
(in millions)	2018	2017	Change	2018	2017	Change	e
Consumer, excluding credit card	\$(56)	\$12	NM	\$90	\$454	(80)%
Credit card	1,164	1,387	(16)%	2,334	2,380	(2)
Total consumer	1,108	1,399	(21)	2,424	2,834	(14)
Wholesale	102	(184)	NM	(49)	(304)	84	
Total provision for credit losses	\$1,210	\$1,215	%	\$2,375	\$2,530	(6)%
Quarterly results							

The provision for credit losses was flat as a result of:

a decrease in the consumer provision predominantly reflecting

no addition to the allowance for credit losses in CCB in the current quarter, compared with a net addition in the prior year primarily in the credit card portfolio

lower net charge-offs, primarily in the residential real estate portfolio, which includes a recovery from a loan sale, and reflects the continued improvement in home prices and delinquencies, predominantly offset by an increase in net charge-offs in the credit card portfolio due to seasoning of newer vintages, in line with expectations the decrease in the consumer provision was offset by

an increase in the wholesale provision reflecting

a net expense in the current period as a result of net portfolio activity, including new exposures and loan sales, eompared with a net benefit in the prior year driven by a reduction in the allowance for credit losses in the Oil & Gas, Natural Gas Pipelines, and Metals and Mining portfolios.

For a more detailed discussion of the credit portfolio and the allowance for credit losses, refer to the segment discussions of CCB on pages 20–24, CIB on pages 25–30, CB on pages 31–34, the Allowance for Credit Losses on pages 67–69 and Note 12.

Year-to-date results

The provision for credit losses decreased as a result of:

a lower consumer provision predominantly reflecting

 \overline{y} no addition to the allowance for credit losses in CCB in the current year, compared with a net addition in the prior \overline{y} year primarily in the credit card portfolio

partially offset by

higher net charge-offs in the credit card portfolio due to seasoning of newer vintages, in line with expectations. These were largely offset by lower net charge-offs in the residential real estate portfolio, which includes a recovery from a loan sale and reflects the continued improvement in home prices and delinquencies

the prior year included a \$218 million write-down recorded in connection with the sale of the student loan portfolio the decrease in the consumer provision was partially offset by

- a lower net benefit in the wholesale provision reflecting
 - a net benefit in the current period, primarily driven by a single name in the Oil & Gas portfolio, partially offset
- by other net portfolio activity, compared with a net benefit in the prior year, driven by a reduction in the allowance for credit losses in the Oil & Gas, Natural Gas Pipelines, and Metals and Mining portfolios.

Noninterest expense

•	Three m	onths end	led June 30,	Six months ended June 30,			
(in millions)	2018	2017	Change	2018	2017	Change	
Compensation expense	\$8,338	\$7,757	7 %	\$17,200	\$16,013	7 %	
Noncompensation expense:							
Occupancy	981	912	8	1,869	1,873	_	
Technology, communications and equipment	2,168	1,871	16	4,222	3,705	14	

Professional and outside services	2,126	1,899	12		4,247	3,691	15	
Marketing	798	756	6		1,598	1,469	9	
Other expense ^{(a)(b)}	1,560	1,572	(1)	2,915	3,299	(12)
Total noncompensation expense	7,633	7,010	9		14,851	14,037	6	
Total noninterest expense	\$15,971	\$14,767	8	%	\$32,051	\$30,050	7	%

Included Firmwide legal expense \$15,971 \$14,767 8 % \$32,051 \$30,050 7 % Included Firmwide legal expense of \$61 million for the three months ended June 30, 2017, and \$70 million and (a) \$279 million for the six months ended June 30, 2018 and 2017, respectively; there was no legal expense for the three months ended June 30, 2018.

Included FDIC-related expense of \$368 million and \$376 million for the three months ended June 30, 2018 and (b) 2017, respectively and \$751 million and \$757 million for the six months ended June 30, 2018 and 2017, respectively.

Ouarterly results

Compensation expense increased driven by investments in headcount across the businesses, including bankers, advisors and business-related support staff; and higher performance-related compensation expense predominantly in CIB.

Noncompensation expense increased as a result of:

higher outside services expense primarily due to higher volume-related transaction costs in CIB and higher external fees on revenue growth in AWM

higher depreciation expense due to growth in auto operating lease volume in CCB

a loss of \$174 million recorded in other expense in Corporate on the liquidation of a legal entity

higher investments in technology

For additional information on the liquidation of a legal entity, refer to Note 17.

Year-to-date results

Compensation expense increased driven by investments in headcount across the businesses, including bankers, advisors and business-related support staff, and higher performance-related compensation expense predominantly in CIB.

Noncompensation expense increased as a result of:

higher outside services expense primarily due to higher volume-related transaction costs in CIB and higher external fees on revenue growth in AWM

higher depreciation expense due to growth in auto operating lease volume in CCB

a loss of \$174 million recorded in other expense in Corporate on the liquidation of a legal entity

higher investments in technology

partially offset by

lower legal expense

For a discussion of legal expense, refer to Note 22.

Income tax expense

	Three mon	ths ended.	June 30,	Six months ended June 30,						
(in millions)	2018	2017	Change	2018	2017	Change				
Income before income tax expense	\$10,572	\$9,749	8 %	\$21,234	\$18,090	17 %				
Income tax expense	2,256	2,720	(17)	4,206	4,613	(9)				
Effective tax rate	21.3 %	27.9 %		19.8 %	25.5 %					
Quarterly results										

Quarterly results

The effective tax rate decreased due to the TCJA, including the reduction in the U.S. federal statutory income tax rate as well as a \$189 million tax benefit resulting from a change in the estimate for the deemed repatriation tax on non-U.S. earnings. The decrease was partially offset by the change in mix of income and expense subject to U.S. federal, state and local taxes.

Year-to-date results

The effective tax rate decreased due to the TCJA, including the reduction in the U.S. federal statutory income tax rate as well as a \$189 million tax benefit recorded in the second quarter of 2018 resulting from a change in the estimate for the deemed repatriation tax on non-U.S. earnings. The decrease was partially offset by higher pre-tax income, and the change in mix of income and expense subject to U.S. federal, state and local taxes.

CONSOLIDATED BALANCE SHEETS AND CASH FLOWS

ANALYSIS

Effective January 1, 2018, the Firm adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

Consolidated balance sheets analysis

The following is a discussion of the significant changes between June 30, 2018, and December 31, 2017. Selected Consolidated balance sheets data

(in millions)	Jun 30, 2018	Dec 31, 2017	Chang	ge
Assets				
Cash and due from banks	\$23,680	\$25,898	(9)%
Deposits with banks	381,500	405,406	(6)
Federal funds sold and securities purchased under resale agreements	226,505	198,422	14	
Securities borrowed	108,246	105,112	3	
Trading assets:				
Debt and equity instruments	360,289	325,321	11	
Derivative receivables	58,510	56,523	4	
Investment securities	233,015	249,958	(7)
Loans	948,414	930,697	2	
Allowance for loan losses	(13,250	(13,604)(3)
Loans, net of allowance for loan losses	935,164	917,093	2	
Accrued interest and accounts receivable	75,669	67,729	12	
Premises and equipment	14,132	14,159	_	
Goodwill, MSRs and other intangible assets	54,535	54,392		
Other assets	118,805	113,587	5	
Total assets	\$2,590,050	\$2,533,600	2	%

Cash and due from banks and deposits with banks decreased primarily as a result of net long-term debt maturities and a shift in the deployment of excess cash from deposits with banks into securities purchased under resale agreements. The Firm's excess cash is largely placed with various central banks, predominantly Federal Reserve Banks. Federal funds sold and securities purchased under resale agreements increased primarily due to higher client activity in CIB and the shift in the deployment of excess cash from deposits with banks into securities purchased under resale agreements. For additional information on the Firm's Liquidity Risk Management, refer to pages 48–52. Trading assets-debt and equity instruments increased predominantly as a result of client-driven market-making activities in CIB, primarily debt instruments in Fixed Income Markets, and equity instruments in prime brokerage, driven by higher client demand. For additional information, refer to Notes 2 and 4. Investment securities decreased primarily reflecting net sales, paydowns and maturities of U.S. government agency mortgage-backed securities ("MBS"), commercial MBS, and obligations of U.S. states and municipalities. For additional information on Investment securities, refer to Corporate segment results on pages 39–40, Investment

Loans increased reflecting:

Portfolio Risk Management on page 70, and Notes 2 and 9.

higher wholesale loans across all lines of business, predominantly driven by CIB, including loans to financial institution and commercial and industrial clients, and in AWM due to higher loans to international and domestic Private Banking clients partially offset by

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lower consumer loans driven by the seasonal decline in credit card balances, paydown of home equity loans, run-off of PCI loans, and a mortgage loan sale, predominantly offset by higher retention of high-quality prime mortgages in CCB and AWM.

The allowance for loan losses decreased reflecting:

a net reduction in the wholesale allowance primarily in the Oil & Gas portfolio driven by a single name the consumer allowance was relatively flat.

For a detailed discussion of loans and the allowance for loan losses, refer to Credit Risk Management on pages 53–70, and Notes 2, 3, 11 and 12.

Accrued interest and accounts receivable increased primarily reflecting higher client receivables related to client-driven activities in CIB.

Other assets increased largely reflecting higher auto operating lease assets from growth in business volume in CCB. For information on Goodwill and MSRs, refer to Note 14.

Selected Consolidated balance sheets data (continued)

(in millions)	Jun 30, 2018	Dec 31, 2017	Change)
Liabilities				
Deposits	\$1,452,122	\$1,443,982	21	%
Federal funds purchased and securities loaned or sold under repurchase agreements	175,293	158,916	10	
Short-term borrowings	63,918	51,802	23	
Trading liabilities:				
Debt and equity instruments	107,327	85,886	25	
Derivative payables	42,511	37,777	13	
Accounts payable and other liabilities	196,984	189,383	4	
Beneficial interests issued by consolidated variable interest entities ("VIEs")	21,323	26,081	(18)
Long-term debt	273,114	284,080	(4)
Total liabilities	2,332,592	2,277,907	2	
Stockholders' equity	257,458	255,693	1	
Total liabilities and stockholders' equity	\$2,590,050	\$2,533,600)2	%

Deposits increased due to:

higher deposits in the consumer business reflecting the continuation of growth from new and existing customers and low attrition rates in CCB, partially offset by balance migration as customers shift from deposits largely into the Firm's investment-related products; and in the wholesale business reflecting an increase in CIB's Treasury Services business driven by growth in client activity

partially offset by

lower deposits in the other wholesale businesses primarily driven by the impact of seasonality in CB and AWM, and balance migration in AWM predominantly into the Firm's investment-related products.

For more information, refer to the Liquidity Risk Management discussion on pages 48–52; and Notes 2 and 15.

Federal funds purchased and securities loaned or sold under repurchase agreements increased reflecting higher secured financing of trading assets-debt and equity instruments, partially offset by a change in the mix of funding to short-term borrowings in CIB.

Short-term borrowings increased driven by a change in

the mix of funding for CIB activities from securities sold under repurchase agreements to short-term borrowings, and the net issuance of commercial paper. For additional information, refer to Liquidity Risk Management on pages 48–52.

Trading liabilities—debt and equity instruments increased predominantly as a result of client-driven market-making activities in CIB, primarily debt instruments in Fixed Income Markets, and equity instruments in prime brokerage. For additional information, refer to Note 2.

Trading liabilities—derivative payables increased predominantly as a result of client-driven market-making activities in CIB Markets, which increased equity and interest rate derivative payables. For additional information, refer to Derivative contracts on pages 65–66, and Notes 2 and 4.

Beneficial interests issued by consolidated VIEs decreased due to net maturities of credit card securitizations. For further information on Firm-sponsored VIEs and loan securitization trusts, refer to Off-Balance Sheet Arrangements on page 14 and Notes 13 and 20.

Long-term debt decreased primarily driven by lower Federal Home Loan Bank ("FHLB") advances and net maturities of senior debt. For additional information on the Firm's long-term debt activities, refer to Liquidity Risk Management on pages 48–52.

For information on changes in stockholders' equity, refer to page 87, and on the Firm's capital actions, refer to Capital actions on pages 46–47.

Consolidated cash flows analysis

The following is a discussion of cash flow activities during the six months ended June 30, 2018 and 2017.

	Six months ended				
(in millions)	June 30,				
	2018 2017				
Net cash provided by/(used in)					
Operating activities	\$576 \$(18,486)				
Investing activities	(38,974) 24,539				
Financing activities	13,766 47,911				
Effect of exchange rate changes on cash	(1,492) 5,408				
Net increase/(decrease) in cash and due from banks and deposits with banks	\$(26,124) \$59,372				
Operating activities					

Operating activities

In 2018, cash provided primarily reflected increased trading liabilities-debt and equity instruments and accounts payable and other liabilities, offset by increases in trading assets-debt and equity instruments.

In 2017, cash used primarily reflected increases in trading assets-debt and equity instruments and accrued interest and accounts receivable, and decreases in trading liabilities-derivative payables, and accounts payable and other liabilities, partially offset by a decrease in other assets.

Investing activities

In 2018, cash used reflected an increase in securities purchased under resale agreements and higher net loans originated, partially offset by lower investment securities.

In 2017, cash provided reflected a decrease in securities purchased under resale agreements and lower investment securities, partially offset by a net increase in loan originations.

Financing activities

In 2018, cash provided reflected higher securities loaned or sold under repurchase agreements, short-term borrowings and deposits, partially offset by a decrease in long-term borrowings.

In 2017, cash provided reflected higher deposits, and short-term borrowings, partially offset by a decrease in long-term borrowings.

Additionally, for both periods, cash was used for repurchases of common stock and dividends on common and preferred stock.

For a further discussion of the activities affecting the Firm's cash flows, refer to Consolidated Balance Sheets Analysis on pages 11–13, Capital Risk Management on pages 43–47, and Liquidity Risk Management on pages 48–52 of this Form 10-Q, and pages 92–97 of JPMorgan Chase's 2017 Annual Report.

OFF-BALANCE SHEET

ARRANGEMENTS

In the normal course of business, the Firm enters into various contractual obligations that may require future cash payments. Certain obligations are recognized on-balance sheet, while others are off-balance sheet under accounting principles generally accepted in the U.S. ("U.S. GAAP").

The Firm is involved with several types of off-balance sheet arrangements, including through nonconsolidated special-purpose entities ("SPEs"), which are a type of VIE, and through lending-related financial instruments (e.g., commitments and guarantees).

The Firm holds capital, as deemed appropriate, against all SPE-related transactions and related exposures, such as derivative transactions and lending-related commitments and guarantees.

The Firm has no commitments to issue its own stock to support any SPE transaction, and its policies require that transactions with SPEs be conducted at arm's length and reflect market pricing. Consistent with this policy, no JPMorgan Chase employee is permitted to invest in SPEs with which the Firm is involved where such investment would violate the Firm's Code of Conduct.

The table below provides an index of where in this Form 10-Q a discussion of the Firm's various off-balance sheet arrangements can be found. In addition, refer to Note 1 for information about the Firm's consolidation policies.

Type of off-balance sheet arrangement	Location of disclosure	Page references
Special-purpose entities: variable interests and other obligations, including contingent obligations, arising from variable interests in nonconsolidated VIEs	Refer to Note 1	3 145-150
Off-balance sheet lending-related financial instruments, guarantees, and other commitments	Refer to Note 2	0 159-162

EXPLANATION AND RECONCILIATION OF THE FIRM'S USE OF NON-GAAP FINANCIAL MEASURES AND KEY PERFORMANCE MEASURES

Non-GAAP financial measures

The Firm prepares its Consolidated Financial Statements using U.S. GAAP; these financial statements appear on pages 84–88. That presentation, which is referred to as "reported" basis, provides the reader with an understanding of the Firm's results that can be tracked consistently from year-to-year and enables a comparison of the Firm's performance with other companies' U.S. GAAP financial statements.

In addition to analyzing the Firm's results on a reported basis, management reviews Firmwide results, including the overhead ratio, on a "managed" basis; these Firmwide managed basis results are non-GAAP financial measures. The Firm also reviews the results of the lines of business on a managed basis. The Firm's definition of managed basis starts, in each case, with the reported U.S. GAAP results and includes certain reclassifications to present total net revenue for the Firm (and each of the reportable business segments) on an FTE basis. Accordingly, revenue from investments that receive tax credits and tax-exempt securities is presented in the managed results on a basis comparable to taxable investments and securities. These financial measures allow management to assess the comparability of revenue from year-to-year arising from

both taxable and tax-exempt sources. The corresponding income tax impact related to tax-exempt items is recorded within income tax expense. These adjustments have no impact on net income as reported by the Firm as a whole or by the lines of business.

Management also uses certain non-GAAP financial measures at the Firm and business-segment level, because these other non-GAAP financial measures provide information to investors about the underlying operational performance and trends of the Firm or of the particular business segment, as the case may be, and, therefore, facilitate a comparison of the Firm or the business segment with the performance of its relevant competitors. For additional information on these non-GAAP measures, refer to Business Segment Results on pages 18–40.

Additionally, certain credit metrics and ratios disclosed by the Firm exclude PCI loans, and are therefore non-GAAP measures. For additional information on these non-GAAP measures, refer to Credit and Investment Risk Management on pages 53–70.

Non-GAAP financial measures used by the Firm may not be comparable to similarly named non-GAAP financial measures used by other companies.

The following summary tables provide a reconciliation from the Firm's reported U.S. GAAP results to managed basis.

Three months ended June 30

	I nree months ended June 30,									
	2018			2017						
(in millions, except ratios)	Reported results	Fully taxable-equivalent adjustments ^{(a)(b)}	Managed basis	Reported results	Fully taxable-equivalent adjustments ^(a)	Managed basis				
Other income	\$1,255	\$ 474	\$1,729	\$1,474	\$ 596	\$2,070				
Total noninterest revenue	14,268	474	14,742	13,523	596	14,119				
Net interest income	13,485	161	13,646	12,208	339	12,547				
Total net revenue	27,753	635	28,388	25,731	935	26,666				
Pre-provision profit	11,782	635	12,417	10,964	935	11,899				
Income before income tax expense	10,572	635	11,207	9,749	935	10,684				
Income tax expense	\$2,256	\$ 635	\$2,891 \$2,720		\$ 935	\$3,655				
Overhead ratio	58 %	NM	56 %	57 %	NM	55 %				
		ns ended June 30,		2017						
	2018	T 11		2017	D 11					
(in millions, except ratios)	Reported results	Fully taxable-equivalent adjustments ^{(a)(b)}	Managed basis	Reported results	Fully taxable-equivalent adjustments ^(a)	Managed basis				
Other income	\$2,881	\$ 929	\$3,810	\$2,245	\$ 1,178	\$3,423				

Total noninterest revenue	28,863	929	29,792	26,398	1,178	27,576
	,		,	,	*	,
Net interest income	26,797	319	27,116	24,272	668	24,940
Total net revenue	55,660	1,248	56,908	50,670	1,846	52,516
Pre-provision profit	23,609	1,248	24,857	20,620	1,846	22,466
Income before income tax expense	21,234	1,248	22,482	18,090	1,846	19,936
Income tax expense	\$4,206	\$ 1,248	\$5,454	\$4,613	\$ 1,846	\$6,459
Overhead ratio	58 %	NM	56 %	59 %	NM	57 %

Effective January 1, 2018, the Firm adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

⁽a) Predominantly recognized in CIB and CB business segments and Corporate.

The decrease in fully taxable-equivalent adjustments in the three and six months ended June 30, 2018, reflects the impact of the TCJA.

Net interest income excluding CIB's Markets businesses

In addition to reviewing net interest income on a managed basis, management also reviews net interest income excluding net interest income arising from CIB's Markets businesses to assess the performance of the Firm's lending, investing (including asset-liability management) and deposit-raising activities. This net interest income is referred to as non-markets related net interest income. CIB's Markets businesses are Fixed Income Markets and

Equity Markets. Management believes that disclosure of non-markets related net interest income provides investors and analysts with another measure by which to analyze the non-markets-related business trends of the Firm and provides a comparable measure to other financial institutions that are primarily focused on lending, investing and deposit-raising activities.

The data presented below are non-GAAP financial measures due to the exclusion of markets-related net interest income arising from CIB.

	Three month	s ended June	e 30,			Six months ended June 30,					
(in millions, except rates)	2018	2017	Ch	nange		2018	2017		Cha	nge	
Net interest income – managed basi(s)(b)	\$13,646	\$12,547	9		%	\$27,116	\$24,940		9	%	
Less: CIB Markets net interest income ^(c)	754	1,075	(30	0))	1,784	2,439		(27)	
Net interest income excluding CIB Markets ^(a)	\$12,892	\$11,472	12			\$25,332	\$22,501		13		
Average interest-earning assets	\$2,222,277	\$2,177,109	2			\$2,212,897	\$2,169,055	5	2		
Less: Average CIB Markets interest-earning assets ^(c)	611,432	537,263	14	•		601,544	530,051		13		
Average interest-earning assets excluding CIB Markets	\$1,610,845	\$1,639,846	5 (2))%	\$1,611,353	\$1,639,004	4	(2)%	
Net interest yield on average interest-earning assets – managed basis	2.46	62.31	%			2.47	%2.32	%			
Net interest yield on average CIB Markets interest-earning assets ^(c)	0.49	0.80				0.60	0.93				
Net interest yield on average interest-earning assets excluding CIB Markets	3.21	% 2.81	%			3.17	%2.77	%			

⁽a) Interest includes the effect of related hedges. Taxable-equivalent amounts are used where applicable.

⁽b) For a reconciliation of net interest income on a reported and managed basis, refer to reconciliation from the Firm's reported U.S. GAAP results to managed basis on page 15.

⁽c) For further information on CIB's Markets businesses, refer to page 29.

Tangible common equity, ROTCE and TBVPS

Tangible common equity ("TCE"), ROTCE and TBVPS are each non-GAAP financial measures. TCE represents the Firm's common stockholders' equity (i.e., total stockholders' equity less preferred stock) less goodwill and identifiable intangible assets (other than MSRs), net of related deferred tax liabilities. ROTCE measures the Firm's net income

applicable to common equity as a percentage of average TCE. TBVPS represents the Firm's TCE at period-end divided by common shares at period-end. TCE, ROTCE, and TBVPS are utilized by the Firm, as well as investors and analysts, in assessing the Firm's use of equity.

The following summary table provides a reconciliation from the Firm's common stockholders' equity to TCE.

	Period-er	nd	Average								
	Jun 30,	Dec 31,	Three mo	nths ended	1	Six mont	hs ended June				
(in millions, except per share and ratio data)	2018	2017	June 30,			30,					
	2010	2017	2018	2017		2018	2017				
Common stockholders' equity	\$231,390	\$229,625	\$228,901	\$230,20	00	\$228,261	\$228,959				
Less: Goodwill	47,488	47,507	47,494	47,290		47,499	47,292				
Less: Other intangible assets	806	855	822	838		833	845				
Add: Certain Deferred tax liabilities ^{(a)(b)}	2,227	2,204	2,221	3,239		2,216	3,234				
Tangible common equity	\$185,323	\$\$183,467	\$182,806	\$185,31	l 1	\$182,145	\$184,056				
Return on tangible common equity	NA	NA	17	% 14	%	18	% 14 %				
Tangible book value per share	\$55.14	\$53.56	NA	NA		NA	NA				

⁽a) Represents deferred tax liabilities related to tax-deductible goodwill and to identifiable intangibles created in nontaxable transactions, which are netted against goodwill and other intangibles when calculating TCE.

 $(b) Includes \ the \ effect \ from \ the \ revaluation \ of \ the \ Firm's \ net \ deferred \ tax \ liability \ as \ a \ result \ of \ the \ TCJA.$

Key performance measures

The Firm considers the following to be key regulatory capital measures:

Capital, risk-weighted assets ("RWA"), and capital and leverage ratios presented under Basel III Standardized and Advanced Fully Phased-In rules, and

SLR calculated under Basel III Advanced Fully Phased-In rules.

The Firm, as well as banking regulators, investors and analysts use these measures to assess the Firm's regulatory capital position and to compare the Firm's regulatory capital to that of other financial services companies. For additional information on these measures, refer to Capital Risk Management on pages 43–47.

Core loans are also considered a key performance measure. Core loans represent loans considered central to the Firm's ongoing businesses; and exclude loans classified as trading assets, runoff portfolios, discontinued portfolios and portfolios the Firm has an intent to exit. Core loans is a measure utilized by the Firm and its investors and analysts in assessing actual growth in the loan portfolio.

BUSINESS SEGMENT RESULTS

The Firm is managed on a line of business basis. There are four major reportable business segments – Consumer & Community Banking, Corporate & Investment Bank, Commercial Banking and Asset & Wealth Management. In addition, there is a Corporate segment.

The business segments are determined based on the products and services provided, or the type of customer served, and they reflect the manner in which financial information is currently evaluated by management. Results of these lines of business are presented on a managed basis. For a definition of managed basis, refer to Explanation and Reconciliation of the Firm's use of Non-GAAP Financial Measures and Key Performance Measures on pages 15–17.

Description of business segment reporting methodology

Results of the business segments are intended to present each segment as if it were a stand-alone business. The management reporting process that derives business segment results includes the allocation of certain income and expense items. For further information about line of business capital, refer to Line of business equity on page 46. The Firm periodically assesses the assumptions, methodologies and reporting classifications used for segment reporting, and further refinements may be implemented in future periods.

Business segment capital allocation

The amount of capital assigned to each business is referred to as equity. On at least an annual basis, the Firm assesses the level of capital required for each line of business as well as the assumptions and methodologies used to allocate capital. For additional information on business segment capital allocation, refer to Line of business equity on pages 88-89 of JPMorgan Chase's 2017 Annual Report.

For a further discussion of those methodologies, refer to Business Segment Results – Description of business segment reporting methodology on pages 55–56 of JPMorgan Chase's 2017 Annual Report.

Segment results – managed basis

Effective January 1, 2018, the Firm adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

Net income in 2018 for the business segments reflects the favorable impact of the reduction in the U.S. federal statutory income tax rate as a result of the TCJA.

The following tables summarize the business segment results for the periods indicated.

The following tubles summarize to	ic odsine	255 505111	ent resur	15 10							
Three months ended June 30,	Total ne	et revenu	ıe		expense	oninteres e	il	Pre-provision profit/(loss)			
(in millions)	2018	2017	Change	;	2018	2017	Change	2018	2017	Change	е
Consumer & Community Banking	\$12,49	7\$11,41	210	%	\$6,879	\$6,500		\$5,618	\$4,912	14	%
Corporate & Investment Bank	9,923	8,925	11		5,403	4,877	11	4,520	4,048	12	
Commercial Banking	2,316	2,088	11		844	790	7	1,472	1,298	13	
Asset & Wealth Management	3,572	3,437	4		2,566	2,417	6	1,006	1,020	(1)
Corporate	80	804	(90)	279	183	52	(199)621	NM	
Total	\$28,388	3\$26,66	66	%	\$15,97	1\$14,76	78	\$12,417	7 \$11,899)4	%
Three months ended June 30,	Provisi	on for cr	edit losse	es	Net inc	ome/(los	61	Return or equity	n		
(in millions, except ratios)	2018	2017	Change		2018	2017	Change 2		017		
Consumer & Community Banking			_			\$2,223		26 %1			
Corporate & Investment Bank	58)NM		3,198	2,710		17 1.	5		
Commercial Banking	43	•)NM		1,087	-		21 1	7		
Asset & Wealth Management	2	4	(50)	755	624	21 3	33 2	7		
Corporate	(1)—	NM		(136)570	NM I	NM N	M		
Total	\$1,210	\$1,215			\$8,316	\$7,029	18	14 %1	2 %		
Six months ended June 30,		et reveni]		ninterest		Pre-pr	ovision pr	ofit/(los	ss)
(in millions)	2018	2017	Chang				Change	2018	2017	Chang	ge
Consumer & Community Banking	\$25,09	4 \$22,3	_			\$12,8957	7 9	% \$11,30	06 \$9,487	7 19	
Corporate & Investment Bank	20,406	18,52	4 10	1	11,062	10,061	10	9,344	8,463	10	
Commercial Banking	4,482	4,106	9	1	1,688	1,615	5	2,794	2,491	12	
Asset & Wealth Management	7,078	6,725	5	5	5,147	5,198 ((1)	1,931	1,527	26	
Corporate	(152)779	NM	3	366	281 3	30	(518)498	NM	
Total	\$56,90	8 \$52,5	168	\$	32,051	\$30,0507	7 %	6 \$24,83	57 \$22,46	6611	
Six months and ad June 20	Descrisi	on for or	adit lass	20	Not in a	ama/(1aa	a)	Return	on		
Six months ended June 30,	PIOVISI	on for Ci	edit losse	28	Net IIIC	ome/(los	8)	equity			
(in millions, except ratios)	2018	2017	Change		2018	2017	Change	e 2018	2017		
Consumer & Community Banking	\$2,425	\$2,824	(14)%	\$6,738	\$4,21	1 60	26 %	616 %		
Corporate & Investment Bank	(100)(149)33		7,172	5,951	21	20	16		
Commercial Banking	38	(167)NM		2,112	1,701	24	20	16		
Asset & Wealth Management	17	22	(23)	1,525	1,009	51	33	22		
Corporate	(5)—	NM		(519)605	NM	NM	NM		
Total	\$2,375	\$2,530	(6)%	\$17,02	8 \$13,47	7726		611 %		
TD1 C 11 ' .' '1							4.	c c			

The following sections provide a comparative discussion of business segment results as of or for the three and six months ended June 30, 2018 versus the corresponding period in the prior year, unless otherwise specified.

CONSUMER & COMMUNITY

BANKING

For a discussion of the business profile of CCB, refer to pages 57-61 of JPMorgan Chase's 2017 Annual Report and Line of Business Metrics on page 177.

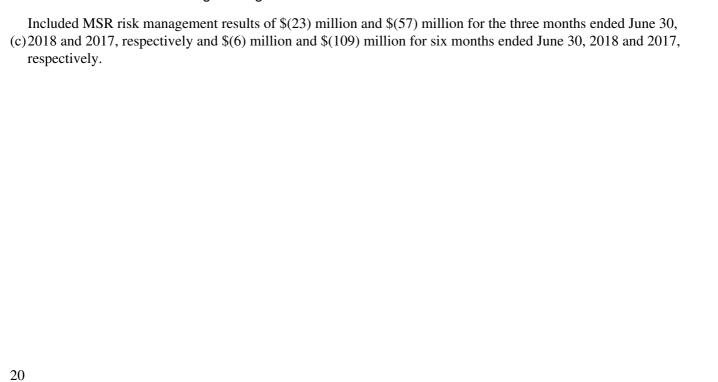
Selected income statement data

	Three n	noı	nths end	ded	June 3	30,	Six months ended June 30,				
(in millions, except ratios)	2018		2017		Chang	ge	2018	2017		Ch	ange
Revenue											
Lending- and deposit-related fees	\$875		\$850		3	%	\$1,732	\$1,662		4	%
Asset management, administration and commissions	591		562		5		1,166	1,101		6	
Mortgage fees and related income	324		401		(19)	789	807		(2)
Card income	910		1,061		(14)	2,080	1,878		11	
All other income	1,048		810		29		2,120	1,553		37	
Noninterest revenue	3,748		3,684		2		7,887	7,001		13	
Net interest income	8,749		7,728		13		17,207	15,381		12	
Total net revenue	12,497		11,412	,	10		25,094	22,382		12	
Provision for credit losses	1,108		1,394		(21)	2,425	2,824		(14	.)
Noninterest expense											
Compensation expense ^(a)	2,621		2,504		5		5,281	5,030		5	
Noncompensation expense ^{(a)(b)}	4,258		3,996		7		8,507	7,865		8	
Total noninterest expense	6,879		6,500		6		13,788	12,895		7	
Income before income tax expense	4,510		3,518		28		8,881	6,663		33	
Income tax expense	1,098		1,295		(15)	2,143	2,452		(13)
Net income	\$3,412		\$2,223	3	53		\$6,738	\$4,211		60	
Revenue by line of business											
Consumer & Business Banking	\$6,131		\$5,233	3	17		\$11,853	\$10,139)	17	
Home Lending	1,347		1,426		(6)	2,856	2,955		(3)
Card, Merchant Services & Auto	5,019		4,753		6		10,385	9,288		12	,
Mortgage fees and related income details:											
Net production revenue	93		152		(39)	188	293		(36	5)
Net mortgage servicing revenue ^(c)	231		249		(7)	601	514		17	,
Mortgage fees and related income	\$324		\$401		(19		\$789	\$807		(2)%
Financial ratios											
Return on equity	26	%	17	%			26 %	5 16	%		
Overhead ratio	55		57				55	58			

Note: In the discussion and the tables which follow, CCB presents certain financial measures which exclude the impact of PCI loans; these are non-GAAP financial measures.

Effective in the first quarter of 2018, certain operations staff were transferred from CCB to CB. The prior period (a) amounts have been revised to conform with the current period presentation. For a further discussion of this transfer, refer to CB segment results on page 31.

Included operating lease depreciation expense of \$827 million and \$638 million for the three months ended June (b) 30, 2018 and 2017, respectively, and \$1.6 billion and \$1.2 billion for six months ended June 30, 2018 and 2017, respectively.



Quarterly results

Net income was \$3.4 billion, an increase of 53%.

Net revenue was \$12.5 billion, an increase of 10%.

Net interest income was \$8.7 billion, up 13%, driven by:

higher deposit margins and growth in deposit balances, and

margin expansion and higher loan balances in Card,

partially offset by

4oan spread compression from higher rates in Home Lending and Auto, and

the impact of the sale of the student loan portfolio in the prior year.

Noninterest revenue was \$3.7 billion, up 2%, driven by:

Hower new account origination costs in Card,

higher auto lease volume, and

higher MSR risk management results,

predominantly offset by

lower net interchange reflecting higher rewards costs and partner payments, partially offset by higher card sales volumes. The rewards costs included an adjustment to the credit card rewards liability of approximately \$330 million driven by an increase in redemption rate assumptions, and

Nower net production revenue reflecting lower mortgage production margins.

Refer to Note 14 for further information regarding changes in value of the MSR asset and related hedges, and mortgage fees and related income.

Noninterest expense was \$6.9 billion, up 6%, driven by:

higher auto lease depreciation, and

investments in technology.

The provision for credit losses was \$1.1 billion, a decrease of 21% from the prior year, reflecting:

no addition to the allowance for credit losses in the current quarter, compared with a net addition of \$250 million in the prior year primarily in the credit card portfolio, and

lower net charge-offs, primarily in the residential real estate portfolio, which includes a recovery of approximately \$130 million from a loan sale, and reflects continued improvement in home prices and delinquencies, predominantly offset by an increase in net charge-offs in the credit card portfolio due to seasoning of newer vintages, in line with expectations.

Year-to-date results

Net income was \$6.7 billion, an increase of 60%.

Net revenue was \$25.1 billion, an increase of 12%.

Net interest income was \$17.2 billion, up 12%, driven by:

higher deposit margins and growth in deposit balances, and

margin expansion and higher loan balances in Card,

partially offset by

4oan spread compression from higher rates in Home Lending and Auto, and

the impact of the sale of the student loan portfolio in the prior year.

Noninterest revenue was \$7.9 billion, up 13%, driven by:

Hower new account origination costs in Card,

higher auto lease volume, and

higher MSR risk management results,

partially offset by

lower net interchange reflecting higher rewards costs and partner payments, largely offset by higher card sales volumes. The rewards costs included an adjustment to the credit card rewards liability of approximately \$330 million driven by an increase in redemption rate assumptions, and

4 ower net production revenue reflecting lower mortgage production margins.

Noninterest expense was \$13.8 billion, up 7%, driven by:

investments in technology and marketing,

higher auto lease depreciation, and

continued business growth.

The provision for credit losses was \$2.4 billion, a decrease of 14% from the prior year, reflecting:

no addition to the allowance for credit losses in the current year, compared with a net addition of \$250 million in the prior year primarily in the credit card portfolio

partially offset by

higher net charge-offs in the credit card portfolio due to seasoning of newer vintages, in line with expectations. These were largely offset by lower net charge-offs in the residential real estate portfolio, which includes a recovery of approximately \$130 million from a loan sale, and reflects the continued improvement in home prices and delinquencies

the prior year included a \$218 million write-down recorded in connection with the sale of the student loan portfolio.

Selected metrics

					As of or for the six months ended June 30,			
(in millions, except headcount)	2018	2017	Change	2	2018	2017	Change	•
Selected balance sheet data (period-end)								
Total assets	\$552,674	\$529,859	4	%	\$552,674	\$529,859	4	%
Loans:								
Consumer & Business Banking	26,272	25,044	5		26,272	25,044	5	
Home equity	39,033	46,330	(16)	39,033	46,330	(16)
Residential mortgage	202,205	189,661	7		202,205	189,661	7	
Home Lending	241,238	235,991	2		241,238	235,991	2	
Card	145,255	140,141	4		145,255	140,141	4	
Auto	65,014	65,627	(1)	65,014	65,627	(1)
Student		75	NM			75	NM	
Total loans	477,779	466,878	2		477,779	466,878	2	
Core loans	419,295	393,639	7		419,295	393,639	7	
Deposits	679,154	648,369	5		679,154	648,369	5	
Equity	51,000	51,000			51,000	51,000		
Selected balance sheet data (average)								
Total assets	\$544,642	\$528,598	3		\$541,806	\$530,338	2	
Loans:								
Consumer & Business Banking	26,110	24,725	6		25,978	24,543	6	
Home equity	39,898	47,339	(16)	40,836	48,303	(15)
Residential mortgage	201,587	187,201	8		200,129	185,489	8	
Home Lending	241,485	234,540	3		240,965	233,792	3	
Card	142,724	138,132	3		142,825	137,674	4	
Auto	65,383	65,474			65,622	65,395		
Student	_	4,642	NM		_	5,772	NM	
Total loans	475,702	467,513	2		475,390	467,176	2	
Core loans	414,120	387,783	7		412,145	384,419	7	
Deposits	673,761	639,873	5		666,719	631,441	6	
Equity	51,000	51,000			51,000	51,000		
Headcount ^(a)	131,945	135,040	(2)%	131,945	135,040	(2)%
T 00 1 1 1 01 0 0 0 0 1 0			20		0 10	~~~	~~ ~~	

Effective in the first quarter of 2018, certain operations staff were transferred from CCB to CB. The prior period (a) amount has been revised to conform with the current period presentation. For further discussion of this transfer, refer to CB segment results on page 31.

a 1		
VA.	lected	metrics

					As of or for the six months ended June 30,			
(in millions, except ratio data) Credit data and quality statistics	2018	2017	Change	2	2018	2017	Chang	e
Nonaccrual loans ^{(a)(b)}	\$3,854	\$4,124	(7)%	\$3,854	\$4,124	(7)%
Net charge-offs/(recoveries)(c)								
Consumer & Business Banking	50	56	(11)	103	113	(9)
Home equity	(7)	7	NM		9	54	(83)
Residential mortgage	(149)	(4)	NM		(147)	(1)	NM	
Home Lending	(156)	3	NM		(138)	53	NM	
Card	1,164	1,037	12		2,334	2,030	15	
Auto	50	48	4		126	129	(2)
Student			NM				(100)
Total net charge-offs/(recoveries)	\$1,108	\$1,144	(3)	\$2,425	\$2,823 (g)	(14)
Net charge-off/(recovery) rate(c)								
Consumer & Business Banking	0.77 %	0.91 %			0.80 %	0.93 %		
Home equity ^(d)	(0.09)	0.08			0.06	0.30		
Residential mortgage ^(d)	(0.33)	(0.01)			(0.16)	_		
Home Lending ^(d)	(0.29)	0.01			(0.13)	0.05		
Card	3.27	3.01			3.30	2.98		
Auto	0.31	0.29			0.39	0.40		
Student		_				NM		
Total net charge-off/(recovery) rate ^(d)	1.00	1.07			1.10	1.32 (g)		
30+ day delinquency rate								
Home Lending ^{(e)(f)}	0.86 %	1.02 %			0.86 %	1.02 %		
Card	1.65	1.59			1.65	1.59		
Auto	0.77	0.88			0.77	0.88		
90+ day delinquency rate — Card	0.85	0.80			0.85	0.80		
Allowance for loan losses								
Consumer & Business Banking	\$796	\$796	_		\$796	\$796		
Home Lending, excluding PCI loans	1,003	1,153	(13)	1,003	1,153	(13)
Home Lending — PCI loans	2,132	2,265	(6)	2,132	2,265	(6)
Card	4,884	4,384	11		4,884	4,384	11	
Auto	464	499	(7)	464	499	(7)
Total allowance for loan losses ^(c)	\$9,279	\$9,097	2	%	\$9,279	\$9,097	2	%

⁽a) Excludes PCI loans. The Firm is recognizing interest income on each pool of PCI loans as each of the pools is performing.

(c)

At June 30, 2018 and 2017, nonaccrual loans excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of \$3.3 billion and \$4.1 billion, respectively. Student loans insured by U.S. government (b) agencies under the Federal Family Education Loan Program ("FFELP") and 90 or more days past due were also excluded from nonaccrual loans prior to sale of the student loan portfolio in 2017. These amounts have been excluded based upon the government guarantee.

Net charge-offs and the net charge-off rates for the three months ended June 30, 2018 and 2017, excluded \$73 million and \$22 million, respectively, and for six months ended June 30, 2018 and 2017, excluded \$93 million and \$46 million, respectively, of write-offs in the PCI portfolio. These write-offs decreased the allowance for loan losses for PCI loans. For further information on PCI write-offs, refer to Summary of changes in the allowance for credit losses on page 68.

Excludes the impact of PCI loans. For the three months ended June 30, 2018 and 2017, the net charge-off/(recovery) rates including the impact of PCI loans were as follows: (1) home equity of (0.07)% and 0.06%, respectively; (2) residential mortgage of (0.30)% and (0.01)%, respectively; (3) Home Lending of (0.26)%

- (d) and 0.01%, respectively; and (4) total CCB of 0.93% and 0.99%, respectively. For the six months ended June 30, 2018 and 2017, the net charge-off/(recovery) rates included impact of PCI loans were as follows: (1) home equity of 0.04% and 0.23%, respectively; (2) residential mortgage of (0.15)% and -%, respectively; (3) Home Lending of (0.12)% and 0.05%, respectively; and (4) total CCB of 1.03% and 1.23%, respectively.
- At June 30, 2018 and 2017, excluded mortgage loans insured by U.S. government agencies of \$5.0 billion and \$6.0 (e) billion, respectively, that are 30 or more days past due. These amounts have been excluded based upon the government guarantee.
- (f) Excludes PCI loans. The 30+ day delinquency rate for PCI loans was 9.40% and 9.06% at June 30, 2018 and 2017, respectively.
- Excluding net charge-offs of \$467 million related to the student loan portfolio sale, the total net charge-off rate for the six months ended June 30, 2017 would have been 1.10%.

Selected metrics	As of or f	or the thre	e months	As of or f	for the six	months	
	ended Jur			ended June 30,			
(in billions, except ratios and where otherwise noted Business Metrics		2017	Change	2018	2017	Chang	ge
Number of branches	5,091	5,217	(2)%	5,091	5,217	(2)%
Active digital customers (in thousands) ^(a)	47,952	45,876	5	47,952	45,876	5	
Active mobile customers (in thousands) ^(b)	31,651	28,386	12	31,651	28,386	12	
Debit and credit card sales volume ^(c)	\$255.0	\$231.3	10	\$487.4	\$440.7	11	
Consumer & Business Banking							
Average deposits	\$659.8	\$625.4	5	\$653.1	\$617.3	6	
Deposit margin		1.96 %			1.92 %		`
Business banking origination volume	\$1.9	\$2.2 253.0	(12)	\$3.6	\$3.9	(8)
Client investment assets	283.7	253.0	12	283.7	253.0	12	
Home Lending Mortgage origination volume by channel							
Retail	\$10.4	\$9.7	7	\$18.7	\$18.7		
Correspondent	11.1	14.2	(22)	21.0	27.6	(24)
Total mortgage origination volume ^(d)	\$21.5	\$23.9	(10)	\$39.7	\$46.3	(14)
Total mortgage origination volume	Ψ21.5	Ψ23.7	(10)	Ψ37.1	φ 10.5	(1)	,
Total loans serviced (period-end)	\$802.6	\$827.8	(3)	\$802.6	\$827.8	(3)
Third-party mortgage loans serviced (period-end)	533.0	568.0	(6)	533.0	568.0	(6)
MSR carrying value (period-end)	6.2	5.8	7	6.2	5.8	7	
Ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end)		1.02 %			1.02 %		
	2.21	2.01		2.22	2.01		
MSR revenue multiple ^(e)	3.31 x	2.91 x		3.22 x	2.91 x		
Card, excluding Commercial Card							
Credit card sales volume	\$174.0	\$156.8	11	\$331.1	\$296.5	12	
New accounts opened (in millions)	1.9	2.1	(10)	3.9	4.6	(15)
Card Services							
Net revenue rate	10.38 %	10.53 %		11.00 %	10.34 %		
Merchant Services							
Merchant processing volume	\$330.8	\$294.4	12	\$647.1	\$568.7	14	
Auto							
Loan and lease origination volume	\$8.3	\$8.3	_	\$16.7	\$16.3	2	
Average Auto operating lease assets	18.4	14.7	25 %	18.0	14.2	26	%

⁽a) Users of all web and/or mobile platforms who have logged in within the past 90 days.

⁽b) Users of all mobile platforms who have logged in within the past 90 days.

⁽c) The prior period amounts have been revised to conform with the current period presentation.

⁽d)

Firmwide mortgage origination volume was \$23.7 billion and \$26.2 billion for the three months ended June 30, 2018 and 2017, respectively, and \$43.7 billion and \$51.8 billion for the six months ended June 30, 2018 and 2017, respectively.

(e) Represents the ratio of MSR carrying value (period-end) to third-party mortgage loans serviced (period-end) divided by the ratio of annualized loan servicing-related revenue to third-party mortgage loans serviced (average).

CORPORATE

&

INVESTMENT

BANK

For a discussion of the business profile of CIB, refer to pages 62–66 of JPMorgan Chase's 2017 Annual Report and Line of Business Metrics on page 177.

Effective January 1, 2018, the Firm adopted several new accounting standards; the guidance which had the most significant impact on the CIB segment results was revenue recognition, and recognition and measurement of financial assets. The revenue recognition guidance was applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

Selected income statement data

	Three mo	onths ended	d June	Six months ended June 30,			
(in millions, except ratios)	2018	2017	Change	2018	2017	Change	
Revenue							
Investment banking fees	\$2,139	\$1,839	16 %	\$3,835	\$3,714	3 %	
Principal transactions	3,666	2,928	25	7,695	6,435	20	
Lending- and deposit-related fees	382	387	(1)	763	775	(2)	
Asset management, administration and commissions	1,155	1,068	8	2,286	2,120	8	
All other income	190	258	(26)	870	435	100	
Noninterest revenue	7,532	6,480	16	15,449	13,479	15	
Net interest income	2,391	2,445	(2)	4,957	5,045	(2)	
Total net revenue ^(a)	9,923	8,925	11	20,406	18,524	10	
Provision for credit losses	58	(53)	NM	(100)	(149)	33	
Noninterest expense							
Compensation expense	2,720	2,451	11	5,756	5,250	10	
Noncompensation expense	2,683	2,426	11	5,306	4,811	10	
Total noninterest expense	5,403	4,877	11	11,062	10,061	10	
Income before income tax expense	4,462	4,101	9	9,444	8,612	10	
Income tax expense	1,264	1,391	(9)	2,272	2,661	(15)	
Net income	\$3,198	\$2,710	18 %	\$7,172	\$5,951	21 %	
Financial ratios							
Return on equity	17 %	15 %		20 %	16 %		
Overhead ratio	54	55		54	54		
Compensation expense as percentage of total net revenue	27	27		28	28		

Included tax-equivalent adjustments, predominantly due to income tax credits related to alternative energy investments; income tax credits and amortization of the cost of investments in affordable housing projects; and (a)tax-exempt income from municipal bonds of \$428 million and \$554 million for the three months ended June 30, 2018 and 2017, respectively, and \$833 million and \$1.1 billion for the six months ended June 30, 2018 and 2017, respectively.

Selected income statement data

	Three m 30,	onths end	ded June	Six months ended June 30,				
(in millions)	2018	2017	Change	2018	2017	Change		
Revenue by business								
Investment Banking	\$1,949	\$1,731	13 %	\$3,536	\$3,445	3 %		
Treasury Services	1,181	1,055	12	2,297	2,036	13		
Lending	321	373	(14)	623	762	(18)		

Total Banking	3,451	3,159	9	6,456	6,243	3	
Fixed Income Markets	3,453	3,216	7	8,006	7,431	8	
Equity Markets	1,959	1,586	24	3,976	3,192	25	
Securities Services	1,103	982	12	2,162	1,898	14	
Credit Adjustments & Other(a)	(43)	(18)	(139)	(194)	(240	19	
Total Markets & Investor Services	6,472	5,766	12	13,950	12,281	14	
Total net revenue	\$9,923	\$8,925	11 %	\$20,406	\$18,524	10	%

Consists primarily of credit valuation adjustments ("CVA") managed centrally within CIB and funding valuation adjustments ("FVA") on derivatives. Results are primarily reported in principal transactions revenue. Results are presented net of associated hedging activities and net of CVA and FVA amounts allocated to Fixed Income Markets and Equity Markets.

Quarterly results

Net income was \$3.2 billion, up 18%.

Net revenue was \$9.9 billion, up 11%.

Banking revenue was \$3.5 billion, up 9%. Investment banking revenue was \$1.9 billion, up 13%, driven by higher equity underwriting and advisory fees. The Firm maintained its #1 ranking for Global Investment Banking fees, according to Dealogic. Equity underwriting fees were \$570 million, up 49%, driven by a higher share of fees, primarily due to strong performance in the IPO and convertible markets. Advisory fees were \$626 million, up 24%, driven by a higher number of large completed transactions. Debt underwriting fees were \$943 million, flat compared to the prior year. Treasury Services revenue was \$1.2 billion, up 12%, driven by the impact of higher interest rates and growth in deposits. Lending revenue was \$321 million, down 14%, predominantly driven by lower net interest income primarily reflecting a change in the portfolio composition and overall spread tightening as well as higher gains in the prior year on securities received from restructurings.

Markets & Investor Services revenue was \$6.5 billion, up 12%. Fixed Income Markets revenue was \$3.5 billion, up 7%. Excluding the reduction of approximately \$160 million in tax-equivalent adjustments as a result of the TCJA, Fixed Income Markets revenue was up 12%. Fixed Income Markets reflected solid performance across products with good client activity, and improved Commodities revenue compared to a challenging prior year. Equity Markets revenue was \$2.0 billion, up 24%, driven by strength across products, predominantly in derivatives and prime brokerage. Securities Services revenue was \$1.1 billion, up 12%, predominantly driven by higher interest rates and deposit growth, as well as higher asset-based fees driven by net client inflows and higher market levels. The provision for credit losses was an expense of \$58 million, reflecting net portfolio activity, including new exposures and loan sales. The prior year was a benefit of \$53 million primarily driven by a reduction in the allowance for credit losses in the Oil & Gas portfolio.

Noninterest expense was \$5.4 billion, up 11%, predominantly driven by higher performance-related compensation, volume-related transaction costs and investments in technology.

Year-to-date results

Net income was \$7.2 billion, up 21%.

Net revenue was \$20.4 billion, up 10%.

Banking revenue was \$6.5 billion, up 3%. Investment banking revenue was \$3.5 billion, up 3%, driven by higher advisory and equity underwriting fees, largely offset by lower debt underwriting fees. The Firm maintained its #1 ranking for Global Investment Banking fees, according to Dealogic. Advisory fees were \$1.2 billion, up 20%, driven by a higher number of large completed transactions. Equity underwriting fees were \$916 million, up 14%, driven by a higher share of fees, primarily due to strong performance in the IPO market. Debt underwriting fees were \$1.7 billion, down 10%, primarily driven by declines in industry-wide fee levels and a lower share in leveraged finance. Treasury Services revenue was \$2.3 billion, up 13%, predominantly driven by the impact of higher interest rates and growth in deposits. Lending revenue was \$623 million, down 18%, driven by lower net interest income primarily reflecting a change in the portfolio composition and overall spread tightening as well as higher gains in the prior year on securities received from restructurings.

Markets & Investor Services revenue was \$14.0 billion, up 14%. The results included approximately \$500 million of fair value gains related to the adoption in the first quarter of 2018 of the new recognition and measurement accounting guidance for certain equity investments previously held at cost, and a reduction of approximately \$310 million in tax-equivalent adjustments as a result of the TCJA. Fixed Income Markets revenue was \$8.0 billion, up 8%. Excluding the impact of these fair value gains and tax-equivalent adjustments, Fixed Income Markets revenue was up 5%, with strong performance in Currencies & Emerging Markets and Commodities, largely offset by lower revenue in Credit. Equity Markets revenue was \$4.0 billion, up 25%, driven by strength across derivatives, prime brokerage and Cash Equities. Securities Services revenue was \$2.2 billion, up 14%, predominantly driven by the impact of higher interest rates and deposit growth as well as higher asset-based fees driven by net client inflows and higher market levels. The provision for credit losses was a benefit of \$100 million, primarily driven by a reduction in the allowance for credit losses in the Oil & Gas portfolio related to a single name, partially offset by net portfolio activity. The prior

year was a benefit of \$149 million primarily driven by a reduction in the allowance for credit losses in the Oil & Gas portfolio.

Noninterest expense was \$11.1 billion, up 10%, largely driven by higher performance-related compensation expense, volume-related transaction costs and investments in technology.

Selected metrics

	As of or fo	or the three	months	As of or for the six months					
	ended Jun	e 30,		ended Jun	e 30,				
(in millions, except headcount)	2018	2017	Ol7 Change		2017	Cha	nge		
Selected balance sheet data (period-end)									
Assets	\$908,954	\$847,377	7 %	\$908,954	\$847,377	7	%		
Loans:									
Loans retained ^(a)	116,645	108,935	7	116,645	108,935	7			
Loans held-for-sale and loans at fair value	6,254	7,168	(13)	6,254	7,168	(13)		
Total loans	122,899	116,103	6	122,899	116,103	6			
Core loans	122,574	115,764	6	122,574	115,764	6			
Equity	70,000	70,000	_	70,000	70,000	_			
Selected balance sheet data (average)									
Assets	\$937,217	\$864,686	8	\$923,756	\$851,425	8			
Trading assets-debt and equity instruments	358,611	351,678	2	356,750	340,073	5			
Trading assets-derivative receivables	60,623	54,937	10	60,393	56,931	6			
Loans:									
Loans retained ^(a)	\$113,950	\$110,011	4	\$111,665	\$109,204	2			
Loans held-for-sale and loans at fair value	5,961	5,789	3	5,722	5,550	3			
Total loans	\$119,911	\$115,800	4	\$117,387	\$114,754	2			
Core loans	119,637	115,434	4	117,090	114,375	2			
Equity	70,000	70,000	_	70,000	70,000	_			
Headcount	51,400	49,228	4 %	51,400	49,228	4	%		

⁽a) Loans retained includes credit portfolio loans, loans held by consolidated Firm-administered multi-seller conduits, trade finance loans, other held-for-investment loans and overdrafts.

Selected metrics

	As of or for the three months ended June 30,			As of or for the six months ended June 30,		
(in millions, except ratios)	2018	2017	Change	2018	2017	Change
Credit data and quality statistics						
Net charge-offs/(recoveries)	\$114	\$47	143 %	\$134	\$29	362 %
Nonperforming assets:						
Nonaccrual loans:						
Nonaccrual loans retained ^(a)	\$352	\$462	(24)	\$352	\$462	(24)
Nonaccrual loans held-for-sale and loans at fair value	175	31	465	175	31	465
Total nonaccrual loans	527	493	7	527	493	7
Derivative receivables	112	170	(34)	112	170	(34)
Assets acquired in loan satisfactions	104	71	46	104	71	46
Total nonperforming assets	\$743	\$734	1	\$743	\$734	1
Allowance for credit losses:						
Allowance for loan losses	\$1,043	\$1,298	(20)	\$1,043	\$1,298	(20)
Allowance for lending-related commitments	828	745	11	828	745	11
Total allowance for credit losses	\$1,871	\$2,043	(8)%	\$1,871	\$2,043	(8)%
Net charge-off/(recovery) rate ^(b)	0.40 %	0.17 %)	0.24 %	0.05 %)
Allowance for loan losses to period-end loans retained	0.89	1.19		0.89	1.19	
Allowance for loan losses to period-end loans retained, excluding trade finance and conduits ^(c)	1.27	1.83		1.27	1.83	
Allowance for loan losses to nonaccrual loans retained(a)	296	281		296	281	
Nonaccrual loans to total period-end loans	0.43 %	0.42 %)	0.43 %	0.42 %)

- (a) Allowance for loan losses of \$141 million and \$164 million were held against these nonaccrual loans at June 30, 2018 and 2017, respectively.
- (b) Loans held-for-sale and loans at fair value were excluded when calculating the net charge-off/(recovery) rate.
- Management uses allowance for loan losses to period-end loans retained, excluding trade finance and conduits, a non-GAAP financial measure, to provide a more meaningful assessment of CIB's allowance coverage ratio.

Investment banking fees

-	Three n	nonths e	nded	Six months ended June					
	June 30),		30,					
(in millions)	2018	2017	Change	2018	2017	Change			
Advisory	\$626	\$503	24 %	\$1,201	\$1,004	20 %			
Equity underwriting	570	382	49	916	807	14			
Debt underwriting ^(a)	943	954	(1)	1,718	1,903	(10)			
Total investment banking fees	\$2,139	\$1,839	16 %	\$3,835	\$3,714	3 %			
(a) Includes loan syndications.									

League table results - wallet share

Three months Full-year ended 2017 June 30, 2018

2018					
Ran Share		RanShai			
#1	7.4	#1	7.6		
2	11.4	2	10.9		
1	10.2	2	7.1		
1	13.3	1	11.6		
2	9.0	2	8.5		
2	10.0	2	9.2		
1	9.7	1	9.4		
1	11.3	1	11.0		
#1	9.0	#1	8.1		
	#1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	#1 7.4 2 11.4 1 10.2 1 13.3 2 9.0 2 10.0 1 9.7 1 11.3	#1 7.4 #1 2 11.4 2 1 10.2 2 1 13.3 1 2 9.0 2 2 10.0 2 1 9.7 1 1 11.3 1		

- (a) Source: Dealogic as of July 1, 2018. Reflects the ranking of revenue wallet and market share. Long-term debt rankings include investment-grade, high-yield, supranationals, sovereigns, agencies, covered
- (b) bonds, asset-backed securities ("ABS") and mortgage-backed securities ("MBS"); and exclude money market, short-term debt, and U.S. municipal securities.
- (c) Global equity and equity-related ranking includes rights offerings and Chinese A-Shares.
- (d) Global M&A reflect the removal of any withdrawn transactions. U.S. M&A revenue wallet represents wallet from client parents based in the U.S.
- (e) Global investment banking fees exclude money market, short-term debt and shelf deals.

Markets revenue

The following table summarizes select income statement data for the Markets businesses. Markets includes both Fixed Income Markets and Equity Markets. Markets revenue comprises principal transactions, fees, commissions and other income, as well as net interest income. The Firm assesses its Markets business performance on a total revenue basis, as offsets may occur across revenue line items. For example, securities that generate net interest income may be risk-managed by derivatives that are

recorded in principal transactions. For a description of the composition of these income statement line items, refer to Notes 5 and 6. For further information, refer to Markets revenue on page 65 of JPMorgan Chase's 2017 Annual Report.

For the periods presented below, the predominant source of principal transactions revenue was the amount recognized upon executing new transactions.

	Three	months e	ended	Three months ended				
	June 3	0,		June 30,				
	2018			2017				
	Fixed	Equity	Total	Fixed Family Total				
(in millions)	Incom	Equity e _{Mortrot}	Markets	Incom	Equity e _{Mortrot}	Total		
(in millions)	Marke	ets	s Markets	Marke	Income Markets Markets Markets			
Principal transactions	\$2,214	4\$1,664	\$ 3,878	\$1,851	1 \$ 1,109	\$ 2,960		
Lending- and deposit-related fees	49	2	51	48	1	49		
Asset management, administration and commissions	104	460	564	103	410	513		
All other income	171	(6) 165	207	(2) 205		
Noninterest revenue	2,538	2,120	4,658	2,209	1,518	3,727		
Net interest income ^(a)	915	(161)754	1,007	68	1,075		
Total net revenue	\$3,453\$1,959 \$5,412 \$3,216\$1,586 \$				\$4,802			
	Six months ended June			Six mo	onths end	led June		
	30,			30,				
	2018			2017				
	Fixed	Equity	Total	Fixed	Equity	Total		
(in millions)	Incom	Equity e _{Market}	Total Markets	Incom	Equity e _{Market} s	Total Markets		
(in millions)	Marke	ets	siviarkeis	Marke	ts	s Markets		
Principal transactions	\$4,940	5\$3,276	\$8,222	\$4,552	2\$2,118	\$6,670		
Lending- and deposit-related fees	96	3	99	97	2	99		
Asset management, administration and commissions	217	918	1,135	207	833	1,040		
All other income	731	11	742	384	(9)375		
Noninterest revenue	5,990	4,208	10,198	5,240	2,944	8,184		
Net interest income ^(a)	2,016	(232	1,784	2,191	248	2,439		
Total net revenue	\$8,000	5\$3,976	\$11,982	\$7,431	1\$3,192	\$10,623		
(a) Declines in Markets net interest income were driven by higher funding costs.								

Selected metrics							
	As of or for the three month ended June 30,			As of or fe	or the six n	nonth	S
	ended Jun	e 30,		ended Jun	e 30,		
(in millions, except where otherwise noted)	2018	2017	Change	2018	2017	Chan	ige
Assets under custody ("AUC") by asset class (period-end)							
(in billions):							
Fixed Income	\$12,611	\$12,662		\$12,611	\$12,662		
Equity	8,791	7,214	22	8,791	7,214	22	
Other ^(a)	2,782	2,258	23	2,782	2,258	23	
Total AUC	\$24,184	•	9	\$24,184	•	9	
Client deposits and other third party liabilities (average) ^(b)					\$398,354		
Consists of mutual funds, unit investment trusts, currence	cies, annuit	ies, insurai	nce cont	racts, option	ns and othe	er	
contracts.							
(b) Client deposits and other third party liabilities pertain to International metrics	the Treasu	ary Service	es and Se	curities Se	rvices busi	nesses	S.
International metrics	As of or f	or the three	months	As of or f	or the civ n	nonth	c
	ended Jun		As of or for the six months ended June 30,				
(in millions, except where			CI		•	C1	
otherwise noted)	2018	2017	Change	2018	2017	Char	ige
Total net revenue ^(a)							
Europe/Middle East/Africa	\$3,420	\$3,034	13 %	\$7,076	\$6,223	14	%
Asia/Pacific	1,410	1,034	36	2,881	2,273	27	
Latin America/Caribbean	329	244	35	743	585	27	
Total international net revenue	5,159	4,312	20	10,700	9,081	18	
North America	4,764	4,613	3	9,706	9,443	3	
Total net revenue	\$9,923	\$8,925	11	\$20,406	\$18,524	10	
Loans retained (period-end) ^(a)							
Europe/Middle East/Africa	\$26,971	\$26,690	1	\$26,971	\$26,690	1	
Asia/Pacific	17,255	14,709	17	17,255	14,709	17	
Latin America/Caribbean	4,046	6,196	(35)	4,046	6,196	(35)	,
Total international loans	48,272	47,595	1	48,272	47,595	$\frac{(33)}{1}$	'
North America	68,373	61,340	11	68,373	61,340	11	
Total loans retained ^(a)		\$108,935		-	\$108,935		
Total found fetallica	Ψ110,043	Ψ100,233	,	Ψ110,043	ψ100,233	,	
Client deposits and other third-party liabilities							
(average) ^{(a)(b)}	4164650	015655	_	\$160.046	4150 106	0	
Europe/Middle East/Africa		\$156,575			\$150,436		
Asia/Pacific	81,549	73,327	11	82,603	73,544	12	
Latin America/Caribbean	27,747	25,806	8	26,620	24,934	7	
Total international		\$255,708		-	\$248,914		
North America	159,700		7	-	149,440		
Total client deposits and other third-party liabilities	\$433,646	\$404,920	7	\$428,502	\$398,354	8	
AUC (period-end)(a)							
(in billions)							
North America	\$14,942	\$13,207	13	\$14,942	\$13,207	13	
All other regions	9,242	8,927	4	9,242	8,927	4	
Total AUC	\$24,184	\$22,134	9 %	\$24,184	\$22,134	9	%

(a)

Total net revenue is based predominantly on the domicile of the client or location of the trading desk, as applicable. Loans outstanding (excluding loans held-for-sale and loans at fair value), client deposits and other third-party liabilities, and AUC are based predominantly on the domicile of the client.

(b) Client deposits and other third party liabilities pertain to the Treasury Services and Securities Services businesses.

COMMERCIAL

BANKING

For a discussion of the business profile of CB, refer to pages 67–69 of JPMorgan Chase's 2017 Annual Report and Line of Business Metrics on page 178.

Selected income statement data

	Three r	nonths (ended June	Six months ended June			
	30,			30,			
(in millions)	2018	2017	Change	2018	2017	Change	
Revenue							
Lending- and deposit-related fees	\$224	\$232	(3)%	\$450	\$467	(4)%	
Asset management, administration and commissions	16	16	_	34	34	_	
All other income ^(a)	393	335	17	698	681	2	
Noninterest revenue	633	583	9	1,182	1,182	_	
Net interest income	1,683	1,505	12	3,300	2,924	13	
Total net revenue ^(b)	2,316	2,088	11	4,482	4,106	9	
Provision for credit losses	43	(130)	NM	38	(167)	NM	
Noninterest expense							
Compensation expense ^(c)	415	382	9	836	770	9	
Noncompensation expense ^(c)	429	408	5	852	845	1	
Total noninterest expense	844	790	7	1,688	1,615	5	
Income before income tax expense	1,429	1,428		2,756	2,658	4	
Income tax expense	342	526	(35)	644	957	(33)	
Net income	\$1,087	\$902	21 %	\$2,112	\$1,701	24 %	

⁽a) Includes revenue from investment banking products and commercial card transactions.

Total net revenue included tax-equivalent adjustments from income tax credits related to equity investments in designated community development entities that provide loans to qualified businesses in low-income communities,

(b) as well as tax-exempt income related to municipal financing activities of \$106 million and \$131 million for the three months ended June 30, 2018 and 2017 respectively, and \$209 million and \$252 million for the six months ended June 30, 2018 and June 30, 2017, respectively. The decrease in taxable-equivalent adjustments reflects the impact of TCJA.

Effective in the first quarter of 2018, certain Operations and Compliance staff were transferred from CCB and Corporate, respectively, to CB. As a result, expense for this staff is now reflected in CB's compensation expense

(c) with a corresponding adjustment for expense allocations reflected in noncompensation expense. CB's, Corporate's and CCB's previously reported headcount, compensation expense and noncompensation expense have been revised to reflect this transfer.

Quarterly results

Net income was \$1.1 billion, an increase of 21%.

Net revenue was \$2.3 billion, an increase of 11%. Net interest income was \$1.7 billion, an increase of 12%, driven by higher deposit margins. Noninterest revenue was \$633 million, an increase of 9% driven by higher investment banking revenue from an increased number of large transactions.

Noninterest expense was \$844 million, an increase of 7%, predominantly driven by continued investments in banker coverage and technology.

The provision for credit losses was an expense of \$43 million. The prior year was a benefit of \$130 million driven by net reductions in the allowance for credit losses, including in the Oil & Gas, Natural Gas Pipelines and Metals & Mining portfolios.

Year-to-date results

Net income was \$2.1 billion, an increase of 24%.

Net revenue was \$4.5 billion, an increase of 9%. Net interest income was \$3.3 billion, an increase of 13%, driven by higher deposit margins. Noninterest revenue was \$1.2 billion, flat compared with the prior year.

Noninterest expense was \$1.7 billion, an increase of 5%, driven by continued investments in banker coverage and technology.

The provision for credit losses was an expense of \$38 million. The prior year was a benefit of \$167 million, driven by net reductions in the allowance for credit losses, including in the Oil & Gas, Natural Gas Pipelines and Metals & Mining portfolios.

Selected income statement data (continued)

	Three me	onths ended	d June 30,	Six months ended June 30,			
(in millions, except ratios)	2018	2017	Change	2018	2017	Change	
Revenue by product							
Lending	\$1,026	\$1,023	%	\$2,025	\$2,015		
Treasury services	1,026	854	20	1,998	1,650	21	
Investment banking ^(a)	254	189	34	438	405	8	
Other	10	22	(55)	21	36	(42)	
Total Commercial Banking net revenue	\$2,316	\$2,088	11	\$4,482	\$4,106	9	
Investment banking revenue, gross ^(b)	\$739	\$533	39	\$1,308	\$1,199	9	
Revenue by client segment							
Middle Market Banking	\$919	\$839	10	\$1,814	\$1,623	12	
Corporate Client Banking	807	662	22	1,494	1,328	13	
Commercial Term Lending	344	364	(5)	696	731	(5)	
Real Estate Banking	170	147	16	334	281	19	
Other	76	76	10	144	143	1	
Total Commercial Banking net revenue		\$2,088		\$4,482	\$4,106	9 %	
Total Commercial Banking het levenue	\$2,310	\$2,000	11 %	94,462	54,100	9 70	
Financial ratios							
Return on equity	21 %	17 %)	20 %	16 %	,	
Overhead ratio	36	38		38	39		
	_			~~		_	

Includes total Firm revenue from investment banking products sold to CB clients, net of revenue sharing with the CIB.

Represents total Firm revenue from investment banking products sold to CB clients. As a result of the adoption of (b) the revenue recognition guidance, prior period amounts have been revised to conform with the current period presentation. For additional information, refer to Note 1.

Selected metrics

Selected metrics	As of or ended Ju		ree montl	hs	As of or for the six months ended June 30,			
(in millions, except headcount)	2018	2017	Change	;	2018	2017	Cha	ange
Selected balance sheet data (period-end)								
Total assets	\$220,232	2\$220,67	6—	%	\$220,232	2\$220,670	5—	%
Loans:								
Loans retained	-	197,912	4			197,912		
Loans held-for-sale and loans at fair value	1,576	1,661	`)	1,576	1,661	•)
Total loans		0\$199,57)\$199,573		
Core loans		199,319	4		-	199,319	4	
Equity	20,000	20,000	_		20,000	20,000		
Period-end loans by client segment								
Middle Market Banking	\$58,301	\$56,377	3		\$58,301	\$56,377	3	
Corporate Client Banking	48,885	45,918	6		48,885	45,918	6	
Commercial Term Lending	75,621	73,760	3		75,621	73,760	3	
Real Estate Banking	17,458	16,726	4		17,458	16,726	4	
Other	7,145	6,792	5		7,145	6,792	5	
Total Commercial Banking loans	\$207,410	0\$199,57	34		\$207,410)\$199,573	34	
Selected balance sheet data (average)								
Total assets	\$218 300	6\$217,69 [,]	4		\$217.781	1\$215,750) 1	
Loans:	\$210,390	J\$217,03°	+		φ217,761	ιφ213,730	<i>J</i> 1	
Loans retained	204 230	196,454	1		203 100	193,630	5	
Loans held-for-sale and loans at fair value	1,381	1,402)	896	1,061	(16)
Total loans	-	0\$197,85	•	,		5 \$ 194,69		,
Core loans		197,567				194,391		
Core round	203,110	177,507	•		203,007	171,371	5	
Average loans by client segment								
Middle Market Banking	\$57,346	\$55,651	3		\$57,052	\$54,963	4	
Corporate Client Banking	48,150	46,483	4		46,962	45,041	4	
Commercial Term Lending	75,307	73,081	3		75,126	72,484	4	
Real Estate Banking	17,614	16,139	9		17,729	15,834	12	
Other	7,203	6,502	11		7,136	6,369	12	
Total Commercial Banking loans	\$205,620	0\$197,85	64		\$204,005	5 \$ 194,69	15	
Client deposits and other third-party liabilities	\$170.74	5\$173.214	4(1)	\$173 168	3\$174,98′	7(1)
Equity	20,000	20,000		,	20,000	20,000		,
•								
Headcount ^(a)	10,579	9,857	7	%	10,579	9,857	7	%

Effective in the first quarter of 2018, certain Operations and Compliance staff were transferred from CCB and (a) Corporate, respectively, to CB. The prior period amounts have been revised to conform with the current period presentation. For a further discussion of this transfer, refer to page 31, Selected income statement data, footnote (c).

Selected metrics (continued)

	As of or ended Ju	for the th	ree mor	nths	As of or for the six months ended June 30,			
(in millions, except ratios)	2018	2017	Chang	ge	2018	2017	Change	
Credit data and quality statistics							C	
Net charge-offs/(recoveries)	\$34	\$8	325	%	\$34	\$(2) NM	
Nonperforming assets								
Nonaccrual loans:								
Nonaccrual loans retained(a)	\$546	\$819	(33)	\$546	\$819	(33)%	
Nonaccrual loans held-for-sale and loans at fair value	_						_	
Total nonaccrual loans	\$546	\$819	(33)	\$546	\$819	(33)	
Assets acquired in loan satisfactions	2	4	(50)	2	4	(50)	
Total nonperforming assets	\$548	\$823	(33)	\$548	\$823	(33)	
Allowance for credit losses:								
Allowance for loan losses	\$2,622	\$2,678	(2)	\$2,622	\$2,678	(2)	
Allowance for lending-related commitments	243	331	(27)	243	331	(27)	
Total allowance for credit losses	\$2,865	\$3,009	(5)%	\$2,865	\$3,009	(5)%	
Net charge-off/(recovery) rate ^(b)	0.07	% 0.02 °	%		0.03 %			
Allowance for loan losses to period-end loans retained	1.27	1.35			1.27	1.35		
Allowance for loan losses to nonaccrual loans retained(a)	480	327			480	327		
Nonaccrual loans to period-end total loans	0.26	0.41			0.26	0.41		

Nonaccrual loans to period-end total loans 0.26 0.41 0.26 0.41

Allowance for loan losses of \$126 million and \$112 million was held against nonaccrual loans retained at June 30, 2018 and 2017, respectively.

⁽b) Loans held-for-sale and loans at fair value were excluded when calculating the net charge-off/(recovery) rate.

ASSET & WEALTH

MANAGEMENT

For a discussion of the business profile of AWM, refer to pages 70–72 of JPMorgan Chase's 2017 Annual Report and Line of Business Metrics on pages 178–179.

Effective January 1, 2018, the Firm adopted several new accounting standards; the guidance which had the most significant impact on the AWM segment results was revenue recognition. The revenue recognition guidance was applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

Selected income statement data

Selected medific statement data								
(in millions, except ratios)	Three months ended June 30, Six 2018 2017 Change 201					•		
•	2018	2017	Change	9	2018	2017	Chang	e
Revenue								
Asset management, administration and commissions		\$2,435	4	%	\$5,060	\$4,739	7	%
All other income	155	156	(1)	257	321	(20)
Noninterest revenue	2,687	2,591	4		5,317	5,060	5	
Net interest income	885	846	5		1,761	1,665	6	
Total net revenue	3,572	3,437	4		7,078	6,725	5	
Provision for credit losses	2	4	(50)	17	22	(23)
Noninterest expense								
Compensation expense	1,329	1,277	4		2,721	2,609	4	
Noncompensation expense	1,237	1,140	9		2,426	2,589	(6)
Total noninterest expense	2,566	2,417	6		5,147	5,198	(1)
Income before income tax expense	1,004	1,016	(1)	1,914	1,505	27	
Income tax expense	249	392	(36)	389	496	(22)
Net income	\$755	\$624	21	,	\$1,525	\$1,009	51	ŕ
Revenue by line of business								
Asset Management	\$1,826	\$1,786	2		\$3,613	\$3,474	4	
Wealth Management	1,746	1,651	6		3,465	3,251	7	
Total net revenue	\$3,572	\$3,437	4	%	\$7,078	\$6,725	5	%
Financial ratios								
Return on equity	33 %	627 9	%		33 9	622 9	%	
Overhead ratio	72	70			73	77		
Pre-tax margin ratio:								
Asset Management	28	27			27	14		
Wealth Management	28	33			27	31		
Asset & Wealth Management	28	30			27	22		
Quarterly results	-	-			-			

Quarterly results

Net income was \$755 million, an increase of 21%.

Net revenue was \$3.6 billion, an increase of 4%. Net interest income was \$885 million, up 5%, driven by deposit margin expansion and loan growth. Noninterest revenue was \$2.7 billion, up 4%, driven by higher management fees from net long-term product inflows and higher market levels, partially offset by fee compression and the impact of lower market valuations of seed capital investments.

Noninterest expense was \$2.6 billion, up 6%, largely driven by continued investments in technology and advisors, as well as higher external fees on revenue growth.

Year-to-date results

Net income was \$1.5 billion, an increase of 51%.

Net revenue was \$7.1 billion, an increase of 5%. Net interest income was \$1.8 billion, up 6%, driven by deposit margin expansion and loan growth. Noninterest revenue was \$5.3 billion, up 5%, driven by higher management fees from net long-term product inflows and higher market levels, partially offset by fee compression and the impact of lower market valuations of seed capital investments.

Noninterest expense was \$5.1 billion, a decrease of 1%, driven by higher legal expense in 1Q17, largely offset by investments in technology and advisors, as well as higher external fees on revenue growth.

Selected metrics

Selected metrics		of or for the three months ed June 30, As of or for the ended June 30,										
(in millions, except ranking data, headcount and ratios)	2018		2017		Change		2018		2017		Change	e
% of JPM mutual fund assets rated as 4- or 5-star ^(a)	59	%	65	%	ó		59	%	65	%)	
% of JPM mutual fund assets ranked in 1st or	•											
2 nd quartile: ^(b)												
1 year	65		60				65		60			
3 years	71		83				71		83			
5 years	85		77				85		77			
Selected balance sheet data (period-end)												
Total assets	\$161,47		\$147,508	3	9	%	\$161,474	ŀ	\$147,508	,	9	%
Loans	138,606		124,517		11		138,606		124,517		11	
Core loans	138,606		124,517		11		138,606		124,517		11	
Deposits	131,511		146,758		(10)	131,511		146,758		(10)
Equity	9,000		9,000		_		9,000		9,000		_	
Selected balance sheet data (average)												
Total assets	\$158,24	4	\$142,966	6	11		\$156,305	5	\$140,585		11	
Loans	136,710		122,173		12		134,683		120,252		12	
Core loans	136,710		122,173		12		134,683		120,252		12	
Deposits	139,557		150,786		(7)	141,865		154,776		(8)
Equity	9,000		9,000		_		9,000		9,000		_	
Headcount	23,141		22,289		4		23,141		22,289		4	
Number of Wealth Management client advisors	2,644		2,452		8		2,644		2,452		8	
Credit data and quality statistics	Φ./5	`	Φ.2		ND 4		Φ./.4	,	Φ.5		ND 6	
Net charge-offs	\$(5)	\$2		NM	,	\$(4)	\$5		NM	,
Nonaccrual loans	323		400		(19)	323		400		(19)
Allowance for credit losses:	# 20.4		4.20 <i>5</i>		_		# 20.4		\$205		_	
Allowance for loan losses	\$304		\$285		7		\$304		\$285		7	
Allowance for lending-related commitments	15		10		50		15		10		50	
Total allowance for credit losses	\$319		\$295		8	%	\$319		\$295		8	%
Net charge-off rate	(0.01))%	60.01	%	ó		(0.01))%	60.01	%	,	
Allowance for loan losses to period-end loan			0.23				0.22		0.23			
Allowance for loan losses to nonaccrual loan	s94		71				94		71			
Nonaccrual loans to period-end loans	0.23		0.32				0.23		0.32			

Represents the "overall star rating" derived from Morningstar for the U.S., the U.K., Luxembourg, Hong Kong and Taiwan domiciled funds; and Nomura "star rating" for Japan domiciled funds. Includes only Asset Management retail open-ended mutual funds that have a rating. Excludes money market funds, Undiscovered Managers Fund, and Brazil and India domiciled funds.

⁽b) Quartile ranking sourced from: Lipper for the U.S. and Taiwan domiciled funds; Morningstar for the U.K., Luxembourg and Hong Kong domiciled funds; Nomura for Japan domiciled funds and Fund Doctor for South Korea domiciled funds. Includes only Asset Management retail open-ended mutual funds that are ranked by the

aforementioned sources. Excludes money market funds, Undiscovered Managers Fund, and Brazil and India domiciled funds.

Client assets

Client assets of \$2.8 trillion and assets under management of \$2.0 trillion were both up 8%, reflecting higher net inflows into long-term and liquidity products, as well as higher market levels.

\sim 1			
('I	101	t	assets
v	IUII	ı.	associs

	June 3			
(in billions)	2018	2017	Chang	e
Assets by asset class				
Liquidity	\$448	\$434	3	%
Fixed income	452	440	3	
Equity	435	390	12	
Multi-asset and alternatives	693	612	13	
Total assets under management	2,028	1,876	8	
Custody/brokerage/administration/deposit	s771	722	7	
Total client assets	\$2,799	9\$2,598	88	
Memo:				
Alternatives client assets (a)	\$172	\$159	8	
Assets by client segment				
Private Banking	\$551	\$488	13	
Institutional	934	889	5	
Retail	543	499	9	
Total assets under management	\$2,028	8\$1,870	68	
Private Banking	\$1,298	8\$1,188	89	
Institutional	956	909	5	
Retail	545	501	9	
Total client assets	\$2,799	9\$2,598	88	%

(a) Represents assets under management, as well as client balances in brokerage account

Client assets (continued)

Chem assets (commuca)					
	Three n ended	nonths	Six months ended		
	June 30),	June 30	,	
(in billions)	2018	2017	2018	2017	
Assets under management rollforward					
Beginning balance	\$2,016	\$1,841	\$2,034	\$1,771	
Net asset flows:					
Liquidity	17	(7)	(4)(6	
Fixed income	(7)2	(12)	7	
Equity	2	(3)	7	(7	
Multi-asset and alternatives	9	10	25	17	
Market/performance/other impacts	(9)33	(22)	94	
Ending balance, June 30	\$2,028	\$1,876	\$2,028	\$1,876	
Client assets rollforward					
	\$2.700	\$2,548	\$2,789	\$2.452	
Beginning balance		-			
Net asset flows	11	2	25	12	
Market/performance/other impacts		48	(15)	133	
Ending balance, June 30	\$2,799	\$2,598	\$2,799	\$2,598	

International metrics

	As of o	As of or for the three				As of or for the six				
	months	months			months					
	ended June 30,				ended June 30,					
(in millions)	2018	2017	Change		2018	2017	Change	•		
Total net revenue (a)										
Europe/Middle East/Africa	\$692	\$663	4	%	\$1,418	\$1,278	311	%		
Asia/Pacific	391	342	14		784	660	19			
Latin America/Caribbean	234	222	5		461	401	15			
Total international net revenue	1,317	1,227	7		2,663	2,339	14			
North America	2,255	2,210	2		4,415	4,386	1			
Total net revenue ^(a)	\$3,572	2\$3,437	74	%	\$7,078	\$6,725	55	%		

(a) Regional revenue is based on the domicile of the client.

As of or for the three As of or for the six

	As of o	or for th	ne three	As of	As of or for the six				
	month	S		month	months				
	ended	June 30),	ended	ended June 30,				
(in billions)	2018	2017	Change	2018	2017	Change			
Assets under management									
Europe/Middle East/Africa	\$371	\$335	11 9	6 \$371	\$335	11 %	6		
Asia/Pacific	164	136	21	164	136	21			
Latin America/Caribbean	65	57	14	65	57	14			
Total international assets under management	600	528	14	600	528	14			
North America	1,428	1,348	6	1,428	1,348	6			
Total assets under management	\$2,028	3\$1,876	58	\$2,02	58				
Client assets									
Europe/Middle East/Africa	\$431	\$387	11	\$431	\$387	11			
Asia/Pacific	229	196	17	229	196	17			
Latin America/Caribbean	160	152	5	160	152	5			
Total international client assets	820	735	12	820	735	12			
North America	1,979	1,863	6	1,979	1,863	6			
Total client assets	\$2,799	9\$2,598	38 %	\$2,79	9\$2,598	88 %	6		

CORPORATE
For a discussion of Corporate, refer to pages 73–74 of JPMorgan Chase's 2017 Annual Report.
Selected income statement and balance sheet data

					As of or for the six months				
	ended Ju	ne 30,			ended Ju	ne 30,			
(in millions, except headcount)	2018	2017	Cha	nge	2018	2017		Chang	ge
Revenue									
Principal transactions	\$83	\$148	(44)%	\$(61) \$163		NM	
Investment securities losses	(80)(34	(135)%	(325) (37)	NM	
All other income/(loss) ^(a)	139	667	(79)%	343	728		(53)
Noninterest revenue	142	781	(82)%	(43) 854		NM	
Net interest income	(62)23	NM		(109) (75)	(45)%
Total net revenue ^(b)	80	804	(90)%	(152) 779		NM	
Provision for credit losses	(1)—	NM		(5) —		NM	
Noninterest expense(c)	279	183	52		366	281		30	%
Income/(loss) before income tax expense/(benefit)	(198)621	NM		(513) 498		NM	
Income tax expense/(benefit)	(62)51	NM		6	(107)	NM	
Net income/(loss)	\$(136)\$570	NM		\$(519) \$605		NM	
Total net revenue									
Treasury and CIO	\$87	\$86	1		\$49	\$79		(38)%
Other Corporate	(7)718	NM		(201) 700		NM	
Total net revenue	\$80	\$804	(90)%	\$(152	\$779		NM	
Net income/(loss)									
Treasury and CIO	\$(153)\$(14) NM		\$(340) \$(81)	(320)
Other Corporate	17	584	(97)%	(179) 686		NM	
Total net income/(loss)	\$(136)\$570	NM		\$(519) \$605		NM	
Total assets (period-end)	\$746,71	6 \$817,754	(9)	\$746,710	5 \$817,75	4	(9)
Loans (period-end)	1,720	1,696	1		1,720	1,696		1	
Core loans(d)	1,720	1,696	1		1,720	1,696		1	
Headcount ^(e)	35,877	32,843	9	%	35,877	32,843		9	%

Included revenue related to a legal settlement of \$645 million for both the three and six months ended June 30, 2017.

Included tax-equivalent adjustments, predominantly due to tax-exempt income from municipal bond investments of \$95 million and \$237 million for the three months ended June 30, 2018 and 2017, respectively, and \$193 million and \$465 million for six months ended June 30, 2018 and 2017, respectively. The decrease in taxable-equivalent adjustments reflects the impact of the TCJA.

Included legal expense/(benefit) of \$(8) million and \$16 million for the three months ended June 30, 2018 and (c) 2017, respectively, and \$(50) million and \$(212) million for six months ended June 30, 2018 and 2017, respectively.

- Average core loans were \$1.7 billion and \$1.6 billion for the three months ended June 30, 2018 and 2017, respectively, and \$1.7 billion and \$1.6 billion for the six months ended June 30, 2018 and 2017, respectively. Effective in the first quarter of 2018, certain Compliance staff were transferred from Corporate to CB. The prior
- (e) period amounts have been revised to conform with the current period presentation. For a further discussion of this transfer, refer to CB segment results on page 31.

Quarterly results

Net loss was \$136 million, compared with net income of \$570 million in the prior year.

Net revenue was \$80 million, compared with \$804 million in the prior year. The current period includes investment securities losses related to the repositioning of the investment securities portfolio. The prior year included a \$645 million benefit from a legal settlement.

Noninterest expense of \$279 million increased from the prior year, primarily driven by a pretax loss of \$174 million on the liquidation of a legal entity.

Current period income tax reflects a benefit of \$189 million resulting from a change in the estimate for the deemed repatriation tax on non-U.S. earnings as well as other net tax adjustments, that were predominantly offset by changes to certain tax reserves.

Year-to-date results

Net loss was \$519 million, compared with net income of \$605 million in the prior year.

Net revenue was a loss of \$152 million, compared with a gain of \$779 million in the prior-year. The current period includes investment securities losses related to the repositioning of the investment securities portfolio. The prior year included a \$645 million benefit from a legal settlement.

Noninterest expense of \$366 million, up \$85 million from prior year, includes a pretax loss in the current period of \$174 million on the liquidation of a legal entity.

Current period income tax expense reflects changes to certain tax reserves, largely offset by changes in the estimate for the deemed repatriation tax on non-U.S. earnings and other tax adjustments.

Treasury and CIO overview

At June 30, 2018, the average credit rating of the Treasury and CIO investment securities comprising the portfolio in the table below was AA+ (based upon external ratings where available and, where not available, based primarily upon internal ratings that correspond to ratings as defined by S&P and Moody's). Refer to Note 9 for further information on the Firm's investment securities portfolio.

For further information on liquidity and funding risk, refer to Liquidity Risk Management on pages 48-52. For information on interest rate, foreign exchange and other risks, refer to Market Risk Management on pages 71–75. Selected income statement and balance sheet data

	As of or for the three months				As of or for the six months				
	ended June 30,				ended June 30,				
(in millions)	2018	2017	Change	9	2018	2017	Change	e	
Investment securities losses	\$(80)	\$(34)	(135)%	\$(325)	\$(49)	NM		
Available-for-sale ("AFS") investment securitie (average)		\$225,053	(11)%	\$202,266	\$229,920	(12)%	
Held-to-maturity ("HTM") investment securities (average)	s 30,304	48,232	(37)	32,152	48,794	(34)	
Investment securities portfolio (average)	\$230,536	\$273,285	(16)	\$234,418	\$278,714	(16)	
AFS investment securities (period-end)	\$200,434	\$213,291	(6)	\$200,434	\$213,291	(6)	
HTM investment securities (period-end)	31,006	47,761	(35)	31,006	47,761	(35)	
Investment securities portfolio (period-end)	\$231,440	\$261,052	(11)%	\$231,440	\$261,052	(11)%	
As permitted by the new hedge accounting guide	ance, the Fi	rm elected to	o transfe	er ce	rtain invest	ment securit	ties from	1	
LITM to AEC in the first question of 2019. For od	ditional info	amotion mo	for to NI	ataa	1 and 0				

HTM to AFS in the first quarter of 2018. For additional information, refer to Notes 1 and 9.

ENTERPRISE-WIDE

RISK

MANAGEMENT

Risk is an inherent part of JPMorgan Chase's business activities. When the Firm extends a consumer or wholesale loan, advises customers on their investment decisions, makes markets in securities, or offers other products or services, the Firm takes on some degree of risk. The Firm's overall objective is to manage its businesses, and the associated risks, in a manner that balances serving the interests of its clients, customers and investors and protects the safety and soundness of the Firm.

The Firm believes that effective risk management requires:

Acceptance of responsibility, including identification and escalation of risk issues, by all individuals within the Firm; Ownership of risk identification, assessment, data and management by each of the lines of business and corporate functions; and

Firmwide structures for risk governance.

The Firm strives for continual improvement through efforts to enhance controls, ongoing employee training and development, talent retention, and other measures. The Firm follows a disciplined and balanced compensation framework with strong internal governance and independent Board oversight. The impact of risk and control issues are carefully considered in the Firm's performance evaluation and incentive compensation processes.

Firmwide Risk Management is overseen and managed on an enterprise-wide basis. The Firm's approach to risk management involves understanding drivers of risks, risk types, and impacts of risks.

Drivers of risk include, but are not limited to, the economic environment, regulatory or government policy, competitor or market evolution, business decisions, process or judgment error, deliberate wrongdoing, dysfunctional markets, and natural disasters.

The Firm's risks are generally categorized in the following four risk types:

Strategic risk is the risk associated with the Firm's current and future business plans and objectives, including capital risk, liquidity risk, and the impact to the Firm's reputation.

Credit and investment risk is the risk associated with the default or change in credit profile of a client, counterparty or customer; or loss of principal or a reduction in expected returns on investments, including consumer credit risk, wholesale credit risk, and investment portfolio risk.

Market risk is the risk associated with the effect of changes in market factors, such as interest and foreign exchange rates, equity and commodity prices, credit spreads or implied volatilities, on the value of assets and liabilities held for both the short and long term.

Operational risk is the risk associated with inadequate or failed internal processes, people and systems, or from external events and includes compliance risk, conduct risk, legal risk, and estimations and model risk.

There may be many consequences of risks manifesting, including quantitative impacts such as reduction in earnings and capital, liquidity outflows, and fines or penalties, or qualitative impacts, such as reputation damage, loss of clients, and regulatory and enforcement actions.

The Firm has established Firmwide risk management functions to manage different risk types. The scope of a particular risk management function may include multiple risk types. For example, the Firm's Country Risk Management function oversees country risk which may be a driver of risk or an aggregation of exposures that could give rise to multiple risk types such as credit or market risk. The following provides an index of where in this Form 10-Q and in JPMorgan Chase's 2017 Annual Report information about the Firm's management of its key risks can be found.

Risk disclosures	Form 10-Q page reference	Annual Report page reference
Enterprise-wide risk management	41–42	75–80
Strategic risk management		81
Capital risk management	43–47	82–91
Liquidity risk management	48–52	92–97
Reputation risk management		98
Consumer credit portfolio	55-59	102–107
Wholesale credit portfolio	60–66	108–116
Investment portfolio risk management	70	120
Market risk management	71–75	121–128
Country risk management	76	129–130
Operational risk management		131–133
Compliance risk management		134
Conduct risk management		135
Legal risk management		136
Estimations and Model risk management		137

CAPITAL RISK MANAGEMENT

Capital risk is the risk the Firm has an insufficient level and composition of capital to support the Firm's business activities and associated risks during normal economic environments and under stressed conditions.

The Firm's capital risk management strategy focuses on maintaining long-term stability to enable it to build and invest in market-leading businesses, even in a highly stressed environment. Senior management considers the implications on the Firm's capital prior to making decisions that could impact future business activities. In addition to considering the Firm's earnings outlook, senior management evaluates all sources and uses of capital with a view to ensuring the Firm's capital strength.

The Firm's capital risk management objectives are achieved through the establishment of minimum capital targets and a strong capital governance framework. Capital risk management is intended to be flexible in order to react to a range of potential events. The Firm's minimum capital targets are based on the most binding of three pillars: an internal assessment of the Firm's capital needs; an estimate of required capital under the CCAR and Dodd-Frank Act stress testing requirements; and Basel III Fully Phased-In regulatory minimums. Where necessary, each pillar may include a management-established buffer.

For a further discussion of the Firm's Capital Risk Management, refer to pages 82–91 of JPMorgan Chase's 2017 Annual Report, Note 19 of this Form 10-Q, and the Firm's Pillar 3 Regulatory Capital Disclosures reports, which are available on the Firm's website (http://investor.shareholder.com/jpmorganchase/basel.cfm).

The Firm and its insured depository institution ("IDI") subsidiaries are subject to Basel III capital rules which include minimum capital ratio requirements that are subject to phase-in periods ("transitional period") through the end of 2018. While this required capital remains subject to the transitional rules during 2018, as of January 1, 2018, the Firm's capital in the form of CET1 and Tier 1, and the Firm's risk-weighted assets were equivalent whether calculated on a transitional basis or on a fully phased-in basis.

The capital adequacy of the Firm and its IDI subsidiaries, both during the transitional period and upon full phase-in, is evaluated against the Basel III approach (Standardized or Advanced) which, for each quarter, results in the lower ratio as required by the Collins Amendment of the Dodd-Frank Act (the "Collins Floor"). The Basel III Standardized Fully Phased-In CET1 ratio is the Firm's current binding constraint, and the Firm expects that this will remain its binding constraint for the foreseeable future.

The Firm is subject to minimum capital ratios under Basel III rules and well-capitalized ratios under the regulations issued by the Federal Reserve and the Prompt Corrective Action ("PCA") requirements of the FDIC Improvement Act ("FDICIA"), respectively. For additional information, refer to Note 19.

The following tables present the Firm's Transitional and Fully Phased-In risk-based and leverage-based capital metrics under both the Basel III Standardized and Advanced Approaches. The Firm's Basel III ratios exceeded both the Transitional and Fully Phased-In regulatory minimums as of June 30, 2018 and December 31, 2017. For a further discussion of these capital metrics, including regulatory minimums, and the Standardized and Advanced Approaches, refer to Strategy and Governance on pages 84–88 of JPMorgan Chase's 2017 Annual Report.

	Transitional				Fully Phased	-In		
Luna 20, 2019			Mini	mum	1		Minii	num
June 30, 2018 (in millions, except ratios)	Standardized	Advanced	capit	al	Standardized	Advanced	capita	al
(iii iiiiiiolis, except ratios)			ratios	S			ratios	
Risk-based capital metrics:								
CET1 capital	\$184,708	\$184,708			\$184,708	\$184,708		
Tier 1 capital	210,321	210,321			210,321	210,321		
Total capital	238,630	229,027			238,357	228,754		
Risk-weighted assets	1,543,370	1,438,747			1,543,370	1,438,747		
CET1 capital ratio	12.0 %	12.8	6 9.0	%	12.0 %	12.8	6 10.5	%
Tier 1 capital ratio	13.6	14.6	10.5		13.6	14.6	12.0	
Total capital ratio	15.5	15.9	12.5		15.4	15.9	14.0	
Leverage-based capital metrics	:							
Adjusted average assets ^(a)	\$2,566,013	\$2,566,013			\$2,566,013	\$2,566,013		
Tier 1 leverage ratio	8.2 %	8.2	6 4.0	%	8.2	8.2	6 4.0	%
Total leverage exposure	NA	NA			NA	\$3,255,296		
SLR ^(b)	NA	NA	NA		NA	6.5	6 5.0	% (b)
	Transitional				Fully Phased	-In		
December 21, 2017	Transitional		Mini	mum		-In	Minii	num
December 31, 2017	Transitional Standardized	Advanced	Mini capit				Minir capita	
December 31, 2017 (in millions, except ratios)		Advanced		al				al
		Advanced	capit	al			capita	al
(in millions, except ratios)		Advanced \$183,300	capit	al			capita	al
(in millions, except ratios) Risk-based capital metrics:	Standardized		capit	al	Standardized	Advanced	capita	al
(in millions, except ratios) Risk-based capital metrics: CET1 capital	Standardized \$183,300	\$183,300	capit	al	Standardized \$183,244	Advanced \$183,244	capita	al
(in millions, except ratios) Risk-based capital metrics: CET1 capital Tier 1 capital	\$183,300 208,644	\$183,300 208,644	capit	al	\$183,244 208,564	Advanced \$183,244 208,564	capita	al
(in millions, except ratios) Risk-based capital metrics: CET1 capital Tier 1 capital Total capital	\$183,300 208,644 238,395 1,499,506	\$183,300 208,644 227,933 1,435,825	capit	al	\$183,244 208,564 237,960 1,509,762	\$183,244 208,564 227,498 1,446,696	capita	al
(in millions, except ratios) Risk-based capital metrics: CET1 capital Tier 1 capital Total capital Risk-weighted assets	\$183,300 208,644 238,395 1,499,506	\$183,300 208,644 227,933 1,435,825	capit ratios	al S	\$183,244 208,564 237,960 1,509,762	\$183,244 208,564 227,498 1,446,696	capita ratios	al
(in millions, except ratios) Risk-based capital metrics: CET1 capital Tier 1 capital Total capital Risk-weighted assets CET1 capital ratio	\$183,300 208,644 238,395 1,499,506 12.2 %	\$183,300 208,644 227,933 1,435,825 12.8	capitaration	al S	\$183,244 208,564 237,960 1,509,762 12.1	\$183,244 208,564 227,498 1,446,696 12.7	capita ratios	al
(in millions, except ratios) Risk-based capital metrics: CET1 capital Tier 1 capital Total capital Risk-weighted assets CET1 capital ratio Tier 1 capital ratio	\$183,300 208,644 238,395 1,499,506 12.2 % 13.9 15.9	\$183,300 208,644 227,933 1,435,825 12.8 9	capitaration	al S	\$183,244 208,564 237,960 1,509,762 12.1 %	\$183,244 208,564 227,498 1,446,696 12.7 9	capita ratios % 10.5 12.0	al
(in millions, except ratios) Risk-based capital metrics: CET1 capital Tier 1 capital Total capital Risk-weighted assets CET1 capital ratio Tier 1 capital ratio Total capital ratio	\$183,300 208,644 238,395 1,499,506 12.2 % 13.9 15.9	\$183,300 208,644 227,933 1,435,825 12.8 9	capitaration	al S	\$183,244 208,564 237,960 1,509,762 12.1 %	\$183,244 208,564 227,498 1,446,696 12.7 9	capita ratios % 10.5 12.0	al
(in millions, except ratios) Risk-based capital metrics: CET1 capital Tier 1 capital Total capital Risk-weighted assets CET1 capital ratio Tier 1 capital ratio Total capital ratio Leverage-based capital metrics	\$183,300 208,644 238,395 1,499,506 12.2 % 13.9 15.9	\$183,300 208,644 227,933 1,435,825 12.8 9 14.5 15.9 \$2,514,270	capitaration	al s	\$183,244 208,564 237,960 1,509,762 12.1 % 13.8 15.8 \$2,514,822	\$183,244 208,564 227,498 1,446,696 12.7 14.4 15.7 \$2,514,822 8.3	capita ratios % 10.5 12.0	al
(in millions, except ratios) Risk-based capital metrics: CET1 capital Tier 1 capital Total capital Risk-weighted assets CET1 capital ratio Tier 1 capital ratio Tier 1 capital ratio Leverage-based capital metrics Adjusted average assets ^(a)	\$183,300 208,644 238,395 1,499,506 12.2 % 13.9 15.9	\$183,300 208,644 227,933 1,435,825 12.8 9 14.5 15.9 \$2,514,270	capital ratios 7.5 9.0 11.0	al s	\$183,244 208,564 237,960 1,509,762 12.1 % 13.8 15.8 \$2,514,822	\$183,244 208,564 227,498 1,446,696 12.7 14.4 15.7	capita ratios % 10.5 12.0 14.0	al %

Note: As of June 30, 2018, and December 31, 2017, the lower of the Standardized or Advanced capital ratios under each of the Transitional and Fully Phased-In approaches in the table above represents the Firm's Collins Floor.

Adjusted average assets, for purposes of calculating the Tier 1 leverage ratio, includes total quarterly average assets (a) adjusted for on-balance sheet assets that are subject to deduction from Tier 1 capital, predominantly goodwill and other intangible assets.

Recent regulatory developments

In April 2018, the Board of Governors of the Federal Reserve System ("FRB") proposed the introduction of a stress buffer framework that would create a single, integrated set of capital requirements by combining the supervisory stress

⁽b) Effective January 1, 2018, the SLR was fully phased-in under Basel III. The December 31, 2017, amounts were calculated under the Basel III Transitional rules.

test results of the CCAR assessment and those under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act Stress Test) with current point-in-time capital requirements. If the proposal is finalized in its current form, the new minimum capital requirements will become effective on October 1, 2019. In addition, in April 2018, the FRB and Office of the

Comptroller of the Currency released a proposal to revise the enhanced supplementary leverage ratio ("eSLR") requirements applicable to the U.S. global systemically important bank ("GSIBs") and their subsidiary insured depository institutions ("IDIs") and to make conforming changes to the Total Loss-Absorbing Capacity ("TLAC") and external long-term debt that satisfies certain eligibility criteria ("eligible LTD") requirements applicable to U.S. GSIBs. The Firm continues to evaluate the impact of these proposals.

Capital components

The following table presents reconciliations of total stockholders' equity to Basel III Fully Phased-In CET1 capital, Tier 1 capital and Total capital as of June 30, 2018 and December 31, 2017.

(in millions)	June 30, 2018	December 3 2017	31,
Total stockholders' equity	\$257,458	\$ 255,693	
Less: Preferred stock	26,068	26,068	
Common stockholders' equity	231,390	229,625	
Less:			
Goodwill	47,488	47,507	
Other intangible assets	806	855	
Add:			
Deferred tax liabilities ^(a)	2,227	2,204	
Less: Other CET1 capital adjustments	615	223	
Standardized/Advanced Fully	184,708	183,244	
Phased-In CET1 capital	104,700	103,244	
Preferred stock	26,068	26,068	
Less: Other Tier 1 adjustments	455	748	
Standardized/Advanced Fully	\$210,321	\$ 208,564	
Phased-In Tier 1 capital	Ψ210,321	\$ 200,50 +	
Long-term debt and other instruments qualifying as Tier 2 capital	\$13,537	\$ 14,827	
Qualifying allowance for credit losses	14,367	14,672	
Other	132	(103)
Standardized Fully Phased-In Tier 2 capital	\$28,036	\$ 29,396	
Standardized Fully Phased-In Total capital	\$238,357	\$ 237,960	
Adjustment in qualifying allowance for credit losses for Advanced Tier 2 capital	(9,603)(10,462)
Advanced Fully Phased-In Tier 2 capital	\$18,433	\$ 18,934	
Advanced Fully Phased-In Total capital	\$228,754	\$ 227,498	

⁽a) Represents certain deferred tax liabilities related to tax-deductible goodwill and identifiable intangibles created in nontaxable transactions, which are netted against goodwill and other intangibles when calculating TCE.

Capital rollforward

The following table presents the changes in Basel III Fully Phased-In CET1 capital, Tier 1 capital and Tier 2 capital for the six months ended June 30, 2018.

Six months ended June 30,	2018
(in millions)	2016
Standardized/Advanced CET1 capital at December 31, 2017	\$183,244
Net income applicable to common equity	16,240
Dividends declared on common stock	(3,852)
Net purchase of treasury stock	(8,234)
Changes in additional paid-in capital	(1,187)
Changes related to AOCI	(796)
Adjustment related to DVA ^(a)	(586)
Changes related to other CET1 capital adjustments	(121)
Change in Standardized/Advanced CET1 capital	1,464
Standardized/Advanced CET1 capital at June 30, 2018	\$184,708
Standardized/Advanced Tier 1 capital at December 31, 2017	\$208,564
Change in CET1 capital	1,464

Net issuance of noncumulative perpetual preferred stock Other Change in Standardized/Advanced Tier 1 capital Standardized/Advanced Tier 1 capital at June 30, 2018		
Standardized Tier 2 capital at December 31, 2017	\$29,396	
Change in long-term debt and other instruments qualifying as Tier 2	(1,290))
Change in qualifying allowance for credit losses	(305))
Other	235	
Change in Standardized Tier 2 capital	(1,360)
Standardized Tier 2 capital at June 30, 2018	\$28,036	
Standardized Total capital at June 30, 2018	\$238,357	7
	4.10.02.1	
Advanced Tier 2 capital at December 31, 2017	\$18,934	
Change in long-term debt and other instruments qualifying as Tier 2	(1,290)
Change in qualifying allowance for credit losses	554	
Other	235	
Change in Advanced Tier 2 capital	(501)
Advanced Tier 2 capital at June 30, 2018	\$18,433	
Advanced Total capital at June 30, 2018	\$228,754	ļ
(a) Includes DVA related to structured notes recorded in AOCI.		

RWA rollforward

The following table presents changes in the components of RWA under Basel III Standardized and Advanced Fully Phased-In for the six months ended June 30, 2018. The amounts in the rollforward categories are estimates, based on the predominant driver of the change.

	Standardize	ed		Advanced				
Six months ended	Credit risk	Market		Credit risk	z Market	Operationa	al	
June 30, 2018	RWA	risk RWA	Total RWA	RWA	risk RWA	risk	Total RWA	
(in millions)	IX VV Z I	115K IX VV 1	1	10 11 11	113K IX W 1	RWA		
At December 31, 2017	\$1,386,060	\$123,702	\$1,509,762	\$922,905	\$123,791	\$400,000	\$1,446,696	
Model & data changes ^(a)	(652)(1,100)(1,752)	1,481	(1,100))—	381	
Portfolio runoff ^(b)	(5,416)—	(5,416)	(6,484)—	_	(6,484)
Movement in portfolio levels(c)	44,960	(4,184)40,776	14,727	(4,073)(12,500)(1,846)
Changes in RWA	38,892	(5,284)33,608	9,724	(5,173)(12,500)(7,949)
June 30, 2018	\$1,424,952	\$118,418	\$1,543,370	\$932,629	\$118,618	\$387,500	\$1,438,747	

- Model & data changes refer to movements in levels of RWA as a result of revised methodologies and/or treatment per regulatory guidance (exclusive of rule changes).
- (b) Portfolio runoff for credit risk RWA primarily reflects reduced risk from position rolloffs in legacy portfolios in Home Lending.
- Movement in portfolio levels refers to: changes in book size, composition, credit quality, and market movements (c) for credit risk RWA; changes in position and market movements for market risk RWA; and an update to cumulative losses for operational risk RWA.

Supplementary leverage ratio

The SLR is defined as Tier 1 capital under Basel III divided by the Firm's total leverage exposure. For additional information, refer to Capital Risk Management on page 88 of JPMorgan Chase's 2017 Annual Report. The following table presents the components of the Firm's Fully Phased-In SLR as of June 30, 2018 and December 31, 2017.

(in millions, except ratio)	June 30,	December
(iii iiiiiiolis, except ratio)	2018	31, 2017
Tier 1 capital	\$210,321	\$208,564
Total average assets	2,612,969	2,562,155
Less: Adjustments for deductions from Tier 1 capital	46,956	47,333
Total adjusted average assets ^(a)	2,566,013	2,514,822
Off-balance sheet exposures ^(b)	689,283	690,193
Total leverage exposure	\$3,255,296	\$3,205,015
SLR	6.5	% 6.5 %

Adjusted average assets, for purposes of calculating the SLR, includes total quarterly average assets adjusted for (a) on-balance sheet assets that are subject to deduction from Tier 1 capital, predominantly goodwill and other intangible assets.

(b)Off-balance sheet exposures are calculated as the average of the three month-end spot balances during the quarter. As of June 30, 2018, JPMorgan Chase Bank, N.A.'s and Chase Bank USA, N.A.'s Fully Phased-In SLRs were approximately 6.7% and 13.1%, respectively.

Line of business equity

Each business segment is allocated capital by taking into consideration stand-alone peer comparisons and regulatory capital requirements. For additional information, refer to page 88 of JPMorgan Chase's 2017 Annual Report.

The following table represents the capital allocated to each business segment:

	June 30,	December 31,
(in billions)	2018	2017
Consumer & Community Banking	\$51.0	\$ 51.0
Corporate & Investment Bank	70.0	70.0

Commercial Banking 20.0 20.0
Asset & Wealth Management 9.0 9.0
Corporate 81.4 79.6
Total common stockholders' equity\$ 231.4 \$ 229.6

Planning and stress testing

Comprehensive Capital Analysis and Review

The Federal Reserve requires large bank holding companies, including the Firm, to submit a capital plan on an annual basis. Through the CCAR process, the Federal Reserve evaluates each bank holding company's ("BHC") capital adequacy and internal capital adequacy assessment processes, as well as its plans to make capital distributions, such as dividend payments or stock repurchases.

On June 28, 2018, the Federal Reserve informed the Firm that it did not object, on either a quantitative or qualitative basis, to the Firm's 2018 capital plan.

Capital actions

Preferred stock

Preferred stock dividends declared were \$788 million for the six months ended June 30, 2018.

Common stock dividends

The current quarter common stock dividend was \$0.56 per share. On June 28, 2018, the Firm announced that its Board of Directors intends to increase the quarterly common stock dividend to \$0.80 per share, effective the third quarter of 2018. The Firm's dividends are subject to the Board of Directors' approval on a quarterly basis.

Common equity

Effective as of June 28, 2018, the Firm's Board of Directors authorized the repurchase of up to \$20.7 billion of common equity (common stock and warrants) between July 1, 2018 and June 30, 2019, as part of its annual capital plan.

The following table sets forth the Firm's repurchases of common equity for the three and six months ended June 30, 2018 and 2017. There were no repurchases of warrants during the three and six months ended June 30, 2018 and 2017.

Three months Six months ended ended June June 30. 30.

 (in millions)
 2018
 2017
 2018
 2017

 Total shares of common stock repurchased
 45.3
 35.0
 86.7
 67.1

 Aggregate common stock repurchases
 \$4,968 \$3,007 \$9,639 \$5,839

For additional information regarding repurchases of the Firm's equity securities, refer to Part II, Item 2: Unregistered Sales of Equity Securities and Use of Proceeds and Part II, Item 5: Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities on page 180 of this Form 10-Q and page 28 of JPMorgan Chase's 2017 Form 10-K, respectively.

There were 12.1 million and 15.0 million warrants outstanding at June 30, 2018 and December 31, 2017, respectively. Other capital requirements

TLAC

The Federal Reserve's TLAC rule requires the top-tier U.S. GSIB holding companies, including the Firm, to maintain minimum levels of external TLAC and eligible LTD effective January 1, 2019.

As of June 30, 2018, the Firm was compliant with the requirements of the rule to which it will be subject on January 1, 2019. For additional information, refer to page 90 of JPMorgan Chase's 2017 Annual Report.

Broker-dealer regulatory capital

J.P. Morgan Securities

JPMorgan Chase's principal U.S. broker-dealer subsidiary is J.P. Morgan Securities. J.P. Morgan Securities is subject to Rule 15c3-1 under the Securities Exchange Act of 1934 (the "Net Capital Rule"). J.P. Morgan Securities is also registered as a futures commission merchant and subject to Rule 1.17 of the Commodity Futures Trading Commission ("CFTC").

J.P. Morgan Securities has elected to compute its minimum net capital requirements under the "Alternative Net Capital Requirements" of the Net Capital Rule.

Under the market and credit risk standards of Appendix E of the Net Capital Rule, J.P. Morgan Securities is eligible to use the alternative method of computing net capital if, in addition to meeting its minimum net capital requirement, it maintains tentative net capital of at least \$1.0 billion. J.P. Morgan Securities is required to notify the Securities and Exchange Commission ("SEC") in the event that tentative net capital is less than \$5.0 billion. As of June 30, 2018, J.P. Morgan Securities maintained tentative net capital in excess of the minimum and notification requirements.

The following table presents J.P. Morgan Securities' net capital information:

June 30, 2018 Net Capital (in millions) Actual Minimum J.P. Morgan Securities \$16,649\$ 2,888

J.P. Morgan Securities plc

J.P. Morgan Securities plc is a wholly-owned subsidiary of JPMorgan Chase Bank, N.A. and is the Firm's principal operating subsidiary in the U.K. It has authority to engage in banking, investment banking and broker-dealer activities. J.P. Morgan Securities plc is jointly regulated by the U.K. Prudential Regulatory Authority ("PRA") and the Financial Conduct Authority ("FCA"). J.P. Morgan Securities plc is subject to the European Union Capital Requirements Regulation and the U.K. PRA capital rules, each of which implemented Basel III and thereby subject J.P. Morgan Securities plc to its requirements.

The following table presents J.P. Morgan Securities plc's capital information:

June 30, 2018	Total capital	CET1 ratio		Total capital ratio	
(in millions, except ratios)	Estimated	Estimated	dMinimum	Estimated	lMinimum
J.P. Morgan Securities plc	\$ 40,269	15.9	4.5	15.9	8.0

LIQUIDITY

RISK

MANAGEMENT

Liquidity risk is the risk that the Firm will be unable to meet its contractual and contingent financial obligations as they arise or that it does not have the appropriate amount, composition and tenor of funding and liquidity to support its assets and liabilities. For a further discussion of the Firm's Liquidity Risk Management, refer to pages 92–97 of JPMorgan Chase's 2017 Annual Report and the Firm's US LCR Disclosure reports, which are available on the Firm's website at: (https://investor.shareholder.com/jpmorganchase/basel.cfm).

LCR and HOLA

The LCR rule requires the Firm to maintain an amount of unencumbered HQLA that is sufficient to meet its estimated total net cash outflows over a prospective 30 calendar-day period of significant stress. HOLA is the amount of liquid assets that qualify for inclusion in the LCR. HQLA primarily consist of unencumbered cash and certain high quality liquid securities as defined in the LCR rule.

Under the LCR rule, the amount of HQLA held by JPMorgan Chase Bank N.A. and Chase Bank USA, N.A that are in excess of each entity's standalone 100% minimum LCR requirement, and that are not transferable to non-bank affiliates, must be excluded from the Firm's reported HOLA. The LCR is required to be a minimum of 100%. The following table summarizes the Firm's average LCR for the three months ended June 30, 2018, March 31, 2018 and June 30, 2017 based on the Firm's current interpretation of the finalized LCR framework.

	Three months ended						
Avaraga amount	June	March	June				
Average amount	30,	31,	30,				
(in billions)	2018	2018	2017				
HQLA							
Eligible cash ^(a)	\$363	\$358	378				
Eligible securities(b)(c)	166	181	163				
Total HQLA ^(d)	\$529	\$539	541				
Net cash outflows	\$458	468	469				
LCR	115 %	115 %	115%				
Net excess HQLA (d)	\$71	71	72				

- (a) Represents cash on deposit at central banks, primarily Federal Reserve Banks.
- Predominantly U.S. Treasuries, U.S. Agency MBS, and sovereign bonds net of applicable haircuts under the LCR rules.
- (c) HQLA eligible securities may be reported in securities borrowed or purchased under resale agreements, trading assets, or investment securities on the Firm's Consolidated balance sheets.
- Excludes average excess HQLA at JPMorgan Chase Bank, N.A. and Chase Bank USA, N.A. that are not transferable to particular for the control of transferable to non-bank affiliates.

The Firm's average LCR may fluctuate from period to period, due to changes in its HQLA and estimated net cash outflows under the LCR as a result of ongoing business activity. The Firm's HQLA are expected to be available to meet its liquidity needs in a time of stress.

Other liquidity sources

As of June 30, 2018, in addition to assets reported in the Firm's HQLA under the LCR rule, the Firm had approximately \$215 billion of unencumbered marketable securities, such as equity securities and fixed income debt securities, available to raise liquidity, if required. This includes HQLA-eligible securities included as part of the excess liquidity at JPMorgan Chase Bank, N.A. that are not transferable to non-bank affiliates.

As of June 30, 2018, the Firm also had approximately \$292 billion of available borrowing capacity at various Federal Home Loan Banks ("FHLBs"), discount windows at Federal Reserve Banks and various other central banks as a result of collateral pledged by the Firm to such banks. This borrowing capacity excludes the benefit of securities reported in the Firm's HOLA or other unencumbered securities that are currently pledged at Federal Reserve Bank discount windows. Although available, the Firm does not view the borrowing capacity at the Federal Reserve Bank discount

windows and the various other central banks as a primary source of liquidity.

Funding

Sources of funds

Management believes that the Firm's unsecured and secured funding capacity is sufficient to meet its on- and off-balance sheet obligations.

The Firm funds its global balance sheet through diverse sources of funding including a stable deposit franchise as well as secured and unsecured funding in the capital markets. The Firm's loan portfolio is funded with a portion of the Firm's deposits, through securitizations and, with respect to a portion of the Firm's real estate-related loans, with secured borrowings from the FHLBs. Deposits in excess of the amount utilized to fund loans are primarily invested in the Firm's investment securities portfolio or deployed in cash or other short-term liquid investments based on their interest rate and liquidity risk characteristics. Securities borrowed or purchased under resale agreements and trading assets-debt and equity instruments are primarily funded by the Firm's securities loaned or sold under agreements to repurchase, trading liabilities-debt and equity instruments, and a portion of the Firm's long-term debt and stockholders' equity. In addition to funding securities borrowed or purchased under resale agreements and trading assets-debt and equity instruments, proceeds from the Firm's debt and equity issuances are used to fund certain loans and other financial and non-financial assets, or may be invested in the Firm's investment securities portfolio. Refer to the discussion below for additional information relating to Deposits, Short-term funding, and Long-term funding and issuance.

Deposits

The table below summarizes, by line of business, the deposit balances as of June 30, 2018, and December 31, 2017, and the average deposit balances for the three and six months ended June 30, 2018 and 2017, respectively.

			Three months ended		Six months ended June		
	June 30,	December 31,	June 30,		30,		
Deposits	2018	2017	Average		Average		
(in millions)			2018	2017	2018	2017	
Consumer & Community Banking	\$679,154	\$ 659,885	\$673,761	\$639,873	\$666,719	\$631,441	
Corporate & Investment Bank	475,761	455,883	475,697	442,387	470,788	434,968	
Commercial Banking	165,170	181,512	170,665	173,081	173,081	174,843	
Asset & Wealth Management	131,511	146,407	139,557	150,786	141,865	154,776	
Corporate	526	295	815	4,002	839	4,870	
Total Firm	\$1,452,122	2\$ 1,443,982	\$1,460,495	5\$1,410,129	\$1,453,292	2\$1,400,898	

A key strength of the Firm is its diversified deposit franchise, through each of its lines of business, which provides a stable source of funding and limits reliance on the wholesale funding markets. A significant portion of the Firm's deposits are consumer and wholesale operating deposits, which are both considered to be stable sources of liquidity. Wholesale operating deposits are considered to be stable sources of liquidity because they are generated from customers that maintain operating service relationships with the Firm.

The table below shows the loan and deposit balances, the loans-to-deposits ratios, and deposits as a percentage of total liabilities, as of June 30, 2018 and December 31, 2017.

(in hillians avant notics)	June 30,	December 31	,
(in billions except ratios)	2018	2017	
Deposits	\$1,452.1	\$ 1,444.0	
Deposits as a % of total liabilities	62 %	63	%
Loans	\$948.4	\$ 930.7	
Loans-to-deposits ratio	65 %	64	%

Deposits increased from December 31, 2017, due to higher deposits in the consumer business reflecting the continuation of growth from new and existing customers and low attrition rates in CCB, partially offset by balance migration as customers shift from deposits largely into the Firm's investment-related products; and in the wholesale business reflecting an increase in CIB's Treasury Services business driven by growth in client activity. The increase was partially offset by declines in the other wholesale businesses primarily driven by the impact of seasonality in CB and AWM, and balance migration in AWM predominantly into the Firm's investment-related products. Average deposits increased for the three and six months ended June 30, 2018, due to higher deposits in the consumer business and in CIB, partially offset by declines in AWM and Corporate. Drivers of the changes in average balances for these businesses are generally consistent with the drivers of the changes in the period-end balances described above. The decline in average Corporate deposits was predominantly due to maturities of wholesale non-operating deposits, which are consistent with the Firm's efforts to reduce such products. The Firm believes average deposit balances are generally more representative of deposit trends than period-end deposit balances. For further information on deposit and liability balance trends, refer to the discussion of the Firm's Business Segment Results and the Consolidated Balance Sheets Analysis on pages 18–40 and pages 11–13, respectively.

The following table summarizes short-term and long-term funding, excluding deposits, as of June 30, 2018, and December 31, 2017, and average balances for the three and six months ended June 30, 2018 and 2017, respectively. For additional information, refer to the Consolidated Balance Sheets Analysis on pages 11–13 and Note 10.

		Three months		Six months ended		
	June 30,	December 31, ended June 30,		June 30,		
Sources of funds (excluding deposits)	2018	2017	Average		Average	
(in millions)			2018	2017	2018	2017
Commercial paper	\$28,049	24,186	\$27,143	\$19,466	\$26,571	\$16,432
Other borrowed funds	35,869	27,616	35,196	23,693	33,413	23,427
Total short-term borrowings	\$63,918	\$ 51,802	\$62,339	\$43,159	\$59,984	\$39,859
Obligations of Firm-administered multi-seller conduits ^(a)	\$2,969	\$ 3,045	\$2,993	\$2,750	\$3,054	\$3,557
Securities loaned or sold under agreements to repurchase:						
Securities sold under agreements to repurchase ^(b)	\$164,69	1\$ 147,713	\$178,06	4\$180,512	\$181,212	2\$177,389
Securities loaned ^(b)	9,809	9,211	13,058	14,752	11,799	14,602
Total securities loaned or sold under agreements to repurchase ^{(b)(c)(d)}	\$174,500	0\$ 156,924	\$191,122	2\$195,264	\$193,01	1\$191,991
Senior notes	\$151,24	4\$ 155,852	\$151,04	7\$153,661	\$150,633	5\$151,557
Trust preferred securities ^(e)	682	690	684	2,340	686	2,342
Subordinated debt ^(e)	15,963	16,553	16,010	20,546	16,120	20,857
Structured notes	48,036	45,727	48,674	42,957	47,842	40,941
Total long-term unsecured funding	\$215,923	5\$ 218,822	\$216,41	5\$219,504	\$215,283	3\$215,697
Credit card securitization ^(a)	\$16,505	\$ 21,278	\$16,181	\$27,034	\$17,416	\$28,226
Other securitizations ^{(a)(f)}	_			1,003		1,262
Federal Home Loan Bank ("FHLB") advances	52,162	60,617	54,232	73,053	57,291	75,155
Other long-term secured funding ^(g)	5,027	4,641	4,998	3,311	4,741	3,204
Total long-term secured funding	\$73,694	\$ 86,536	\$75,411	\$104,401	\$79,448	\$107,847
Preferred stock ^(h)	\$26,068	\$ 26,068	\$26,068	\$26,068	\$26,068	\$26,068
Common stockholders' equityh)	-	0\$ 229,625	-	•	•	1\$228,959

Included in beneficial interests issued by consolidated variable interest entities on the Firm's Consolidated balance sheets.

- (b) The prior period amounts have been revised to conform with the current period presentation.
- (c) Primarily consists of short-term securities loaned or sold under agreements to repurchase.
- (d) Excludes federal funds purchased.

Subordinated debt includes \$1.6 billion of junior subordinated debentures distributed pro rata to the holders of trust

- (e) preferred securities which were cancelled on December 18, 2017. For further information refer to Note 19 of JPMorgan Chase's 2017 Annual Report.
 - Other securitizations include securitizations of student loans. The Firm deconsolidated the student loan securitization entities in the second quarter of 2017 as it no longer had a controlling financial interest in these
- (f) entities as a result of the sale of the student loan portfolio. The Firm's wholesale businesses also securitize loans for client-driven transactions, which are not considered to be a source of funding for the Firm and are not included in the table.
- (g) Includes long-term structured notes which are secured.
- (h) For additional information on preferred stock and common stockholders' equity refer to Capital Risk Management on pages 43–47, Consolidated statements of changes in stockholders' equity, and Note 20 and Note 21 of JPMorgan

Chase's 2017 Annual Report.

Short-term funding

The Firm's sources of short-term secured funding primarily consist of securities loaned or sold under agreements to repurchase. These instruments are secured predominantly by high-quality securities collateral, including government-issued debt and agency MBS, and constitute a significant portion of the federal funds purchased and securities loaned or sold under repurchase agreements on the Consolidated balance sheets. The increase at June 30, 2018, from December 31, 2017, reflected higher secured financing of trading assets-debt and equity instruments, partially offset by a change in the mix of funding to short-term borrowings in CIB.

The balances associated with securities loaned or sold under agreements to repurchase fluctuate over time due to customers' investment and financing activities; the Firm's demand for financing; the ongoing management of the mix of the Firm's liabilities, including its secured and unsecured financing (for both the investment securities and market-making portfolios); and other market and portfolio factors.

The Firm's sources of short-term unsecured funding primarily consist of issuance of wholesale commercial paper. The increase in commercial paper was due to higher net issuance.

Long-term funding and issuance

Long-term funding provides additional sources of stable funding and liquidity for the Firm. The Firm's long-term funding plan is driven primarily by expected client activity, liquidity considerations, and regulatory requirements, including TLAC. Long-term funding objectives include maintaining diversification, maximizing market access and optimizing funding costs. The Firm evaluates various funding markets, tenors and currencies in creating its optimal long-term funding plan.

The significant majority of the Firm's long-term unsecured funding is issued by the Parent Company to provide maximum flexibility in support of both bank and nonbank subsidiary funding needs. The Parent Company advances substantially all net funding proceeds to its subsidiary, the Intermediate Holding Company ("IHC"). The IHC does not issue debt to external counterparties. The following table summarizes long-term unsecured issuance and maturities or redemptions for the three and six months ended June 30, 2018 and 2017. For additional information on the IHC and long-term debt, refer to Liquidity Risk Management and Note 19 of JPMorgan Chase's 2017 Annual Report.

Long-term unsecured funding

	Three months ended June 30,		Six morended June 30	
(in millions)	2018	2017	2018	2017
Issuance				
Senior notes issued in the U.S. market ^(a)	\$10,470	0\$8,218	\$18,451	\$14,681
Senior notes issued in non-U.S. markets	1,170	2,210	1,170	2,210
Total senior notes	11,640	10,428	19,621	16,891
Subordinated debt				
Structured notes	8,095	8,160	15,883	16,594
Total long-term unsecured funding – issuance	\$19,735	5\$18,588	\$35,504	1\$33,485
Maturities/redemptions				
Senior notes	\$6,827	\$3,615	\$20,951	\$14,042
Trust preferred securities				
Subordinated debt		2,011		3,006
Structured notes	4,986	7,043	10,513	12,373

Total long-term unsecured funding – maturities/redemptions\$11,813\$12,669 \$31,464\$29,421

(a) The prior period amounts have been revised to conform with the current period presentation.

The Firm raises secured long-term funding through securitization of consumer credit card loans and advances from the FHLBs. The following table summarizes the securitization issuance and FHLB advances and their respective maturities or redemptions for the three and six months ended June 30, 2018 and 2017, respectively. Long-term secured funding

	Three months ended June 30,					Six months ended June 30,			
	Issuan	ce	Maturities/	Redemptions	Issuan	ce	Maturities/I	Redemptions	
(in millions)	2018	2017	2018	2017	2018	2017	2018	2017	
Credit card securitization	\$1,396	5\$—	\$ 1,725	\$ 3,016	\$1,396	5\$1,545	\$ 6,125	\$ 7,006	
Other securitizations ^(a)	_	_	_				_	55	
FHLB advances	_	_	4,702	5,852	4,000	_	12,453	11,054	
Other long-term secured funding ^{(b)(c)}	74	434	6	80	195	537	22	124	
Total long-term secured funding	\$1,470	\$434	\$ 6,433	\$ 8,948	\$5,59	1\$2,082	\$ 18,600	\$ 18,239	

Other securitizations includes securitizations of student loans. The Firm deconsolidated the student loan

- (a) securitization entities in the second quarter of 2017 as it no longer had a controlling financial interest in these entities as a result of the sale of the student loan portfolio.
- (b) Includes long-term structured notes which are secured.
- (c) The prior period amounts have been revised to conform with the current period presentation.

The Firm's wholesale businesses also securitize loans for client-driven transactions; those client-driven loan securitizations are not considered to be a source of funding for the Firm and are not included in the table above. For further description of the client-driven loan securitizations, refer to Note 14 of JPMorgan Chase's 2017 Annual Report.

Credit ratings

The cost and availability of financing are influenced by credit ratings. Reductions in these ratings could have an adverse effect on the Firm's access to liquidity sources, increase the cost of funds, trigger additional collateral or funding requirements and decrease the number of investors and counterparties willing to lend to the Firm.

Additionally, the Firm's funding requirements for VIEs and other third-party commitments may be adversely affected by a decline in credit ratings. For additional information on the impact of a credit ratings downgrade on the funding requirements for VIEs, and on derivatives and collateral agreements, refer to SPEs on page 14, and Liquidity risk and credit-related contingent features in Note 4.

The credit ratings of the Parent Company and the Firm's principal bank and nonbank subsidiaries as of June 30, 2018, were as follows.

	JPMorgan C	Thosa & Co		JPMorgan C	Chase Bank, I	N.A.	J.P. Morgan	Securities L	LC
	C			Chase Bank	USA, N.A.		J.P. Morgan	Securities pl	lc
June 30, 2018	Long-term issuer	Short-term issuer	Outlook	Long-term issuer	Short-term issuer	Outlook	Long-term issuer	Short-term issuer	Outlook
Moody's									
Investors	A3	P-2	Stable	Aa3	P-1	Stable	A1	P-1	Stable
Service									
Standard & Poor's	A-	A-2	Stable	A+	A-1	Stable	A+	A-1	Stable
Fitch Ratings	AA-	F1+	Stable	AA	F1+	Stable	AA	F1+	Stable

On June 21, 2018, Fitch upgraded the Parent Company's long term issuer rating to AA- (previously A+) and short term issuer rating to F1+ (previously F1). The long term issuer ratings were also upgraded to AA for JPMorgan Chase Bank, N.A, Chase Bank USA, N.A., J.P. Morgan Securities LLC and J.P. Morgan Securities plc (all previously AA-). Downgrades of the Firm's long-term ratings by one or two notches could result in an increase in its cost of funds, and access to certain funding markets could be reduced. The nature and magnitude of the impact of ratings downgrades depends on numerous contractual and behavioral factors which the Firm believes are incorporated in its liquidity risk and stress testing metrics. The Firm believes that it maintains sufficient liquidity to withstand a potential decrease in funding capacity due to ratings downgrades.

JPMorgan Chase's unsecured debt does not contain requirements that would call for an acceleration of payments, maturities or changes in the structure of the existing debt, provide any limitations on future borrowings or require additional collateral, based on unfavorable changes in the Firm's credit ratings, financial ratios, earnings, or stock price.

Critical factors in maintaining high credit ratings include a stable and diverse earnings stream, strong capital ratios, strong credit quality and risk management controls, diverse funding sources, and disciplined liquidity monitoring procedures. Rating agencies continue to evaluate economic and geopolitical trends, regulatory developments, future profitability, risk management practices, and litigation matters, as well as their broader ratings methodologies. Changes in any of these factors could lead to changes in the Firm's credit ratings.

CREDIT AND INVESTMENT RISK

MANAGEMENT

Credit and investment risk is the risk associated with the default or change in credit profile of a client, counterparty or customer; or loss of principal or a reduction in expected returns on investments. For a further discussion of Credit Risk refer to pages 53–70. For a further discussion on Investment Portfolio Risk, refer to page 70. For a further discussion of the Firm's Credit and Investment Risk Management framework and organization, and the identification, monitoring and management, refer to Credit and Investment Risk Management on pages 99–120 of JPMorgan Chase's 2017 Annual Report.

CREDIT

PORTFOLIO

Credit risk is the risk associated with the default or change in credit profile of a client, counterparty or customer. In the following tables, reported loans include loans retained (i.e., held-for-investment); loans held-for-sale; and certain loans accounted for at fair value. The following tables do not include loans which the Firm accounts for at fair value and classifies as trading assets. For further information regarding these loans, refer to Notes 2 and 3. For additional information on the Firm's loans, lending-related commitments and derivative receivables, including the Firm's accounting policies, refer to Notes 11, 20, and 4, respectively.

For further information regarding the credit risk inherent in the Firm's cash placed with banks, refer to Wholesale credit exposure – industry exposures on pages 62–64; for information regarding the credit risk inherent in the Firm's investment securities portfolio, refer to Note 9 of this Form 10-Q, and Note 10 of JPMorgan Chase's 2017 Annual Report; and for information regarding the credit risk inherent in the securities financing portfolio, refer to Note 10 of this Form 10-Q, and Note 11 of JPMorgan Chase's 2017 Annual Report.

For a further discussion of the consumer credit environment and consumer loans, refer to Consumer Credit Portfolio on pages 102–107 of JPMorgan Chase's 2017 Annual Report and Note 11 of this Form 10-Q. For a further discussion of the wholesale credit environment and wholesale loans,

refer to Wholesale Credit Portfolio on pages 108–116 of JPMorgan Chase's 2017 Annual Report and Note 11 of this Form 10-Q.

Total credit portfolio

Total credit portions			Credit exp	osure	Nonperforming ^{(d)(e)}		
('a a '11' a a a)			Jun 30,	Dec 31,	Jun 30,	Dec 31,	
(in millions)			2018	2017	2018	2017	
Loans retained			\$940,440	\$924,838	\$ 5,135	\$ 5,943	
Loans held-for-sale			4,898	3,351	175	_	
Loans at fair value			3,076	2,508	_	_	
Total loans – reported			948,414	930,697	5,310	5,943	
Derivative receivables			58,510	56,523	112	130	
Receivables from customers and other ^(a)			27,607	26,272		_	
Total credit-related assets			1,034,531	1,013,492	5,422	6,073	
Assets acquired in loan satisfactions							
Real estate owned			NA	NA	312	311	
Other			NA	NA	33	42	
Total assets acquired in loan satisfactions			NA	NA	345	353	
Lending-related commitments			1,045,993	991,482	712	731	
Total credit portfolio			\$2,080,52	4 \$2,004,974	\$ 6,479	\$ 7,157	
Credit derivatives used			\$(15,229)\$(17,609) \$ —	\$ —	
in credit portfolio management activities(b)			\$(13,229)\$(17,009)	φ —	
Liquid securities and other cash collateral held aga	inst deriv	atives ^(c)	(16,103)(16,108) NA	NA	
	Three mo	onths	Six mont	ns andad			
(in millions,	ended		June 30,	iis chided			
except ratios)	June 30,		June 50,				
	2018	2017	2018	2017			
Net charge-offs ^(f)	\$1,252	\$1,204	\$2,587	\$2,858			
Average retained loans							
Loans	932,042	892,840	926,268	889,229			
Loans – excluding residential real estate PCI loans	903,263	859,102	896,856	854,842			
Net charge-off rates ^(f)							
				0.65 %			
Loans – excluding PCI	0.56	0.56	0.58	0.67			

- (a) Receivables from customers and other primarily represents held-for-investment margin loans to brokerage customers.
 - Represents the net notional amount of protection purchased and sold through credit derivatives used to manage
- (b) both performing and nonperforming wholesale credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. For additional information, refer to Credit derivatives on page 66 and Note 4.
- Includes collateral related to derivative instruments where an appropriate legal opinion has not been either sought or obtained.
- (d) Excludes PCI loans. The Firm is recognizing interest income on each pool of PCI loans as each of the pools is performing.
 - At June 30, 2018, and December 31, 2017, nonperforming assets excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of \$3.3 billion and \$4.3 billion, respectively, and real estate owned
- (e) ("REO") insured by U.S. government agencies of \$84 million and \$95 million, respectively. These amounts have been excluded based upon the government guarantee. In addition, the Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance issued by the Federal Financial Institutions Examination Council ("FFIEC").
- For the six months ended June 30, 2017, excluding net charge-offs of \$467 million related to the student loan (f) portfolio transfer, the net charge-off rate for Loans would have been 0.54% and for Loans excluding PCI would have been 0.56%.

CONSUMER

CREDIT

PORTFOLIO

The Firm's retained consumer portfolio consists primarily of residential real estate loans, credit card loans, auto loans, and business banking loans, as well as associated lending-related commitments. The Firm's focus is on serving primarily the prime segment of the consumer credit market. For further information on consumer loans, refer to Note 11 of this Form

10-Q and Consumer Credit Portfolio on pages 102-107 and Note 12 of JPMorgan Chase's 2017 Annual Report. For further information on lending-related commitments, refer to Note 20 of this Form 10-Q and Note 27 of JPMorgan Chase's 2017 Annual Report.

The following table presents consumer credit-related information with respect to the credit portfolio held by CCB, prime mortgage and home equity loans held by AWM, and prime mortgage loans held by Corporate. For further information about the Firm's nonaccrual and charge-off accounting policies, refer to Note 12 of JPMorgan Chase's 2017 Annual Report.

Consumer credit portfolio

Consumer credi	i portiono				Three	months e	nded June		Six mo	onths end		
(in millions,	Credit exp	osure	Nonac loans ⁽ⁱ⁾)(j)		-offs/(rec	Average net co veraces (k)(l)		Net wahase	-offs/(rec	net	e annual (M/(recove
except ratios)	Jun 30, 2018	Dec 31, 2017	Jun 30 2018	Dec 31, 2017	2018	2017	2018	2017	2018	2017	2018	2017
Consumer, excluding credit card Loans, excluding PCI loans and loans held-for-sale	t											
Residential mortgage	\$225,864	\$216,496	\$2,10	1\$2,175	\$(151)\$(3) (0.27)%	(0.01)%	\$(151)\$—	(0.14)%	%— %
Home equity Auto ^{(a)(b)} Consumer &	30,460 65,014	33,450 66,242	1,481 124	1,610 141	(7 50)9 48	(0.09) 0.31	0.10 0.29	10 126	58 129	0.06 0.39	0.31 0.40
Business Banking ^{(b)(c)}	26,272	25,789	273	283	50	56	0.77	0.91	103	113	0.80	0.93
Student ^(d) Total loans,	_	_	_	_	_	_	_	_		498	_	NM
excluding PCI loans and loans held-for-sale Loans – PCI	347,610	341,977	3,979	4,209	(58)110	(0.07)	0.13	88	798	0.05	0.49
Home equity Prime mortgage	9,849 25,437	10,799 6,479	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA	NA NA
Subprime mortgage	2,249	2,609	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
Option ARMs ^(e) Total loans – PO	•	10,689 30,576 372,553	NA NA 3,979	NA NA 4,209	NA NA (58	NA NA)110	NA NA (0.06)	NA NA 0.12	NA NA 88	NA NA 798	NA NA 0.05	NA NA 0.44

Total loans –													
retained													
Loans	110	120											
held-for-sale	110	128				_					_		
Total consumer	,												
excluding credit card loans	374,697	372,681	3,979	4,209	(58)110	(0.06)	0.12		88	798	0.05	0.44
Lending-related commitments ^(f)	51,784	48,553											
Receivables													
from customers ^(g)	153	133											
Total consumer													
exposure, excluding credit card	426,634	421,367											
Credit card													
Loans retained ^(h)	145,221	149,387		_	1,164	1,037	3.27	3.01		2,334	2,030	3.30	2.98
Loans held-for-sale	34	124	_	_	_	_	_	_		_	_		_
Total credit card loans	145,255	149,511	_	_	1,164	1,037	3.27	3.01		2,334	2,030	3.30	2.98
Lending-related commitments ^(f)	592,452	572,831											
Total credit card exposure	737,707	722,342											
Total consumer credit portfolio	\$1,164,341	\$1,143,709	\$3,979	\$4,209	\$1,106	\$1,147	0.86	% 0.92	%	\$2,422	\$2,828	0.95	% 1.14 %
Memo: Total													
consumer credit portfolio, excluding PCI	\$1,137,364	\$1,113,133	\$3,979	9\$4,209	\$1,106	\$1,147	0.91	% 0.99	%	\$2,422	\$2,828	1.00	% 1.22 %

At June 30, 2018, and December 31, 2017, excluded operating lease assets of \$18.8 billion and \$17.1 billion, respectively. These operating lease assets are included in other assets on the Firm's Consolidated balance sheets.

- (a) The risk of loss on these assets relates to the residual value of the leased vehicles, which is managed through projection of the lease residual value at lease origination, periodic review of residual values, and through arrangements with certain auto manufacturers that mitigates this risk.
 - Includes certain business banking and auto dealer risk-rated loans that apply the wholesale methodology for
- (b) determining the allowance for loan losses; these loans are managed by CCB, and therefore, for consistency in presentation, are included within the consumer portfolio.
- (c) Predominantly includes Business Banking loans.
 - For the six months ended June 30, 2017, excluding net charge-offs of \$467 million related to the student loan portfolio sale, the net charge-off rate for Total consumer, excluding credit card and PCI loans and loans
- (d)held-for-sale would have been 0.20%; Total consumer retained excluding credit card loans would have been 0.18%; Total consumer credit portfolio would have been 0.95%; and Total consumer credit portfolio, excluding PCI loans would have been 1.02%.
- (e) At both June 30, 2018, and December 31, 2017, approximately 68% of the PCI option adjustable rate mortgage ("ARM") portfolio has been modified into fixed-rate, fully amortizing loans.

Credit card and home equity lending-related commitments represent the total available lines of credit for these products. The Firm has not experienced, and does not anticipate, that all available lines of credit would be used at

- (f) the same time. For credit card commitments, and if certain conditions are met, home equity commitments, the Firm can reduce or cancel these lines of credit by providing the borrower notice or, in some cases as permitted by law, without notice. For further information, refer to Note 20.
 - Receivables from customers represent held-for-investment margin loans to brokerage customers that are
- (g) collateralized through assets maintained in the clients' brokerage accounts. These receivables are reported within accrued interest and accounts receivable on the Firm's Consolidated balance sheets.
- (h) Includes billed interest and fees net of an allowance for uncollectible interest and fees. At June 30, 2018 and December 31, 2017, nonaccrual loans excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of \$3.3 billion and \$4.3 billion, respectively. These amounts have been
- (i) excluded from nonaccrual loans based upon the government guarantee. In addition, the Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status, as permitted by regulatory guidance issued by the FFIEC
- Excludes PCI loans. The Firm is recognizing interest income on each pool of PCI loans as each of the pools is performing.
 - Net charge-offs and the net charge-off rates excluded write-offs in the PCI portfolio of \$73 million and \$22 million
- (k) for the three months ended June 30, 2018 and 2017, respectively, and \$93 million and \$46 million for the six months ended June 30, 2018 and 2017, respectively. These write-offs decreased the allowance for loan losses for PCI loans. Refer to Allowance for Credit Losses on pages 67–69 for further information.
- Average consumer loans held-for-sale were \$291 million and \$4.9 billion for the three months ended June 30, 2018
- (l) and 2017, respectively, and \$263 million and \$2.6 billion for the six months ended June 30, 2018 and 2017, respectively. These amounts were excluded when calculating net charge-off rates.

Consumer, excluding credit card

Portfolio analysis

Consumer loan balances increased from December 31, 2017 predominantly due to originations of high-quality prime mortgage loans that have been retained on the balance sheet, largely offset by paydowns and the charge-off or liquidation of delinquent loans.

PCI loans are excluded from the following discussions of individual loan products and are addressed separately below. For further information about the Firm's consumer portfolio, including information about delinquencies, loan modifications and other credit quality indicators, refer to Note 11 of this Form 10-Q.

Residential mortgage: The residential mortgage portfolio predominantly consists of high-quality prime mortgage loans, with a small component consisting of subprime mortgage loans (approximately 1%). These subprime mortgage loans continue to run off and are performing in line with expectations. The residential mortgage portfolio, including loans held-for-sale, increased from December 31, 2017 as the amount of retained originations of primarily high-quality prime mortgage loans exceeded paydowns. Residential mortgage 30+ day delinquencies decreased from December 31, 2017. Nonaccrual loans decreased from December 31, 2017 due to lower delinquencies. Net recoveries for the three and six months ended June 30, 2018 were higher compared with the same period in the prior year reflecting a loan sale as well as continued improvement in home prices and delinquencies.

At June 30, 2018, and December 31, 2017, the Firm's residential mortgage portfolio included \$20.8 billion and \$20.2 billion, respectively, of interest-only loans. These loans have an interest-only payment period generally followed by an adjustable-rate or fixed-rate fully amortizing payment period to maturity and are typically originated as higher-balance loans to higher-income borrowers. To date, losses on this portfolio generally have been consistent with the broader residential mortgage portfolio. The Firm continues to monitor the risks associated with these loans.

The following table provides a summary of the Firm's residential mortgage portfolio insured and/or guaranteed by U.S. government agencies, including loans held-for-sale. The Firm monitors its exposure to certain potential unrecoverable claim payments related to government-insured loans and considers this exposure in estimating the allowance for loan losses.

June 30, December 31,

(in millions)

2018 2017

Current \$3,194 \$ 2,401

30-89 days past due 1,741 1,958

90 or more days past due 3,254 4,264

Total government guaranteed loans \$8,189 \$ 8,623

Home equity: The home equity portfolio declined from December 31, 2017 primarily reflecting loan paydowns. The amount of 30+ day delinquencies decreased from December 31, 2017. Nonaccrual loans decreased from December 31, 2017 primarily as a result of loss mitigation activities. Net recoveries for the three months ended June 30, 2018 and net charge-offs for the six months ended June 30, 2018 improved when compared with the same period in the prior year, as a result of lower loan balances and continued improvement in home prices and delinquencies. At June 30, 2018, approximately 90% of the Firm's home equity portfolio consisted of home equity lines of credit ("HELOCs") and the remainder consisted of home equity loans ("HELOANs"). The carrying value of HELOCs outstanding was \$27 billion at June 30, 2018. This amount included \$13 billion of HELOCs that have recast from interest-only to fully amortizing payments or have been modified and \$5 billion of interest-only balloon HELOCs, which primarily mature after 2030. The Firm manages the risk of HELOCs during their revolving period by closing or reducing the undrawn line to the extent permitted by law when borrowers are exhibiting a material deterioration in their credit risk profile.

The Firm monitors risks associated with junior lien loans where the borrower has a senior lien loan that is either delinquent or has been modified. These loans are considered "high-risk seconds" and are classified as nonaccrual as they are considered to pose a higher risk of default than other junior lien loans. The carrying value of high-risk seconds declined from December 31, 2017.

For further information on the Firm's home equity portfolio, refer to Note 11 of this Form 10-Q and Consumer Credit Portfolio on pages 102-107 of JPMorgan Chase's 2017 Annual Report.

Auto: The auto loan portfolio, which predominantly consists of prime-quality loans, declined when compared with December 31, 2017, as paydowns and the charge-off or liquidation of delinquent loans were partially offset by new originations. Nonaccrual loans decreased from December 31, 2017. Net charge-offs for the three and six months ended June 30, 2018 were relatively flat when compared with the same period in the prior year.

Consumer & Business Banking: Consumer & Business Banking loans increased when compared with December 31, 2017, as growth due to loan originations was predominantly offset by paydowns and the charge-off or liquidation of delinquent loans. Nonaccrual loans decreased from December 31, 2017. Net charge-offs for the three and six months ended June 30, 2018 decreased when compared with the same period in the prior year.

Purchased credit-impaired loans: PCI loans decreased from December 31, 2017 due to portfolio run off and a loan sale. As of June 30, 2018, approximately 11% of the option ARM PCI loans were delinquent and approximately 68% of the portfolio had been modified into fixed-rate, fully amortizing loans. The borrowers for substantially all of the remaining loans are making amortizing payments, although such payments are not necessarily fully amortizing. This latter group of loans is subject to the risk of payment shock due to future payment recast. Default rates generally increase on option ARM loans when payment recast results in a payment increase. The expected increase in default rates is considered in the Firm's quarterly impairment assessment.

The following table provides a summary of lifetime principal loss estimates included in either the nonaccretable difference or the allowance for loan losses.

Summary of PCI loans lifetime principal loss estimates

	Lifetir estima	ne loss ates ^(a)	Life-to-date liquidation losses ^(b)		
(in hillians)	Jun 30	Dec 31,	Jun 30,Dec 31,		
(in billions)	2018	2017	2018	2017	
Home equity	\$14.1	\$ 14.2	\$13.0	\$ 12.9	
Prime mortgage	4.1	4.0	3.8	3.8	
Subprime mortgage	3.3	3.3	3.1	3.1	
Option ARMs	10.3	10.0	9.9	9.7	
Total	\$31.8	\$ 31.5	\$29.8	\$ 29.5	

Includes the original nonaccretable difference established in purchase accounting of \$30.5 billion for principal losses plus additional principal losses recognized subsequent to acquisition through the provision and allowance for loan losses. The remaining nonaccretable difference for principal losses was \$624 million and \$842 million at June 30, 2018, and December 31, 2017, respectively.

(b) Represents both realization of loss upon loan resolution and any principal forgiven upon modification. Geographic composition of residential real estate loans

For information on the geographic composition of the Firm's residential real estate loans, refer to Note 11.

Current estimated loan-to-value ratio of residential real estate loans

Average current estimated loan-to-value ("LTV") ratios

have declined consistent with recent improvements in home prices, customer pay downs, and charge-offs or liquidations of higher LTV loans. For further information on current estimated LTVs on residential real estate loans, refer to Note 11.

Loan modification activities for residential real estate loans

The performance of modified loans generally differs by product type due to differences in both the credit quality and the types of modifications provided. The performance of modifications to the residential real estate portfolios as measured through cumulative redefault rates, were not materially different from December 31, 2017. For further information on the Firm's cumulative redefault rates refer to Consumer Credit Portfolio on pages 102-107 of JPMorgan Chase's 2017 Annual Report.

Certain loans that were modified under HAMP and the Firm's proprietary modification programs have interest rate reset provisions ("step-rate modifications"). Interest rates on these loans generally began to increase commencing in 2014 by 1% per year, and will continue to do so, until the rate reaches a specified cap. The cap on these loans is typically at a prevailing market interest rate for a fixed-rate mortgage loan as of the modification date. At June 30, 2018, the carrying value of non-PCI loans and the unpaid principal balance of PCI loans modified in step-rate modifications, which have not yet met their specified caps, were \$2 billion and \$5 billion, respectively. The Firm continues to monitor this risk exposure and the impact of these potential interest rate increases is considered in the Firm's allowance for loan losses.

The following table presents information as of June 30, 2018, and December 31, 2017, relating to modified retained residential real estate loans for which concessions have been granted to borrowers experiencing financial difficulty. For further information on modifications for the three and six months ended June 30, 2018 and 2017, refer to Note 11. Modified residential real estate loans

	June 30	, 2018	Decemb	per 31, 2017
(in millions)	Retaine loans	Non-accrual dretained loans ^(d)	Retaine loans	Non-accrual dretained loans ^(d)
Modified residential real estate loans, excluding				
PCI loans ^{(a)(b)}				
Residential mortgage	\$5,024	\$ 1,730	\$5,620	\$ 1,743
Home equity	2,092	1,041	2,118	1,032
Total modified residential real estate loans, excluding PCI loans	\$7,116	\$ 2,771	\$7,738	\$ 2,775
Modified PCI loans ^(c)				
Home equity	\$2,180	NA	\$2,277	NA
Prime mortgage	3,684	NA	4,490	NA
Subprime mortgage	2,322	NA	2,678	NA
Option ARMs	7,196	NA	8,276	NA
Total modified PCI loans	\$15,382	2NA	\$17,72	l NA

- (a) Amounts represent the carrying value of modified residential real estate loans.
 - At June 30, 2018, and December 31, 2017, \$4.3 billion and \$3.8 billion, respectively, of loans modified subsequent to repurchase from Ginnie Mae in accordance with the standards of the appropriate government agency (i.e., Federal Housing Administration ("FHA"), U.S. Department of Veterans Affairs ("VA"), Rural Housing Service of the
- (b) U.S. Department of Agriculture ("RHS")) are not included in the table above. When such loans perform subsequent to modification in accordance with Ginnie Mae guidelines, they are generally sold back into Ginnie Mae loan pools. Modified loans that do not re-perform become subject to foreclosure. For additional information about sales of loans in securitization transactions with Ginnie Mae, refer to Note 13.
- (c) Amounts represent the unpaid principal balance of modified PCI loans.

 At both June 30, 2018, and December 31, 2017, nonaccrual loans included \$2.2 billion of troubled debt
- (d) restructurings ("TDRs") for which the borrowers were less than 90 days past due. For additional information about loans modified in a TDR that are on nonaccrual status, refer to Note 11.

Nonperforming assets

The following table presents information as of June 30, 2018, and December 31, 2017, about consumer, excluding credit card, nonperforming assets.

Nonperforming assets(a)

(in millions)	June 30,	December 31,	
(III IIIIIIIIIII)	2018	2017	
Nonaccrual loans(b)			
Residential real estate	\$3,582	\$ 3,785	
Other consumer	397	424	
Total nonaccrual loans	3,979	4,209	
Assets acquired in loan satisfactions			
Real estate owned	206	225	
Other	33	40	
Total assets acquired in loan satisfactions	239	265	
Total nonperforming assets	\$4,218	\$ 4,474	

(a) At June 30, 2018, and December 31, 2017, nonperforming assets excluded mortgage loans 90 or more days past due and insured by U.S. government agencies of \$3.3 billion and \$4.3 billion, respectively, and REO insured by U.S. government agencies of \$84 million and \$95 million, respectively. These amounts have been excluded based

upon the government guarantee.

Excludes PCI loans, which are accounted for on a pool basis. Since each pool is accounted for as a single asset with a single composite interest rate and an aggregate expectation of cash flows, the past-due status of the pools, or that of individual loans within the pools, is not meaningful. The Firm is recognizing interest income on each pool of loans as each of the pools is performing.

Nonaccrual loans in the residential real estate portfolio at June 30, 2018 decreased to \$3.6 billion from \$3.8 billion at December 31, 2017, of which 26% were greater than 150 days past due for both time periods. In the aggregate, the unpaid principal balance of residential real estate loans greater than 150 days past due was charged down by approximately 34% and 40% to the estimated net realizable value of the collateral at June 30, 2018, and December 31, 2017, respectively.

Nonaccrual loans: The following table presents changes in consumer, excluding credit card, nonaccrual loans for the six months ended June 30, 2018 and 2017.

Nonaccrual loan activity

Six months ended June 30, (in millions)	2018	2017
Beginning balance	\$4,209	\$4,820
Additions	1,575	1,647
Reductions:		
Principal payments and other ^(a)	738	888
Charge-offs	246	372
Returned to performing status	666	750
Foreclosures and other liquidations	155	231
Total reductions	1,805	2,241
Net changes	(230)	(594)
Ending balance	\$3,979	\$4,226

(a) Other reductions includes loan sales.

Active and suspended foreclosure: For information on loans that were in the process of active or suspended foreclosure, refer to Note 11.

Credit card

Total credit card loans decreased from December 31, 2017 due to seasonality. The June 30, 2018 30+ day delinquency rate seasonally decreased to 1.65% from 1.80% at December 31, 2017, and the June 30, 2018 90+ day delinquency rate decreased to 0.85% from 0.92% at December 31, 2017, in line with expectations. Net charge-offs increased for the six months ended June 30, 2018 when compared with the same period in the prior year primarily due to growth in newer vintages which, as anticipated, have higher loss rates than the more seasoned portion of the portfolio. For further information on the geographic and FICO composition of the Firm's credit card loans, refer to Note 11. Consistent with the Firm's policy, all credit card loans typically remain on accrual status until charged off. However, the Firm establishes an allowance, which is offset against loans and charged to interest income, for the estimated uncollectible portion of accrued and billed interest and fee income.

Modifications of credit card loans

At June 30, 2018 and December 31, 2017, the Firm had \$1.3 billion and \$1.2 billion, respectively, of credit card loans outstanding that have been modified in TDRs. These balances included both credit card loans with modified payment terms and credit card loans that reverted back to their pre-modification payment terms because the cardholder did not comply with the modified payment terms.

For additional information about loan modification programs to borrowers, refer to Note 11.

WHOLESALE CREDIT PORTFOLIO

In its wholesale businesses, the Firm is exposed to credit risk primarily through its underwriting, lending, market-making, and hedging activities with and for clients and counterparties, as well as through various operating services (such as cash management and clearing activities), securities financing activities and cash placed with banks. A portion of the loans originated or acquired by the Firm's wholesale businesses is generally retained on the balance sheet. The Firm distributes a significant percentage of the loans it originates into the market as part of its syndicated loan business and to manage portfolio concentrations and credit risk.

The credit quality of the wholesale portfolio was stable for the six months ended June 30, 2018, characterized by low levels of criticized exposure, nonaccrual loans and charge-offs. Refer to industry discussion on pages 62–64 for further information. Retained loans increased across all wholesale lines of business, predominantly driven by CIB, including loans to financial institution and commercial and industrial clients, and in AWM due to higher loans to international and domestic Private Banking clients. The wholesale portfolio is actively managed, in part by conducting ongoing, in-depth reviews of client credit quality and transaction structure inclusive of collateral where applicable, and of industry, product and client concentrations.

In the following tables, the Firm's wholesale credit portfolio includes exposure held in CIB, CB, AWM and Corporate, and excludes all exposure managed by CCB.

Credit exposure

Nonnerforming(c)

Wholesale credit portfolio

	Credit exp	Josuic	Nonpen	orning
(in millions)	Jun 30,	Dec 31,	Jun 30,	Dec 31,
(iii iiiiiiolis)	2018	2017	2018	2017
Loans retained	\$420,632	\$402,898	\$ 1,156	\$ 1,734
Loans held-for-sale	4,754	3,099	175	
Loans at fair value	3,076	2,508		
Loans	428,462	408,505	1,331	1,734
Derivative receivables	58,510	56,523	112	130
Receivables from customers and other ^(a)	27,454	26,139		
Total wholesale credit-related assets	514,426	491,167	1,443	1,864
Lending-related commitments	401,757	370,098	712	731
Total wholesale credit exposure	\$916,183	\$861,265	\$ 2,155	\$ 2,595
Credit derivatives used in credit portfolio management activities(b)	\$(15,229))\$(17,609)	\$ <i>—</i>	\$ <i>—</i>
Liquid securities and other cash collateral held against derivatives	(16,103)(16,108)	NA	NA

Receivables from customers and other include \$27.4 billion and \$26.0 billion of held-for-investment margin loans (a) at June 30, 2018, and December 31, 2017, respectively, to prime brokerage customers in CIB and in AWM; these are classified in accrued interest and accounts receivable on the Consolidated balance sheets.

Represents the net notional amount of protection purchased and sold through credit derivatives used to manage

- (b) both performing and nonperforming wholesale credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. For additional information, refer to Credit derivatives on page 66, and Note 4.
- (c) Excludes assets acquired in loan satisfactions.

The following tables present the maturity and ratings profiles of the wholesale credit portfolio as of June 30, 2018, and December 31, 2017. The ratings scale is based on the Firm's internal risk ratings, which generally correspond to the ratings assigned by S&P and Moody's. For additional information on wholesale loan portfolio risk ratings, refer to Note 12 of JPMorgan Chase's 2017 Annual Report.

Wholesale credit exposure – maturity and ratings profile

wholesale credit exposure –	Maturity a	profile ^(d)	prome		Ratings pro		_	
June 30, 2018 (in millions, except ratios)	Due in 1 year or less	Due after 1 year through 5 years	Due after 5 years	Total	AAA/Aaa to BBB-/Baa	t- Nicadia nvestment- BB+/Ba1 & 3 below	grade Total	Total % of IG
Loans retained Derivative receivables Less: Liquid securities and	\$135,312	\$182,613	\$102,707	\$420,632 58,510	\$322,105	\$ 98,527	\$420,632 58,510	77 %
other cash collateral held against derivatives				(16,103)			(16,103)
Total derivative receivables, net of all collateral	13,066	10,092	19,249	42,407	33,780	8,627	42,407	80
Lending-related commitments	103,600	287,054	11,103	401,757	289,653	112,104	401,757	72
Subtotal	251,978	479,759	133,059	864,796	645,538	219,258	864,796	75
Loans held-for-sale and loans at fair value ^(a)				7,830			7,830	
Receivables from customers and other				27,454			27,454	
Total exposure – net of liqui securities and other cash collateral held against derivatives	d			\$900,080			\$900,080	
Credit derivatives used in credit portfolio management activities ^{(b)(c)}	\$(1,281)\$(11,177))\$(2,771)\$(15,229)	\$(13,093)	\$ (2,136	\$(15,229)86%
	Maturity p				Ratings pro			
	Due in 1	Due after 1 year	Due after		Investment AAA/Aaa	t- Nadie nvestment-	_	Total
December 31, 2017 (in millions, except ratios)	year or less	through 5 years		Total	to BBB-/Baa	BB+/Ba1 & 3below	Total	% of IG
Loans retained Derivative receivables	\$121,643	\$177,033	\$104,222	\$402,898 56,523	\$311,681	\$ 91,217	\$402,898 56,523	77 %
Less: Liquid securities and other cash collateral held against derivatives				(16,108)			(16,108)
Total derivative receivables, net of all collateral	9,882	10,463	20,070	40,415	32,373	8,042	40,415	80
Lending-related commitments	80,273	275,317	14,508	370,098	274,127	95,971	370,098	74
Subtotal	211,798	462,813	138,800	813,411	618,181	195,230	813,411	76
Loans held-for-sale and loans at fair value ^(a)				5,607			5,607	
Receivables from customers and other				26,139			26,139	

Total exposure – net of liquid securities and other cash collateral held against derivatives

Credit derivatives used in

\$845,157 \$845,157

ψ015,151

- credit portfolio management (1,807)(11,011)(4,791)(17,609)(14,984) (2,625) (17,609)(17,609) (17,609) (17,609)(17,609)
- (a) Represents loans held-for-sale, primarily related to syndicated loans and loans transferred from the retained portfolio, and loans at fair value.
- (b) These derivatives do not qualify for hedge accounting under U.S. GAAP.
- The notional amounts are presented on a net basis by underlying reference entity and the ratings profile shown is based on the ratings of the reference entity on which protection has been purchased. Predominantly all of the credit derivatives entered into by the Firm where it has purchased protection used in credit portfolio management activities are executed with investment-grade counterparties.
- The maturity profile of retained loans, lending-related commitments and derivative receivables is based on the (d)remaining contractual maturity. Derivative contracts that are in a receivable position at June 30, 2018, may become payable prior to maturity based on their cash flow profile or changes in market conditions.

Wholesale credit exposure – industry exposures

The Firm focuses on the management and diversification of its industry exposures, and pays particular attention to industries with actual or potential credit concerns. Exposures deemed criticized align with the U.S. banking regulators' definition of criticized exposures, which consist of the special mention, substandard and doubtful

categories. The total criticized component of the portfolio, excluding loans held-for-sale and loans at fair value, was \$11.2 billion at June 30, 2018, compared with \$15.6 billion at December 31, 2017. The decrease was largely driven by select names within Oil & Gas, including a loan sale.

Selected metrics

Below are summaries of the Firm's exposures as of June 30, 2018, and December 31, 2017. The industry of risk category is generally based on the client or counterparty's primary business activity. For additional information on industry concentrations, refer to Note 4 of JPMorgan Chase's 2017 Annual Report.

Wholesale credit exposure – industries

As of or for the six months ended June 30, 2018 (in millions)	Credit exposure(e	Investment grade	Noninvest Noncritici			30 days o more past	Net charge- (recove	Credit o ffsr ivative ri he)lges ^(f)		r ll ve
Real Estate	\$142,116	\$116,264	\$24,996	\$ 718	\$ 138	\$696	\$ (18) \$—	\$(2)
Consumer & Retail	86,867	55,172	29,870	1,671	154	32	50	· ·)(3)
Technology, Media & Telecommunications		48,286	29,222	1,495	50	15)(18)
Industrials	59,990	38,609	19,982	1,211	188	125		(146)(17)
Healthcare	57,089	39,589	16,627	844	29	6	(2) —	(180)
Banks & Finance Cos	51,445	35,882	15,242	317	4	13	_	(649)(2,426)
Oil & Gas	42,650	23,064	17,452	1,287	847	2	38	(492)(2)
Asset Managers	40,040	33,963	6,059	4	14	5		_	(6,610)
Utilities	28,437	23,790	4,353	136	158	1	38	(189)(36)
State & Municipal Govt (b)	26,408	25,760	648	_	_	3		(60)(18)
Chemicals & Plastics	18,666	11,432	7,205	29	_	5	_	(25)—	
Central Govt	18,503	18,307	123	73		3	_	, ,)(1,965)
Transportation	16,915	10,445	5,938	461	71	11	6	(32)(69)
Automotive	15,849	9,586	5,943	295	25	2		(227)—	
Metals & Mining	14,225	7,457	6,314	398	56	17		(278)(25)
Insurance	12,952	10,266	2,645	_	41	2	—	(37)(2,404)
Financial Markets Infrastructure	6,231	6,109	122	_	_	_		_	_	
Securities Firms	3,998	2,567	1,430	1	_		_	(261)(454)
All other ^(c)	159,465	142,598	16,424	238	205	790	53	(2,344)(1,874)
Subtotal	\$880,899	\$659,146	\$210,595	\$ 9,178	\$ 1,980	\$1,728	3\$ 165	\$(15,229)\$(16,103	3)
Loans held-for-sale and loans at fair value	7,830									
Receivables from customers and other										
Total ^(d)	\$916,183									

(continued from previous page)

Selected metrics											
As of or for the year ended December 31, 2017			Noninvestment-grade			30 days or more Net Credi			Liquid securities and other cash		
·		Investment- Noncritic grade		. CriticizedCriticized ized performingonperfor		due charge-		e-offstivativ eri hs)dges ^(f)	e collatera held against derivativ	collateral held	
Real Estate	\$139,409	\$115,401	\$23,012	\$859	\$ 137	\$254	\$ (4) \$—	\$(2)	
Consumer & Retail	87,679	55,737	29,619	1,791	532	30	34	(275)(9)	
Technology, Media & Telecommunications	59,274	36,510	20,453	2,258	53	14	(12) (910)(19)	
Industrials	55,272	37,198	16,770	1,159	145	150	(1) (196)(21)	
Healthcare	55,997	42,643	12,731	585	38	82	(1)—	(207)	
Banks & Finance Cos	49,037	34,654	13,767	612	4	1	6	(1,216)(3,174)	
Oil & Gas	41,317	21,430	14,854	4,046	987	22	71	(747)(1)	
Asset Managers	32,531	28,029	4,484	4	14	27			(5,290)	
Utilities	29,317	24,486	4,383	227	221		11	(160)(56)	
State & Municipal Govt(b)	28,633	27,977	656	_	_	12	5	(130)(524)	
Chemicals & Plastics	15,945	11,107	4,764	74		4		_	_		
Central Govt	19,182	18,741	376	65		4		(10,095)(2,520)	
Transportation	15,797	9,870	5,302	527	98	9	14	(32)(131)	
Automotive	14,820	9,321	5,278	221		10	1	(284)—		
Metals & Mining	14,171	6,989	6,822	321	39	3	(13) (316)(1)	
Insurance	14,089	11,028	2,981	_	80	1		(157)(2,195)	
Financial Markets	5,036	1 775	261						(22	`	
Infrastructure	3,030	4,775	201	_	_	_		_	(23)	
Securities Firms	4,113	2,559	1,553	1	_			(274)(335)	
All other ^(c)	147,900	134,110	13,283	260	247	901	8	(2,817)(1,600)	
Subtotal	\$829,519	\$632,565	\$181,349	\$13,010	\$ 2,595	\$1,524	4 \$ 119	\$(17,609	9)\$(16,108	3)	
Loans held-for-sale and loans at fair value	5,607										
Receivables from customers and other	26,139										
Total ^(d)	\$861,265										
						_					

⁽a) The industry rankings presented in the table as of December 31, 2017, are based on the industry rankings of the corresponding exposures at June 30, 2018, not actual rankings of such exposures at December 31, 2017.

(b)

In addition to the credit risk exposure to states and municipal governments (both U.S. and non-U.S.) at June 30, 2018, and December 31, 2017, noted above, the Firm held: \$9.2 billion and \$9.8 billion, respectively, of trading securities; \$39.3 billion and \$32.3 billion, respectively, of AFS securities; and \$4.8 billion and \$14.4 billion, respectively, of held-to-maturity ("HTM") securities, issued by U.S. state and municipal governments. For further information, refer to Note 2 and Note 9.

- All other includes: individuals (predominantly Wealth Management clients within AWM), SPEs, and private (c)education and civic organizations, representing approximately 60%, 36%, and 4%, respectively, at June 30, 2018, and 59%, 37%, and 4%, respectively, at December 31, 2017.
- Excludes cash placed with banks of \$396.1 billion and \$421.0 billion, at June 30, 2018, and December 31, 2017, respectively, which is predominantly placed with various central banks, primarily Federal Reserve Banks.

 Credit exposure is net of risk participations and excludes the benefit of credit derivatives used in credit portfolio (e) management activities held against derivative receivables or loans and liquid securities and other cash collateral
- (e) management activities held against derivative receivables or loans and liquid securities and other cash collateral held against derivative receivables.
- Represents the net notional amounts of protection purchased and sold through credit derivatives used to manage the (f) credit exposures; these derivatives do not qualify for hedge accounting under U.S. GAAP. The All other category includes purchased credit protection on certain credit indices.

Real Estate

Presented below is additional information on the Real Estate industry to which the Firm has significant exposure. Real Estate exposure increased \$2.7 billion to \$142.1 billion during the six months ended June 30, 2018, while the investment-grade percentage of the portfolio remained relatively flat at 82%. For further information on Real Estate loans, refer to Note 11.

	June 30,	2018	3							
	Loans									
(in millions avant ratios)	and	Der	ivative	Credit	%		%			
(in millions, except ratios)	Lending-Related ables		exposure	Investment-grade		Drawn(c)				
	Commitments									
Multifamily ^(a)	\$88,565	\$	28	\$88,593	86	%	88	%		
Other	53,417	106		53,523	74		66			
Total Real Estate Exposure(b)	141,982	134		142,116	82		80			
-										
	December 31, 2017									
	Loans									
(in mailling a second matina)	and	Der	ivative	Credit	% Inves	stment-	%			
(in millions, except ratios)	Lending-Related ables			exposure	grade		Drawn(c)			
	Commitments									
Multifamily ^(a)	\$84,635	\$	34	\$84,669	89	%	92	%		
Other	54,620	120		54,740	74		66			
Total Real Estate Exposure(b)	139,255	154		139,409	83		82			

- (a) Multifamily exposure is largely in California.
- (b) Real Estate exposure is predominantly secured; unsecured exposure is largely investment-grade.
- (c) Represents drawn exposure as a percentage of credit exposure.

Loans

In the normal course of its wholesale business, the Firm provides loans to a variety of clients, ranging from large corporate and institutional clients to high-net-worth individuals. For a further discussion on loans, including information on credit quality indicators and sales of loans, refer to Note 11.

The following table presents the change in the nonaccrual loan portfolio for the six months ended June 30, 2018 and 2017.

Wholesale nonaccrual loan activity

Six months ended June 30,	2018	2017
(in millions)	2010	2017
Beginning balance	\$1,734	\$2,063
Additions	505	747
Reductions:		
Paydowns and other	394	666
Gross charge-offs	231	93
Returned to performing status	176	183
Sales	107	203
Total reductions	908	1,145
Net changes	(403	(398)
Ending balance	\$1,331	\$1,665

The following table presents net charge-offs/recoveries, which are defined as gross charge-offs less recoveries, for the six months ended June 30, 2018 and 2017. The amounts in the table below do not include gains or losses from sales of nonaccrual loans.

Wholesale net charge-offs/(recoveries)

(in millions, except ratios)

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	Three months ended June 30,				Six month June 30,	hs	ended	
	2018		2017		2018		2017	
Loans – reported								
Average loans retained	\$414,980		\$392,257	7	\$409,949	1	\$387,339)
Gross charge-offs	176		73		241		99	
Gross recoveries	(30)	(16)	(76)	(69)
Net charge-offs/(recoveries)	146		57		165		30	
Net charge-off/(recovery) rate	0.14	%	0.06	%	0.08	%	0.02	%

Lending-related commitments

The Firm uses lending-related financial instruments, such as commitments (including revolving credit facilities) and guarantees, to address the financing needs of its clients. The contractual amounts of these financial instruments represent the maximum possible credit risk should the clients draw down on these commitments or the Firm fulfills its obligations under these guarantees, and the clients subsequently fail to perform according to the terms of these contracts. Most of these commitments and guarantees are refinanced, extended, cancelled, or expire without being drawn upon or a default occurring. In the Firm's view, the total contractual amount of these wholesale lending-related commitments is not representative of the Firm's expected future credit exposure or funding requirements. For further information on wholesale lending-related commitments, refer to Note 20.

Derivative contracts

Derivatives enable clients to manage exposures to fluctuations in interest rates, currencies and other markets. In the normal course of business, the Firm uses derivative instruments predominantly for market-making activities. The Firm also uses derivative instruments to manage its own credit and other market risk exposure. For a further discussion of derivative contracts, refer to Note 4.

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The following table summarizes the net derivative receivables for the periods presented.

Derivative receivables

	Derivative receivables			
(in millions)	June 30,	December 31	,	
	2018	2017		
Interest rate	\$22,971	\$ 24,673		
Credit derivatives	624	869		
Foreign exchange	16,763	16,151		
Equity	10,176	7,882		
Commodity	7,976	6,948		
Total, net of cash collateral	58,510	56,523		
Liquid securities and other cash collateral held against derivative receivables ^(a)	(16,103))(16,108))	
Total, net of collateral	\$42,407	\$ 40,415		

\$42,407 \$ 40,415

(a) Includes collateral related to derivative instruments where an appropriate legal opinion has not been either sought or obtained.

The fair value of derivative receivables reported on the Consolidated balance sheets were \$58.5 billion and \$56.5 billion at June 30, 2018, and December 31, 2017, respectively.

Derivative receivables represent the fair value of the derivative contracts after giving effect to legally enforceable master netting agreements and cash collateral held by the Firm. However, in management's view, the appropriate measure of current credit risk should also take into consideration additional liquid securities (primarily U.S. government and agency securities and other group of seven nations ("G7") government securities) and other cash collateral held by the Firm aggregating \$16.1 billion at June 30, 2018, and December 31, 2017, that may be used as security when the fair value of the client's exposure is in the Firm's favor.

In addition to the collateral described in the preceding paragraph, the Firm also holds additional collateral (primarily cash, G7 government securities, other liquid government-agency and guaranteed securities, and corporate debt and equity securities) delivered by clients at the initiation of transactions, as well as collateral related to contracts that have a non-daily call frequency and collateral that the Firm has agreed to return but has not yet settled as of the reporting date. Although this collateral does not reduce the balances and is not included in the table above, it is available as security against potential exposure that could arise should the fair value of the client's derivative transactions move in the Firm's favor.

The derivative receivables fair value, net of all collateral, also does not include other credit enhancements, such as letters of credit. For additional information on the Firm's use of collateral agreements, refer to Note 4.

The following table summarizes the ratings profile of the Firm's derivative receivables, including credit derivatives, net of all collateral, at the dates indicated. The ratings scale is based on the Firm's internal ratings, which generally correspond to the ratings as assigned by S&P and Moody's.

Ratings profile of derivative receivables

	June 30, 2018	December 31, 2017
Rating equivalent (in millions, except ratios)	Exposure net of exposure collateral exposure collateral	Exposure net of exposure collateral exposure collateral
AAA/Aaa to AA-/Aa3	\$11,13326 %	\$11,52929 %
A+/A1 to A-/A3	7,796 18	6,919 17
BBB+/Baa1 to BBB-/Baa3	14,851 35	13,925 34
BB+/Ba1 to B-/B3	7,997 19	7,397 18
CCC+/Caa1 and below	630 2	645 2
Total	\$42,407100 %	\$40,415100 %

As previously noted, the Firm uses collateral agreements to mitigate counterparty credit risk. The percentage of the Firm's over-the-counter derivatives transactions subject to collateral agreements — excluding foreign exchange spot trades, which are not typically covered by collateral agreements due to their short maturity, and centrally cleared trades that are settled daily — was approximately 90% at both June 30, 2018 and December 31, 2017. Credit derivatives

The Firm uses credit derivatives for two primary purposes: first, in its capacity as a market-maker, and second, as an end-user, to manage the Firm's own credit risk associated with various exposures.

Credit portfolio management activities

Included in the Firm's end-user activities are credit derivatives used to mitigate the credit risk associated with traditional lending activities (loans and unfunded commitments) and derivatives counterparty exposure in the Firm's wholesale businesses (collectively, "credit portfolio management" activities). Information on credit portfolio management activities is provided in the table below.

Credit derivatives used in credit portfolio management activities

	Notion	al amount of
	protect	on
	purchas	sed and sold(a)
(in millions)	June 30), December 31,
(in millions)	2018	2017
Credit derivatives used to manage:		
Loans and lending-related commitments	\$1,297	\$ 1,867
Derivative receivables	13,932	15,742
Credit derivatives used in credit portfolio manage	gement activities \$15,22	9 \$ 17,609

Amounts are presented net, considering the Firm's net protection purchased or sold with respect to each underlying reference entity or index.

For further information on credit derivatives and derivatives used in credit portfolio management activities, refer to Credit derivatives in Note 4 of this Form 10-Q, and Note 5 of JPMorgan Chase's 2017 Annual Report.

ALLOWANCE FOR CREDIT LOSSES

The Firm's allowance for credit losses covers the retained consumer and wholesale loan portfolios, as well as the Firm's wholesale and certain consumer lending-related commitments.

For further information on the components of the allowance for credit losses and related management judgments, refer to Critical Accounting Estimates Used by the Firm on pages 77–79 and Note 12 of this Form 10-Q, and Critical Accounting Estimates Used by the Firm on pages 138–140 and Note 13 of JPMorgan Chase's 2017 Annual Report. At least quarterly, the allowance for credit losses is reviewed by the CRO, the CFO and the Controller of the Firm. As of June 30, 2018, JPMorgan Chase deemed the allowance for credit losses to be appropriate and sufficient to absorb probable credit losses inherent in the portfolio.

The wholesale allowance for credit losses decreased from December 31, 2017, primarily as a result of a reduction in the allowance for the Oil & Gas portfolio driven by a single name.

The consumer allowance for credit losses was relatively flat compared with December 31, 2017.

For additional information on the wholesale and consumer credit portfolios, refer to Wholesale Credit Portfolio on pages 60–66, and Consumer Credit Portfolio on pages 55–59 and Note 11.

Summary of changes in the allowance for credit losses 2018 2017								
Six months ended June 30, (in millions, except ratios) Allowance for loan	Consumer, excluding credit card	Credit card	Wholesale	Total	Consumer, excluding credit card		Wholesale	Total
losses Beginning balance at January 1,	\$4,579	\$4,884	\$4,141	\$13,604	\$5,198	\$4,034	\$4,544	\$13,776
Gross charge-offs Gross recoveries			` ,	3,358 (771)				3,427 (569)
Net charge-offs ^(a) Write-offs of PCI loans ^(b)	88 93	2,334	165 —	2,58793	798 46	2,030	30	2,858 46
Provision for loan losses	90	2,334	(98)	2,326	448	2,380		2,491
Other Ending balance at June 30, Impairment	\$4,488	\$4,884	\$3,878	\$13,250	(2) \$4,800	- \$4,384	2 \$4,179	\$13,363
methodology Asset-specific ^(c) Formula-based PCI	\$226 2,130 2,132	\$402 4,482	\$318 3,560	\$946 10,172 2,132	\$296 2,239 2,265	\$370 4,014	\$345 3,834	\$1,011 10,087 2,265
Total allowance for loan losses Allowance for		\$4,884	\$3,878	\$13,250	\$4,800	\$4,384	\$4,179	\$13,363
lending-related commitments Beginning balance at January 1,	\$33	\$	\$1,035	\$1,068	\$26	\$	\$1,052	\$1,078
Provision for lending-related commitments	_	_	49	49	6	_	33	39
Other Ending balance at June 30, Impairment methodology	- \$33		 \$1,084		 \$32		 \$1,085	
Asset-specific Formula-based	\$— 33	\$ <u> </u>	\$139 945	\$139 978	\$— 32	\$ <u> </u>	\$211 874	\$211 906
Total allowance for lending-related commitments ^(d)	\$33	\$—	\$1,084	\$1,117	\$32	\$—	\$1,085	\$1,117
Total allowance for credit losses Memo:	\$4,521	\$4,884	\$4,962	\$14,367	\$4,832	\$4,384	\$5,264	\$14,480
Retained loans, end of period	\$374,587	\$145,221	\$420,632	\$940,440	\$365,115	\$140,035	\$394,426	\$899,576

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Retained loans, average	373,562	142,757	409,949	926,268	364,316	137,574	387,339	889,229	
PCI loans, end of period Credit ratios	26,977	_	3	26,980	33,064	_	3	33,067	
Allowance for loan losses to retained loans	1.20	%3.36	%0.92	%1.41	% 1.31	%3.13	% 1.06	%1.49	%
Allowance for loan losses to retained nonaccrual loans ^(e)	113	NM	335	258	114	NM	256	229	
Allowance for loan losses to retained nonaccrual loans excluding credit card	113	NM	335	163	114	NM	256	154	
Net charge-off rates ^(a) Credit ratios,	0.05	3.30	0.08	0.56	0.44	2.98	0.02	0.65	
excluding residential real estate PCI loans Allowance for loan									
losses to retained loans	0.68	3.36	0.92	1.22	0.76	3.13	1.06	1.28	
Allowance for loan losses to retained nonaccrual loans ^(e) Allowance for loan	59	NM	335	217	60	NM	256	190	
losses to retained nonaccrual loans excluding credit card	59	NM	335	121	60	NM	256	115	
Net charge-off rates ^(a)	0.05	%3.30	%0.08	%0.58	% 0.49	%2.98	% 0.02	%0.67	%

Note: In the table above, the financial measures which exclude the impact of PCI loans are non-GAAP financial measures

For the six months ended June 30, 2017, excluding net charge-offs of \$467 million related to the student loan portfolio transfer, the net charge-off rate for Consumer, excluding credit card would have been 0.18%; total Firm would have been 0.54%; Consumer, excluding credit card and PCI loans would have been 0.20%; and total Firm, excluding PCI would have been 0.56%.

Write-offs of PCI loans are recorded against the allowance for loan losses when actual losses for a pool exceed (b) estimated losses that were recorded as purchase accounting adjustments at the time of acquisition. A write-off of a PCI loan is recognized when the underlying loan is removed from a pool.

Includes risk-rated loans that have been placed on nonaccrual status and loans that have been modified in a TDR.

- (c) The asset-specific credit card allowance for loan losses modified in a TDR is calculated based on the loans' original contractual interest rates and does not consider any incremental penalty rates.
- (d) The allowance for lending-related commitments is reported in accounts payable and other liabilities on the Consolidated balance sheets.
- (e) The Firm's policy is generally to exempt credit card loans from being placed on nonaccrual status as permitted by regulatory guidance.

Provision for credit losses

The following table presents the components of the Firm's provision for credit losses:

	Three months ended June 30,				Six months ended June 30,							
	Provisi loan los		Provi for lendin	1	for	rovision	Provision loan los		Provi for lendin		_	rovision dit losses
			comn	nitment	credit 1	osses				nitment		
(in millions)	2018	2017		2017	2018	2017	2018	2017	2018	2017	2018	2017
Consumer, excluding credit card	\$ \$(56)\$6	\$ —	\$ 6	\$(56)\$12	\$90	\$448	\$ —	\$ 6	\$90	\$454
Credit card	1,164	1,387	_		1,164	1,387	2,334	2,380	_		2,334	2,380
Total consumer	1,108	1,393	_	6	1,108	1,399	2,424	2,828	_	6	2,424	2,834
Wholesale Total	91 \$1,199	(218) \$1,175	11 \$ 11	34 \$ 40	102 \$1,210	(184) \$1,215)(337) \$2,491	49 \$ 49	33 \$ 39	(49 \$2,375)(304) \$2,530

Quarterly discussion

The provision for credit losses was flat as a result of:

a decrease in the consumer provision predominantly reflecting

 $\overline{}$ no addition to the allowance for credit losses in CCB in the current quarter, compared with a net addition in the prior $\overline{}$ year primarily in the credit card portfolio

lower net charge-offs, primarily in the residential real estate portfolio, which includes a recovery from a loan sale, and reflects the continued improvement in home prices and delinquencies, predominantly offset by an increase in net charge-offs in the credit card portfolio due to seasoning of newer vintages, in line with expectations

the decrease in the consumer provision was offset by

an increase in the wholesale provision reflecting

a net expense in the current period as a result of net portfolio activity, including new exposures and loan sales, compared with a net benefit in the prior year driven by a reduction in the allowance for credit losses in the Oil & Gas, Natural Gas Pipelines, and Metals and Mining portfolios.

Year-to-date discussion

The provision for credit losses decreased as a result of:

a lower consumer provision predominantly reflecting

no addition to the allowance for credit losses in CCB in the current year, compared with a net addition in the prior year primarily in the credit card portfolio

partially offset by

higher net charge-offs in the credit card portfolio due to seasoning of newer vintages, in line with expectations. These were largely offset by lower net charge-offs in the residential real estate portfolio, which includes a recovery from a loan sale and reflects the continued improvement in home prices and delinquencies

the prior year included a \$218 million write-down recorded in connection with the sale of the student loan portfolio the decrease in the consumer provision was partially offset by

a lower net benefit in the wholesale provision reflecting

a net benefit in the current period, primarily driven by a single name in the Oil & Gas portfolio, partially offset by other net portfolio activity, compared with a net benefit in the prior year, driven by a reduction in the allowance for credit losses in the Oil & Gas, Natural Gas Pipelines, and Metals and Mining portfolios.

INVESTMENT PORTFOLIO RISK

MANAGEMENT

Investment portfolio risk is the risk associated with the loss of principal or a reduction in expected returns on investments arising from the investment securities portfolio held by Treasury and CIO in connection with the Firm's balance sheet or asset-liability management objectives or from principal investments managed in various LOBs in predominantly privately-held financial assets and instruments. Investments are typically intended to be held over extended periods and, accordingly, the Firm has no expectation for short-term realized gains with respect to these investments.

Investment securities risk

Investment securities risk includes the exposure associated with a default in the payment of principal and interest. This risk is minimized given that Treasury and CIO generally invest in high-quality securities. At June 30, 2018, the investment securities portfolio was \$231.4 billion, and the average credit rating of the securities comprising the portfolio was AA+ (based upon external ratings where available and where not available, based primarily upon internal ratings that correspond to ratings as defined by S&P and Moody's). For further information on the investment securities portfolio, refer to Corporate segment results on pages 39–40 and Note 9. For further information on the market risk inherent in the portfolio, refer to Market Risk Management on pages 71–75. For further information on related liquidity risk, refer to Liquidity Risk on pages 48–52.

Principal investment risk

Principal investments are typically private non-traded financial instruments representing ownership or other forms of junior capital. Principal investments cover multiple asset classes and are made either in stand-alone investing businesses or as part of a broader business platform. Increasingly, new principal investments are made to enhance or accelerate LOB strategic business initiatives. The Firm's principal investments are managed by the various LOBs and are reflected within the respective LOB financial results. Effective January 1, 2018, the Firm adopted new accounting guidance related to the recognition and measurement of financial assets, which requires fair value adjustments upon observable price changes to certain equity investments previously held at cost in the principal investment portfolios. For additional information, refer to Note 2.

As of June 30, 2018 and December 31, 2017, the aggregate carrying values of the principal investment portfolios were \$19.9 billion and \$19.5 billion, respectively, which included tax-oriented investments (e.g., affordable housing and alternative energy investments) of \$13.6 billion and \$14.0 billion, respectively, and private equity, various debt and equity instruments, and real assets of \$6.3 billion and \$5.5 billion, respectively.

For a discussion of the Firm's Investment Portfolio Risk Management governance and oversight, refer to page 120 of JPMorgan Chase's 2017 Annual Report.

MARKET RISK MANAGEMENT

Market risk is the risk associated with the effect of changes in market factors such as interest and foreign exchange rates, equity and commodity prices, credit spreads or implied volatilities, on the value of assets and liabilities held for both the short and long term. For a discussion of the Firm's Market Risk Management organization, tools used to measure risk, risk monitoring and control and risk identification and classification, refer to Market Risk Management on pages 121-128 of JPMorgan Chase's 2017 Annual Report.

Value-at-risk

JPMorgan Chase utilizes value-at-risk ("VaR"), a statistical risk measure, to estimate the potential loss from adverse market moves in a normal market environment. The Firm has a single VaR framework used as a basis for calculating Risk Management VaR and Regulatory VaR.

As VaR is based on historical data, it is an imperfect measure of market risk exposure and potential future losses. In addition, based on their reliance on available historical data, limited time horizons, and other factors, VaR measures are inherently limited in their ability to measure certain risks and to predict losses, particularly those associated with market illiquidity and sudden or severe shifts in market conditions.

For certain products, specific risk parameters are not captured in VaR due to the lack of inherent liquidity and availability of appropriate historical data. The Firm uses proxies to estimate the VaR for these and other products when daily time series are not available. It is likely that using an actual price-based time series for these products, if available, would affect the VaR results presented. The Firm therefore considers other measures such as stress testing and nonstatistical measures, in addition to VaR, to capture and manage its market risk positions. For further information, refer to Other risk measures on pages 126-128 of JPMorgan Chase's 2017 Annual Report.

The Firm's VaR model calculations are periodically evaluated and enhanced in response to changes in the composition of the Firm's portfolios, changes in market conditions, improvements in the Firm's modeling techniques and measurements, and other factors. Such changes may affect historical comparisons of VaR results. For information regarding model reviews and approvals, refer to Estimations and Model Risk Management on page 137 of JPMorgan Chase's 2017 Annual Report.

The Firm's Risk Management VaR is calculated assuming a one-day holding period and an expected tail-loss methodology which approximates a 95% confidence level. For risk management purposes, the Firm believes this methodology provides a stable measure of VaR that closely aligns to the day-to-day risk management decisions made by the lines of business, and provides the necessary and appropriate information to respond to risk events on a daily basis. The Firm calculates separately a daily aggregated VaR in accordance with regulatory rules ("Regulatory VaR"), which is used to derive the Firm's regulatory VaR-based capital requirements under Basel III. For further information regarding the key differences between Risk Management VaR and Regulatory VaR, refer to page 123 of JPMorgan Chase's 2017 Annual Report. For additional information on Regulatory VaR and the other components of market risk regulatory capital for the Firm (e.g., VaR-based measure, stressed VaR-based measure and the respective backtesting), refer to JPMorgan Chase's Basel III Pillar 3 Regulatory Capital Disclosures reports, which are available on the Firm's website at:

(http://investor.shareholder.com/jpmorganchase/basel.cfm).

The table below shows the results of the Firm's Risk Management VaR measure using a 95% confidence level. Total VaR

	Three n	nonths 6	ended						
	June 30	, 2018		March 3	31, 201	8	June 30	, 2017	
(in millions)	Avg.	Min	Max	Avg.	Min	Max	Avg.	Min	Max
CIB trading VaR by risk type									
Fixed income	\$31	\$26	\$36	\$34	\$30	\$39	\$28	\$25	\$31
Foreign exchange	6	4	10	9	6	15	8	5	12
Equities	15	13	18	17	15	22	12	9	16
Commodities and other	7	5	9	5	4	6	8	6	10
Diversification benefit to CIB trading VaR	$(27)^{(a)}$	NM ^(b)	NM ^(b)	$(25)^{(a)}$	$NM^{(b)}$	NM ^(b)	$(30)^{(a)}$	NM ^(b)	$NM^{(b)}$
CIB trading VaR	32	26 (b)	42 (b)	40	35 (b)	49 (b)	26	20 (b)	31 (b)
Credit portfolio VaR	4	3	4	3	3	4	9	6	10
Diversification benefit to CIB VaR	$(3)^{(a)}$	NM ^(b)	NM ^(b)	$(3)^{(a)}$	$NM^{(b)}$	NM ^(b)	$(8)^{(a)}$	$NM^{(b)}$	$NM^{(b)}$
CIB VaR	33	26 (b)	42 (b)	40	35 (b)	51 ^(b)	27	22 (b)	32 (b)
CCB VaR	1	1	3	1	1	2	2	2	3
Corporate VaR	12	10	13	12	10	14	3	2	3
Diversification benefit to other VaR	$(1)^{(a)}$	NM ^(b)	$NM^{(b)}$	$(1)^{(a)}$	$NM^{(b)}$	NM ^(b)	$(2)^{(a)}$	$NM^{(b)}$	$NM^{(b)}$
Other VaR	12	10 (b)	14 ^(b)	12	10 (b)	14 ^(b)	3	3 (b)	4 (b)
Diversification benefit to CIB and other VaR	$(10)^{(a)}$	NM ^{b)}	NM ^(b)	$(9)^{(a)}$	$NM^{(b)}$	NM ^{b)}	$(3)^{(a)}$	$NM^{(b)}$	$NM^{(b)}$
Total VaR	\$35	\$28 ^(b)	\$44 ^(b)	\$43	\$37 ^(b)	\$53 ^(b)	\$27	\$22 ^(b)	\$ 33 ^(b)

- (a) Average portfolio VaR is less than the sum of the VaR of the components described above, which is due to portfolio diversification. The diversification effect reflects that the risks are not perfectly correlated.

 Diversification benefit represents the difference between the total VaR and each reported level and the sum of its
- (b) individual components. Diversification benefit reflects the non-additive nature of VaR due to imperfect correlation across lines of business and risk types. The maximum and minimum VaR for each portfolio may have occurred on different trading days than the components and consequently diversification benefit is not meaningful.

Quarter over Quarter results

Average total VaR decreased by \$8 million for the three months ended June 30, 2018 as compared with the prior quarter. The decrease reflects changes in the exposure profile for Equities and Fixed income risk types.

Year over Year results

Average total VaR increased by \$8 million for the three months ended June 30, 2018, compared with the same period in the prior year. The increase in average total VaR is primarily due to the inclusion of a Corporate private equity position that became publicly traded in the fourth quarter of 2017 and certain investments in CIB VaR. VaR can vary significantly as positions change, market volatility fluctuates, and diversification benefits change.

VaR back-testing

The Firm evaluates the effectiveness of its VaR methodology by back-testing, which compares the daily Risk Management VaR results with the daily gains and losses actually recognized on market-risk related revenue. The Firm's definition of market risk-related gains and losses is consistent with the definition used by the banking regulators under Basel III. Under this definition market risk-related gains and losses are defined as: gains and losses on the positions included in the Firm's Risk Management VaR excluding fees, commissions, certain valuation adjustments (e.g., liquidity and FVA), net interest income, and gains and losses arising from intraday trading. The following chart compares actual daily market risk-related gains and losses with the Firm's Risk Management VaR for the six months ended June 30, 2018. As the chart presents market risk-related gains and losses related to those positions included in the Firm's Risk Management VaR, the results in the table below differ from the results of back-testing disclosed in the Market Risk section of the Firm's Basel III Pillar 3 Regulatory Capital Disclosures reports, which are based on Regulatory VaR applied to covered positions. The chart shows that for the six months ended June 30, 2018, the Firm observed five VaR back-testing exceptions and posted market risk-related gains on 75 of the 129 days. The Firm observed one VaR back-testing exception and posted market risk-related gains on 35 of the 65 days for the three months ended June 30, 2018.

Daily Market Risk-Related Gains and Losses vs. Risk Management VaR (1-day, 95% Confidence level) Six months ended June 30, 2018

Market Risk-Related Gains and Losses

Risk Management VaR January February March April May June

Earnings-at-risk

The VaR and sensitivity measures illustrate the economic sensitivity of the Firm's Consolidated balance sheets to changes in market variables. The effect of interest rate exposure on the Firm's reported net income is also important as interest rate risk represents one of the Firm's significant market risks. Interest rate risk arises not only from trading activities but also from the Firm's traditional banking activities, which include extension of loans and credit facilities, taking deposits and issuing debt. The Firm evaluates its structural interest rate risk exposure through earnings-at-risk, which measures the extent to which changes in interest rates will affect the Firm's net interest income and interest rate-sensitive fees. For a summary by line of business, identifying positions included in earnings-at-risk, refer to the table on page 122 of JPMorgan Chase's 2017 Annual Report.

The Firm generates a baseline for net interest income and certain interest rate-sensitive fees, and then conducts simulations of changes for interest rate-sensitive assets and liabilities denominated in U.S. dollars and other currencies ("non-U.S. dollar" currencies). This simulation primarily includes retained loans, deposits, deposits with banks, investment securities, long term debt and any related interest rate hedges, and excludes other positions in risk management VaR and other sensitivity-based measures as described on page 122 of JPMorgan Chase's 2017 Annual Report.

Earnings-at-risk scenarios estimate the potential change in this baseline, over the following 12 months utilizing multiple assumptions. These scenarios consider the impact on exposures as a result of changes in interest rates from baseline rates, as well as pricing sensitivities of deposits, optionality and changes in product mix. The scenarios include forecasted balance sheet changes, as well as modeled prepayment and reinvestment behavior, but do not include assumptions about actions that could be taken by the Firm in response to any such instantaneous rate changes. Mortgage prepayment assumptions are based on scenario interest rates compared with underlying contractual rates, the time since origination, and other factors which are updated periodically based on historical experience. The pricing sensitivity of deposits in the baseline and scenarios use assumed rates paid which may differ from actual rates paid due to timing lags and other factors. The Firm's earnings-at-risk scenarios are periodically evaluated and enhanced in response to changes in the composition of the Firm's balance sheet, changes in market conditions, improvements in the Firm's simulation and other factors.

The Firm's U.S. dollar sensitivities are presented in the table below.

JPMorgan Chase's 12-month earnings-at-risk sensitivity profiles

U.S. dollar Instantaneous change

in rates

(in billions) +200+100-100 -200

bps bps bps bps

June 30, 2018 \$1.9 \$1.0 \$(2.1) NM^(a) December 31, 2017 \$2.4 \$1.7 \$(3.6) NM^(a)

(a) Given the level of market interest rates, these downward parallel earnings-at-risk scenarios are not considered to be meaningful.

The Firm's sensitivity to rates is largely a result of assets re-pricing at a faster pace than deposits.

The Firm's net U.S. dollar sensitivities to 200 and 100 basis points instantaneous rate increases each decreased by approximately \$500 million and \$700 million, respectively, while the Firm's net U.S. dollar sensitivity to 100 basis points instantaneous decrease in rates decreased by \$1.5 billion when compared to December 31, 2017. The primary driver of these decreases was the updating of the Firm's baseline to reflect higher interest rates. As higher interest rates are reflected in the Firm's baselines, sensitivities to changes in rates are expected to be less significant.

The non-U.S. dollar sensitivities for an instantaneous increase in rates by 200 and 100 basis points results in a 12-month benefit to net interest income of approximately \$900 million and \$500 million, respectively, at June 30, 2018 and \$800 million and \$500 million, respectively, at December 31, 2017. The non-U.S. dollar sensitivities for an instantaneous decrease in rates by 200 and 100 basis points are not material to the Firm's earnings-at-risk at June 30, 2018 and December 31, 2017.

Separately, another U.S. dollar interest rate scenario used by the Firm — involving a steeper yield curve with long-term rates rising by 100 basis points and short-term rates staying at current levels — results in a 12-month benefit to net interest income of approximately \$500 million and \$700 million at June 30, 2018 and December 31, 2017, respectively. The increase in net interest income under this scenario reflects the Firm reinvesting at the higher long-term rates, with funding costs remaining unchanged. The results of the comparable non-U.S. dollar scenarios are not material to the Firm at June 30, 2018 and December 31, 2017.

Other sensitivity-based measures

The Firm quantifies the market risk of certain investment and funding activities by assessing the potential impact on net revenue and OCI due to changes in relevant market variables. For additional information on the positions

captured in other sensitivity-based measures, please refer to the Risk identification and classification table on page 122 of JPMorgan Chase's 2017 Annual Report.

The table below represents the potential impact to net revenue or OCI for market risk-sensitive instruments that are not included in VaR or earnings-at-risk. Where appropriate, instruments used for hedging purposes are reported along with the positions being hedged. The sensitivities disclosed in the table below may not be representative of the actual gain or loss that would have been realized at June 30, 2018 and December 31, 2017, as the movement in market parameters across maturities may vary and are not intended to imply management's expectation of future deterioration in these sensitivities.

Gain/(loss) (in millions)			June 30,	Decem	ber
Activity	Description	Sensitivity measure	2018	2017	
Investment activities					
Investment management activities	Consists of seed capital and related hedges; and fund co-investments	10% decline in market value	\$(135)	\$ (110)
Other investments	Consists of private equity and other investments held at fair value	10% decline in market value	(266)	(338)
Funding activities					
Non-USD LTD cross-currency basis	Represents the basis risk on derivatives used to hedge the foreign exchange risk on the non-USD LTD ^(a)	1 basis point parallel tightening of cross currency basis	(9)	(10)
Non-USD LTD hedges foreign currency ("FX") exposure	Primarily represents the foreign exchange revaluation on the fair value of the derivative hedges ^(a)	10% depreciation of currency	16	(13)
Derivatives – funding spread risk	dImpact of changes in the spread related to derivatives FVA	1 basis point parallel increase in spread	(4)	(6)
Fair value option elected liabilities – funding spread risk	Impact of changes in the spread related to fair value option elected liabilities $DVA^{(a)}$	1 basis point parallel increase in spread	29	22	
Fair value option elected liabilities – interest rate sensitivity (a) Impact recognized through	Interest rate sensitivity on fair value option liabilities resulting from a change in the Firm's own credit spreactal	1 basis point parallel increase in spread	1	(1)
(a) impact recognized through	311 OC1.				

COUNTRY RISK MANAGEMENT

The Firm has a country risk management framework for monitoring and assessing how financial, economic, political or other significant developments adversely affect the value of the Firm's exposures related to a particular country or set of countries. The Country Risk Management group actively monitors the various portfolios giving rise to country risk to ensure the Firm's country risk exposures are diversified and that exposure levels are appropriate given the Firm's strategy and risk tolerance relative to a country.

Country Risk Management periodically designs and runs tailored stress scenarios to test vulnerabilities to individual countries or groups of countries in response to specific or potential market events, sector performance concerns and geopolitical risks. These tailored stress results are used to inform potential risk reduction across the firm, as necessary. For a further discussion of the Firm's Country Risk Management organization; identification and measurement; stress testing; monitoring and control; and reporting, refer to pages 129–130 of JPMorgan Chase's 2017 Annual Report.

The following table presents the Firm's top 20 exposures by country (excluding the U.S.) as of June 30, 2018. The selection of countries represents the Firm's largest total exposures by country, based on the Firm's internal country risk management approach, and does not represent the Firm's view of any actual or potentially adverse credit conditions. Country exposures may fluctuate from period to period due to client activity and market flows.

Top 20 country exposures (excluding the U.S.)(a)

0.5.)				
	June	30, 2018		
(in billions)	Lend and	ing Trading and investing ^{(c)(d)} sits ^(b)	Other ^(e)	Total exposure
C				¢ (O (
Germany	\$50.7		\$ 0.2	\$ 60.6
United Kingdom	25.2	8.5	17.4	51.1
Japan	27.6	8.9	0.4	36.9
China	9.4	7.4	1.9	18.7
France	11.6	5.0	0.5	17.1
Canada	13.4	3.0	0.1	16.5
Switzerland	11.1	0.6	3.4	15.1
India	5.9	5.1	1.4	12.4
Australia	6.0	5.7		11.7
Luxembourg	8.8	0.4	_	9.2
Brazil	5.2	3.9	_	9.1
Netherlands	6.3	1.5	1.2	9.0
Italy	2.6	4.1	0.2	6.9
South Korea	3.9	2.7	0.2	6.8
Hong Kong	3.1	1.2	1.7	6.0
Singapore	3.3	1.3	1.4	6.0
Spain	4.5	0.8	0.1	5.4
Mexico	3.8	1.1		4.9
Saudi Arabia	3.9	0.8	_	4.7
Ireland	2.3	0.4	1.1	3.8

- (a) Country exposures above reflect 87% of total firmwide non-U.S. exposure.
- Lending and deposits includes loans and accrued interest receivable (net of collateral and the allowance for loan losses), deposits with banks (including central banks), acceptances, other monetary assets, issued letters of credit net of participations, and unused commitments to extend credit. Excludes intra-day and operating exposures, such as from settlement and clearing activities.
- (c) Includes market-making inventory, AFS securities, counterparty exposure on derivative and securities financings net of collateral and hedging.

- (d) Includes single reference entity ("single-name"), index and other multiple reference entity transactions for which one or more of the underlying reference entities is in a country listed in the above table.
- (e) Includes capital invested in local entities and physical commodity inventory.

CRITICAL ACCOUNTING ESTIMATES USED BY THE FIRM

JPMorgan Chase's accounting policies and use of estimates are integral to understanding its reported results. The Firm's most complex accounting estimates require management's judgment to ascertain the appropriate carrying value of assets and liabilities. The Firm has established policies and control procedures intended to ensure that estimation methods, including any judgments made as part of such methods, are well-controlled, independently reviewed and applied consistently from period to period. The methods used and judgments made reflect, among other factors, the nature of the assets or liabilities and the related business and risk management strategies, which may vary across the Firm's businesses and portfolios. In addition, the policies and procedures are intended to ensure that the process for changing methodologies occurs in an appropriate manner. The Firm believes its estimates for determining the carrying value of its assets and liabilities are appropriate. The following is a brief description of the Firm's critical accounting estimates involving significant judgments.

Allowance for credit losses

JPMorgan Chase's allowance for credit losses covers the retained consumer and wholesale loan portfolios, as well as the Firm's wholesale and certain consumer lending-related commitments. The allowance for loan losses is intended to adjust the carrying value of the Firm's loan assets to reflect probable credit losses inherent in the loan portfolio as of the balance sheet date. Similarly, the allowance for lending-related commitments is established to cover probable credit losses inherent in the lending-related commitments portfolio as of the balance sheet date.

The allowance for credit losses includes a formula-based component, an asset-specific component, and a component related to PCI loans. The determination of each of these components involves significant judgment on a number of matters. For further information on these components, areas of judgment and methodologies used in establishing the Firm's allowance for credit losses, refer to pages 117–119, page 138 and Note 13 of JPMorgan Chase's 2017 Annual Report; and refer to Allowance for credit losses on pages 67–69 and Note 12 of this Form 10-Q.

As noted in the discussion on page 138 of JPMorgan Chase's 2017 Annual Report, the Firm's allowance for credit losses is sensitive to numerous factors, which may differ depending on the portfolio. Changes in economic conditions or in the Firm's assumptions and estimates could affect its estimate of probable credit losses inherent in the portfolio at the balance sheet date. The Firm uses its best judgment to assess these economic conditions and loss data in estimating the allowance for credit losses and these estimates are subject to periodic refinement based on changes to underlying external or Firm-specific historical data. Refer to Note 12 of this Form 10-Q for further discussion.

To illustrate the potential magnitude of certain alternate judgments, the Firm estimates that changes in the following inputs would have the following effects on the Firm's

modeled credit loss estimates as of June 30, 2018, without consideration of any offsetting or correlated effects of other inputs in the Firm's allowance for loan losses:

A combined 5% decline in housing prices and a 100 basis point increase in unemployment rates from current levels could imply:

an increase to modeled credit loss estimates of approximately \$525 million for PCI loans.

an increase to modeled annual credit loss estimates of approximately \$75 million for residential real estate loans, excluding PCI loans.

For credit card loans, a 100 basis point increase in unemployment rates from current levels could imply an increase to modeled annual credit loss estimates of approximately \$775 million.

An increase in probability of default ("PD") factors consistent with a one-notch downgrade in the Firm's internal risk ratings for its entire wholesale loan portfolio could imply an increase in the Firm's modeled credit loss estimates of approximately \$1.5 billion.

• A 100 basis point increase in estimated loss given default ("LGD") for the Firm's entire wholesale loan portfolio could imply an increase in the Firm's modeled credit loss estimates of approximately \$175 million.

The purpose of these sensitivity analyses is to provide an indication of the isolated impacts of hypothetical alternative assumptions on modeled loss estimates. The changes in the inputs presented above are not intended to imply management's expectation of future deterioration of those risk factors. In addition, these analyses are not intended to estimate changes in the overall allowance for loan losses, which would also be influenced by the judgment management applies to the modeled loss estimates to reflect the uncertainty and imprecision of these modeled loss estimates based on then-current circumstances and conditions.

It is difficult to estimate how potential changes in specific factors might affect the overall allowance for credit losses because management considers a variety of factors and inputs in estimating the allowance for credit losses. Changes in these factors and inputs may not occur at the same rate and may not be consistent across all geographies or product types, and changes in factors may be directionally inconsistent, such that improvement in one factor may offset deterioration in other factors. In addition, it is difficult to predict how changes in specific economic conditions or assumptions could affect borrower behavior or other factors considered by management in estimating the allowance for credit losses. Given the process the Firm follows and the judgments made in evaluating the risk factors related to its loss estimates, management believes that its current estimate of the allowance for credit losses is appropriate.

Fair value of financial instruments, MSRs and commodities inventory Assets measured at fair value

The following table includes the Firm's assets measured at fair value and the portion of such assets that are classified within level 3 of the valuation hierarchy. For further information, refer to Note 2.

Total	Tota	l
assets at	level	3
fair value	asset	S
\$360.2	\$4.5	
58.5	7.0	
418.7	11.5	
202.0	0.1	
3.1	0.2	
6.2	6.2	
30.1	1.3	
\$660.1	\$19.	3
1.6	1.0	
\$661.7	\$20.	3
\$2,590.1		
	0.8	%
	3.1	%
	assets at fair value \$360.2 58.5 418.7 202.0 3.1 6.2 30.1 \$660.1 1.6 \$661.7	assets at level fair value asset \$360.2 \$4.5 \$58.5 7.0 \$418.7 11.5 \$202.0 0.1 3.1 0.2 6.2 6.2 30.1 1.3 \$660.1 \$19.1.6 1.0 \$661.7 \$20.0 \$2,590.1 0.8

For purposes of the table above, the derivative receivables total reflects the impact of netting adjustments; however, the \$7.0 billion of derivative receivables classified as level 3 does not reflect the netting adjustment as such netting is not relevant to a presentation based on the transparency of inputs to the valuation of an asset. The level 3 balances would be reduced if netting were applied, including the netting benefit associated with cash collateral.

Valuation

Estimating fair value requires the application of judgment. The type and level of judgment required is largely dependent on the amount of observable market information available to the Firm. For instruments valued using internally developed valuation models and other valuation techniques that use significant unobservable inputs and are therefore classified within level 3 of the valuation hierarchy, judgments used to estimate fair value are more significant than those required when estimating the fair value of instruments classified within levels 1 and 2. In arriving at an estimate of fair value for an instrument within level 3, management must first determine the appropriate valuation technique to use. Second, the lack of observability of certain significant inputs requires management to assess all relevant empirical data in deriving valuation inputs including, for example, transaction details, yield curves, interest rates, prepayment rates, default rates, volatilities, correlations, equity or debt prices, valuations of comparable instruments, foreign exchange rates and credit curves. For a further discussion of the valuation of level 3 instruments, including unobservable inputs used, refer to Note 2.

For instruments classified in levels 2 and 3, management judgment must be applied to assess the appropriate level of valuation adjustments to reflect counterparty credit quality, the Firm's creditworthiness, market funding rates, liquidity considerations, unobservable parameters, and for portfolios that meet specified criteria, the size of the net open risk position. The judgments made are typically affected by the type of product and its specific contractual terms, and the level of liquidity for the product or within the market as a whole. For a further discussion of valuation adjustments applied by the Firm refer to Note 2.

Imprecision in estimating unobservable market inputs or other factors can affect the amount of gain or loss recorded for a particular position. Furthermore, while the Firm believes its valuation methods are appropriate and consistent with those of other market participants, the methods and assumptions used reflect management judgment and may vary across the Firm's businesses and portfolios.

The Firm uses various methodologies and assumptions in the determination of fair value. The use of methodologies or assumptions different than those used by the Firm could result in a different estimate of fair value at the reporting date. For a detailed discussion of the Firm's valuation process and hierarchy, and its determination of fair value for

individual financial instruments, refer to Note 2.

Goodwill impairment

Management applies significant judgment when testing goodwill for impairment. The goodwill associated with each business combination is allocated to the related reporting units for goodwill impairment testing. For a description of the significant valuation judgments associated with goodwill impairment, refer to Goodwill impairment on pages 139–140 of JPMorgan Chase's 2017 Annual Report.

For the three months ended June 30, 2018, the Firm reviewed current economic conditions, business performance, the current estimated market cost of equity, and prior projections of business performance for all its businesses. Based upon such reviews, the Firm concluded that the goodwill allocated to its reporting units was not impaired as of June 30, 2018.

Declines in business performance, increases in credit losses, increases in equity capital requirements, as well as deterioration in economic or market conditions, adverse regulatory or legislative changes or increases in the estimated market cost of equity, could cause the estimated fair values of the Firm's reporting units or their associated goodwill to decline in the future, which could result in a material impairment charge to earnings in a future period related to some portion of the associated goodwill.

For additional information on goodwill, refer to Note 14.

Credit card rewards liability

JPMorgan Chase offers credit cards with various rewards programs which allow cardholders to earn rewards points based on their account activity and the terms and conditions of the rewards program. Generally, there are no limits on the points that an eligible cardholder can earn, nor do the points expire, and the points can be redeemed for a variety of rewards, including cash (predominantly in the form of account credits), gift cards and travel. The Firm maintains a rewards liability which represents the estimated cost of rewards points earned and expected to be redeemed by cardholders. The rewards liability is sensitive to various assumptions, including cost per point and redemption rates for each of the various rewards programs, which are evaluated periodically. The liability is accrued as the cardholder earns the benefit and is reduced when the cardholder redeems points. This liability was \$5.5 billion and \$4.9 billion at June 30, 2018 and December 31, 2017, respectively, and is recorded in accounts payable and other liabilities on the Consolidated balance sheets.

Income taxes

For a description of the significant assumptions, judgments and interpretations associated with the accounting for income taxes, refer to Note 1, and Income taxes on page 140 of JPMorgan Chase's 2017 Annual Report. Litigation reserves

For a description of the significant estimates and judgments associated with establishing litigation reserves, refer to Note 22 of this Form 10-Q, and Note 29 of JPMorgan Chase's 2017 Annual Report.

ACCOUNTING AND REPORTING **DEVELOPMENTS**

Financial Accounting Standards Board ("FASB") Standards Adopted since January 1, 2018

Standard

Summary of guidance

Effects on financial statements

Revenue recognition revenue from contracts with customers Issued May 2014

- Requires that revenue from contracts with customers be recognized upon transfer of control of a good or service in the amount of consideration expected to be received.
- Changes the accounting for certain contract costs, including whether they may be offset against revenue in the Consolidated statements of income, and requires additional disclosures about revenue and contract costs.
- Adopted January 1, 2018.
- For further information, refer to Note 1.

Recognition and measurement of financial assets and financial liabilities Issued January 2016

- Requires that certain equity instruments be measured at fair value, with changes in fair value recognized in earnings.
- Provides a measurement alternative for equity securities without readily determinable fair values to be measured at cost less impairment (if any), plus or minus observable price changes from an identical or similar investment of the same issuer. Any such price changes are reflected in earnings beginning in the period of adoption.
- Adopted January 1, 2018.
- For further information, refer to Note 1

Classification of certain cash receipts and cash payments in the Issued August 2016

- Provides targeted amendments to the classification of certain cash flows, including the treatment of settlement statement of cash flows payments for zero coupon debt instruments and distributions received from equity method investments.
- Adopted January 1, 2018.
- The adoption of the guidance had no material impact as the Firm was either in compliance with the amendments or the amounts to which it was applied were immaterial.

Treatment of restricted cash on the statement of cash flows Issued November 2016

- Requires restricted cash to be combined with unrestricted cash when reconciling the beginning and ending cash balances on the Consolidated statements of cash flows.
- Requires additional disclosures to supplement the Consolidated statements of cash flows.
- Adopted January 1, 2018
- For further information, refer to Note 1.

FASB Standards Adopted since January 1, 2018 (continued)

Standard

Summary of guidance

Effects on financial statements

Definition of a business Issued January 2017

- Narrows the definition of a business and clarifies that, to be considered a business, substantially all of the fair value of the gross assets acquired (or disposed of) may not be concentrated in a single identifiable asset or a group of similar assets.
- In addition, the definition now requires that a set of activities and assets must include, at a minimum, an input and a substantive process that together significantly contribute to the ability to create outputs.

• Adopted January 1, 2018.

• The adoption of the guidance had no impact because it is being applied prospectively. Subsequent to adoption, fewer transactions will be treated as acquisitions or dispositions of a business.

- Presentation of net periodic pension cost and net periodic postretirement benefit cost Issued March 2017
- Requires the service cost component of net periodic pension and postretirement benefit cost to be reported separately in the Consolidated statements of income from the other components (e.g., expected return on assets, interest costs, amortization of gains/losses and prior service costs).
- Adopted January 1, 2018.
- For further information, refer to Note 1.

Premium amortization on purchased callable debt securities Issued March 2017

- Requires amortization of premiums to the earliest call date on debt securities with call features that are explicit, noncontingent and callable at fixed prices and on preset dates.
- Does not impact debt securities held at a discount; the discount continues to be amortized to the contractual maturity date.
- Aligns the accounting with the economics of the risk management activities.
- Expands the ability for certain hedges of interest rate risk to qualify for hedge accounting.

• Allows recognition of ineffectiveness in cash flow hedges and net investment hedges in OCI.

- Permits an election at adoption to transfer certain investment securities classified as held-to-maturity to available-for-sale.
- Simplifies hedge documentation requirements.
- Reclassification of certain tax effects from AOCI Issued February 2018

Hedge accounting

Issued August 2017

• Permits reclassification of the income tax effects of the TCJA on items within AOCI to retained earnings so that the tax effects of items within AOCI reflect the appropriate tax rate.

- Adopted January 1, 2018.
- For further information, refer to Note 1.
- Adopted January 1, 2018.
- For further information, refer to Note 1.
- Adopted January 1, 2018.
- For further information, refer to Note 1.

FASB Standards Issued but not yet Adopted

Standard

Leases

2016

Issued February

Summary of guidance

- Requires lessees to recognize all leases longer than twelve months on the Consolidated balance sheets as a lease liability with a corresponding right-of-use asset.
- Requires lessees and lessors to classify most leases using principles similar to existing lease accounting, but eliminates the "bright line" classification tests.
- Permits the Firm to generally account for its existing leases consistent with current guidance, except for the incremental balance sheet recognition.
- Expands qualitative and quantitative leasing disclosures.
- May be adopted using a modified cumulative effect approach wherein the guidance is applied only to existing contracts as of the date of initial application, and to new contracts transacted after that date, or a cumulative-effect adjustment to retained earnings at the effective date.

Effects on financial statements

- Required effective date: January 1, 2019(a)
- The Firm is in the process of its implementation which includes evaluating its leasing activities and certain contracts for embedded leases, implementing a new lease accounting software solution for its real estate leases, and updating processes and internal controls for its leasing activities. As a lessee, the Firm is developing its estimate of the right-of-use asset and lease liability, which is based on the present value of lease payments. The Firm expects to recognize a lease liability and a corresponding right-of-use asset (at their present value) related to predominantly all of the \$10 billion of future minimum payments required under operating leases as disclosed in Note 28 of JPMorgan Chase's 2017 Annual Report. However, the population of contracts subject to balance sheet recognition and their initial measurement remains under evaluation; final financial statement impacts will depend on the lease portfolio at the time of adoption. The Firm does not expect material changes to the recognition of operating lease expense in its Consolidated statements of income.
- The Firm plans to adopt the new lease guidance on January 1, 2019 and elect the available practical expedients, which will not require it to reassess whether an existing contract contains a lease or whether classification or unamortized initial lease costs would be different under the new lease guidance.

Financial instruments – credit losses Issued June 2016

- Replaces existing incurred loss impairment guidance and establishes a single allowance framework for financial assets carried at amortized cost, which will reflect management's estimate of credit losses over the full remaining expected life of the financial assets.
- Eliminates existing guidance for PCI loans, and requires recognition of an allowance for expected credit losses on financial assets purchased with more than insignificant credit deterioration

- Required effective date: January 1, 2020(a)
- The Firm has established a Firmwide, cross-discipline governance structure, which provides implementation oversight. The Firm continues to identify key interpretive issues, and is in the process of developing and implementing current expected credit loss models that satisfy the requirements of the new standard.
- The Firm expects that the new guidance will result in an increase in its allowance for credit losses due to several factors, including:
- 1. The allowance related to the Firm's loans and commitments will increase to cover credit losses over the full remaining expected life of the portfolio, and will consider expected future changes in macroeconomic conditions

since origination.

- Amends existing impairment guidance for AFS securities to incorporate an allowance, which will allow for reversals of credit impairments in the event that the credit of an issuer improves.
- Requires a cumulative-effect adjustment to retained earnings as of the beginning of the reporting period of adoption.
- Requires an impairment loss to be recognized when the estimated fair value of a reporting unit falls below its carrying value.
- Eliminates the second condition in the current guidance that requires an impairment loss to be recognized only if the estimated implied fair value of the goodwill is below its carrying value.
- (a) Early adoption is permitted.

- 2. The nonaccretable difference on PCI loans will be recognized as an allowance, which will be offset by an increase in the carrying value of the related loans
- 3. An allowance will be established for estimated credit losses on non-agency HTM securities
- The extent of the increase in the allowance is under evaluation, but will depend upon the nature and characteristics of the Firm's portfolio at the adoption date, and the macroeconomic conditions and forecasts at that date
- The Firm plans to adopt the new guidance on January 1, 2020.
- Required effective date: January 1, 2020(a)
- Based on current impairment test results, the Firm does not expect a material effect on the Consolidated Financial Statements. However, the impact of the new accounting guidance will depend on the performance of the reporting units and the market conditions at the time of adoption.
- After adoption, the guidance may result in more frequent goodwill impairment losses due to the removal of the second condition.
- The Firm plans to adopt the new guidance on January 1, 2020.

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Goodwill

2017

Issued January

FORWARD-LOOKING

STATEMENTS

From time to time, the Firm has made and will make forward-looking statements. These statements can be identified by the fact that they do not relate strictly to historical or current facts. Forward-looking statements often use words such as "anticipate," "target," "expect," "estimate," "intend," "plan," "goal," "believe," or other words of similar meaning. Forward-looking statements provide JPMorgan Chase's current expectations or forecasts of future events, circumstances, results or aspirations. JPMorgan Chase's disclosures in this Form 10-Q contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. The Firm also may make forward-looking statements in its other documents filed or furnished with the SEC. In addition, the Firm's senior management may make forward-looking statements orally to investors, analysts, representatives of the media and others.

All forward-looking statements are, by their nature, subject to risks and uncertainties, many of which are beyond the Firm's control. JPMorgan Chase's actual future results may differ materially from those set forth in its forward-looking statements. While there is no assurance that any list of risks and uncertainties or risk factors is complete, below are certain factors which could cause actual results to differ from those in the forward-looking statements:

• Local, regional and global business, economic and political conditions and geopolitical events;

Changes in laws and regulatory requirements, including capital and liquidity requirements affecting the Firm's businesses, and the ability of the Firm to address those requirements;

Heightened regulatory and governmental oversight and scrutiny of JPMorgan Chase's business practices, including dealings with retail customers;

Changes in trade, monetary and fiscal policies and laws;

Changes in income tax laws and regulations;

Securities and capital markets behavior, including changes in market liquidity and volatility;

Changes in investor sentiment or consumer spending or savings behavior;

Ability of the Firm to manage effectively its capital and liquidity, including approval of its capital plans by banking regulators;

Changes in credit ratings assigned to the Firm or its subsidiaries;

Damage to the Firm's reputation;

Ability of the Firm to deal effectively with an economic slowdown or other economic or market disruption;

Technology changes instituted by the Firm, its counterparties or competitors;

The success of the Firm's business simplification initiatives and the effectiveness of its control agenda;

Ability of the Firm to develop new products and services, and the extent to which products or services previously sold by the Firm (including but not limited to mortgages and asset-backed securities) require the Firm to incur liabilities or absorb losses not contemplated at their initiation or origination;

Acceptance of the Firm's new and existing products and services by the marketplace and the ability of the Firm to innovate and to increase market share;

Ability of the Firm to attract and retain qualified employees;

Ability of the Firm to control expenses;

Competitive pressures:

Changes in the credit quality of the Firm's customers and counterparties;

Adequacy of the Firm's risk management framework, disclosure controls and procedures and internal control over financial reporting;

Adverse judicial or regulatory proceedings;

Changes in applicable accounting policies, including the introduction of new accounting standards;

Ability of the Firm to determine accurate values of certain assets and liabilities;

Occurrence of natural or man-made disasters or calamities or conflicts and the Firm's ability to deal effectively with disruptions caused by the foregoing;

Ability of the Firm to maintain the security of its financial, accounting, technology, data processing and other operational systems and facilities;

Ability of the Firm to withstand disruptions that may be caused by any failure of its operational systems or those of third parties;

Ability of the Firm to effectively defend itself against cyberattacks and other attempts by unauthorized parties to access information of the Firm or its customers or to disrupt the Firm's systems; and

The other risks and uncertainties detailed in Part I,

Item 1A: Risk Factors in JPMorgan Chase's 2017 Annual Report on Form 10-K for the year ended December 31, 2017.

Any forward-looking statements made by or on behalf of the Firm speak only as of the date they are made, and JPMorgan Chase does not undertake to update any forward-looking statements. The reader should, however, consult any further disclosures of a forward-looking nature the Firm may make in any subsequent Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, or Current Reports on Form 8-K.

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JPMorgan Chase & Co.

Consolidated statements of income (unaudited)

	Three m ended June 30,		Six months ended June 30,		
(in millions, except per share data) Revenue	2018	2017	2018	2017	
Investment banking fees	\$2,168	\$1,846	\$3,904	\$3,726	
Principal transactions	3,782	3,137	7,734	6,719	
Lending- and deposit-related fees	1,495	1,482	2,972	2,930	
Asset management, administration and commissions	4,304	4,047	8,613	7,924	
Investment securities losses	,	•		(37	
Mortgage fees and related income	324	404	789	810	
Card income	1,020	1,167	2,295	2,081	
Other income	1,255	1,474	2,881	2,245	
Noninterest revenue	14,268	13,523	28,863	26,398	
Interest income	18,869	15,650	36,564	30,692	
Interest expense	5,384	3,442	9,767	6,420	
Net interest income	13,485	12,208	26,797	24,272	
Total net revenue	27,753	25,731	55,660	50,670	
Provision for credit losses	1,210	1,215	2,375	2,530	
Noninterest expense					
Compensation expense	8,338	7,757	17,200	16,013	
Occupancy expense	981	912	1,869	1,873	
Technology, communications and equipment expense	2,168	1,871	4,222	3,705	
Professional and outside services	2,126	1,899	4,247	3,691	
Marketing	798	756	1,598	1,469	
Other expense	1,560	1,572	2,915	3,299	
Total noninterest expense	15,971	14,767	32,051	30,050	
Income before income tax expense	10,572	9,749	21,234	18,090	
Income tax expense	2,256	2,720	4,206	4,613	
Net income	\$8,316	\$7,029	\$17,028	\$13,477	
Net income applicable to common stockholders	\$7,880	\$6,555	\$16,119	\$12,531	
Net income per common share data					
Basic earnings per share	\$2.31	\$1.83	\$4.69	\$3.49	
Diluted earnings per share	2.29	1.82	4.66	3.47	
Weighted-average basic shares	3,415.2	3,574.1	3,436.7	3,587.9	
Weighted-average diluted shares	3,434.7	3,599.0	3,457.1	3,614.7	
Cash dividends declared per common share	\$0.56	\$0.50	\$1.12	\$1.00	
Cash dividends declared per common share	ψ0.50	φυ.υυ	ψ1,14	ψ1.00	

Effective January 1, 2018, the Firm adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

JPMorgan Chase & Co.

Consolidated statements of comprehensive income (unaudited)

	Three months ended June 30,			Six months ended		
				June 30,		
(in millions)	2018		2017	2018	2017	
Net income	\$8,316)	\$7,029	\$17,028	\$13,477	
Other comprehensive income/(loss), after-tax						
Unrealized gains/(losses) on investment securities	(227)	457	(1,461)	695	
Translation adjustments, net of hedges	88			115	7	
Fair value hedges	(68)	NA	(108)	NA	
Cash flow hedges	(166)	53	(239)	144	
Defined benefit pension and OPEB plans	38		19	59	4	
DVA on fair value option elected liabilities	260		2	527	(67)	
Total other comprehensive income/(loss), after-tax	(75)	531	(1,107)	783	
Comprehensive income	\$8,241		\$7,560	\$15,921	\$14,260	

Effective January 1, 2018, the Firm adopted several new accounting standards. For additional information, refer to Note 1.

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

JPMorgan	Chase	&	Co.
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Consolidated balance sheets (unaudited)

Consolidated balance sheets (unaudited)		
in millions, except share data)		Dec 31, 2017
Assets		
Cash and due from banks	\$23,680	\$25,898
Deposits with banks	381,500	405,406
Federal funds sold and securities purchased under resale agreements (included \$12,793 and	226,505	198,422
\$14,732 at fair value)	220,303	190,422
Securities borrowed (included \$4,052 and \$3,049 at fair value)	108,246	105,112
Trading assets (included assets pledged of \$121,495 and \$109,887)	418,799	381,844
Investment securities (included \$202,009 and \$202,225 at fair value and assets pledged of	233,015	249,958
\$13,307 and \$17,969)	255,015	249,936
Loans (included \$3,076 and \$2,508 at fair value)	948,414	930,697
Allowance for loan losses		(13,604)
Loans, net of allowance for loan losses	935,164	917,093
Accrued interest and accounts receivable	75,669	67,729
Premises and equipment	14,132	14,159
Goodwill, MSRs and other intangible assets	54,535	54,392
Other assets (included \$13,869 and \$16,128 at fair value and assets pledged of \$5,559 and	118,805	113,587
\$7,980)	ŕ	
Total assets ^(a)	\$2,590,050	\$2,533,600
Liabilities		
Deposits (included \$19,696 and \$21,321 at fair value)	\$1,452,122	\$1,443,982
Federal funds purchased and securities loaned or sold under repurchase agreements	175,293	158,916
(included \$866 and \$697 at fair value)		
Short-term borrowings (included \$8,730 and \$9,191 at fair value)	63,918	51,802
Trading liabilities	149,838	123,663
Accounts payable and other liabilities (included \$6,633 and \$9,208 at fair value)	196,984	189,383
Beneficial interests issued by consolidated VIEs (included \$1 and \$45 at fair value)	21,323 273,114	26,081
		284,080
Total liabilities ^(a)	2,332,592	2,277,907
Commitments and contingencies (refer to Notes 20, 21 and 22)		
Stockholders' equity	26.060	26.060
Preferred stock (\$1 par value; authorized 200,000,000 shares; issued 2,606,750 shares)	26,068	26,068
Common stock (\$1 par value; authorized 9,000,000,000 shares; issued 4,104,933,895	4,105	4,105
shares)	90.202	00.570
Additional paid-in capital	89,392	90,579
Retained earnings	189,881	177,676
Accumulated other comprehensive loss Shares held in restricted stock units ("RSU") Trust, at cost (472,953 shares)		(119)
		(21)
Treasury stock, at cost (744,049,788 and 679,635,064 shares)	` ' '	(42,595) 255,693
Total stockholders' equity Total liabilities and stockholders' equity	257,458 \$2,590,050	\$2,533,600
Effective January 1, 2018, the Firm adopted several new accounting standards. Certain of the		

Effective January 1, 2018, the Firm adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

⁽a) The following table presents information on assets and liabilities related to VIEs that are consolidated by the Firm at June 30, 2018, and December 31, 2017. The assets of the consolidated VIEs are used to settle the liabilities of those entities. The holders of the beneficial interests generally do not have recourse to the general credit of

JPMorgan Chase. The assets and liabilities in the table below include third-party assets and liabilities of consolidated VIEs and exclude intercompany balances that eliminate in consolidation. For a further discussion, refer to Note 13.

(in millions)	Jun 30, 2018	Dec 31, 2017
Assets		
Trading assets	\$1,514	\$1,449
Loans	58,404	68,995
All other assets	2,412	2,674
Total assets	\$62,330	\$73,118
Liabilities		
Beneficial interests issued by consolidated VIEs	\$21,323	\$26,081
All other liabilities	333	349
Total liabilities	\$21,656	\$26,430

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

JPMorgan Chase & Co.

Consolidated statements of changes in stockholders' equity (unaudited)

		Six months ended June 30,			
(in millions, except per share data)	2018		2017		
Preferred stock					
Balance at January 1 and June 30	\$26,068		\$26,068		
Common stock	. ,		. ,		
Balance at January 1 and June 30	4,105		4,105		
Additional paid-in capital	,		,		
Balance at January 1	90,579		91,627		
Shares issued and commitments to issue common stock for employee shared-based	•			,	
compensation awards, and related tax effects	(1,076)	(865)	
Other	(111)	(158)	
Balance at June 30	89,392		90,604		
Retained earnings					
Balance at January 1	177,676		162,440		
Cumulative effect of changes in accounting principles	(183)			
Net income	17,028		13,477		
Dividends declared:					
Preferred stock	(788)	(823)	
Common stock (\$1.12 and \$1.00 per share)	(3,852)	(3,606)	
Balance at June 30	189,881		171,488		
Accumulated other comprehensive income/(loss)					
Balance at January 1	(119)	(1,175)	
Cumulative effect of changes in accounting principles	88		_		
Other comprehensive income/(loss)	(1,107))	783		
Balance at June 30	(1,138))	(392)	
Shares held in RSU Trust, at cost					
Balance at January 1 and June 30	(21)	(21)	
Treasury stock, at cost					
Balance at January 1	(42,595)	(28,854)	
Repurchase	(9,639)	(5,839)	
Reissuance	1,405		1,324		
Balance at June 30		-	(33,369	-	
Total stockholders' equity			\$258,483	3	
Effective Innuary 1, 2019, the Firm adopted several new accounting standards. For additional i	nformation		nafan ta		

Effective January 1, 2018, the Firm adopted several new accounting standards. For additional information, refer to Note 1.

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

JPMorgan Chase & Co.

Consolidated statements of cash flows (unaudited)

consonance statements of easily from a (anadated)	Six months ended June 30,		
(in millions)	2018	2017	
Operating activities			
Net income	\$17,028	\$13,477	
Adjustments to reconcile net income to net cash used in operating activities:			
Provision for credit losses	2,375	2,530	
Depreciation and amortization	3,724	2,968	
Deferred tax (benefit)/expense	(216) (161)
Other	1,611	1,163	
Originations and purchases of loans held-for-sale	(43,141) (58,119)
Proceeds from sales, securitizations and paydowns of loans held-for-sale	41,657	53,053	
Net change in:			
Trading assets	(42,859) (22,914)
Securities borrowed) 5,845	
Accrued interest and accounts receivable) (11,940)
Other assets) 11,212	
Trading liabilities	21,997	(12,827)
Accounts payable and other liabilities	12,574	(10,497)
Other operating adjustments	(2,243	7,724	
Net cash provided by/(used in) operating activities	576	(18,486)
Investing activities			
Net change in:			
Federal funds sold and securities purchased under resale agreements	(28,109) 11,364	
Held-to-maturity securities:			
Proceeds from paydowns and maturities	1,458	2,289	
Purchases	(7,426) —	
Available-for-sale securities:			
Proceeds from paydowns and maturities	19,718	-	
Proceeds from sales	25,228		
Purchases) (45,613)
Proceeds from sales and securitizations of loans held-for-investment	12,963	,	
Other changes in loans, net	(33,441) (24,266)
All other investing activities, net) 550	
Net cash provided by/(used in) investing activities	(38,974) 24,539	
Financing activities			
Net change in:			
Deposits	10,100	53,122	
Federal funds purchased and securities loaned or sold under repurchase agreements	16,396	(43)
Short-term borrowings	12,151	18,222	
Beneficial interests issued by consolidated VIEs	(165) (1,067)
Proceeds from long-term borrowings	41,166	35,530	
Payments of long-term borrowings	(50,171) (47,743)
Treasury stock repurchased	(9,639) (5,839)
Dividends paid	(4,716) (4,386)
All other financing activities, net	(1,356) 115	
Net cash provided by financing activities	13,766	47,911	
Effect of exchange rate changes on cash and due from banks and deposits with banks	(1,492) 5,408	

Net increase/(decrease) in cash and due from banks and deposits with banks	(26,124)	59,372
Cash and due from banks and deposits with banks at the beginning of the period	431,304	391,154
Cash and due from banks and deposits with banks at the end of the period	\$405,180	\$450,526
Cash interest paid	\$9,151	\$6,322
Cash income taxes paid, net	3,906	1,736

Effective January 1, 2018, the Firm adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised. For additional information, refer to Note 1.

The Notes to Consolidated Financial Statements (unaudited) are an integral part of these statements.

Refer to the Glossary of Terms and Acronyms on pages 172–176 for definitions of terms and acronyms used throughout the Notes to Consolidated Financial Statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (unaudited)

Note 1 – Basis of presentation

JPMorgan Chase & Co. ("JPMorgan Chase" or "the Firm"), a financial holding company incorporated under Delaware law in 1968, is a leading global financial services firm and one of the largest banking institutions in the U.S., with operations worldwide. The Firm is a leader in investment banking, financial services for consumers and small businesses, commercial banking, financial transaction processing and asset management. For a further discussion of the Firm's business segments, refer to Note 23.

The accounting and financial reporting policies of JPMorgan Chase and its subsidiaries conform to U.S. GAAP. Additionally, where applicable, the policies conform to the accounting and reporting guidelines prescribed by regulatory authorities.

The unaudited Consolidated Financial Statements prepared in conformity with U.S. GAAP require management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue and expense, and the disclosures of contingent assets and liabilities. Actual results could be different from these estimates. In the opinion of management, all normal, recurring adjustments have been included such that this interim financial information is fairly presented.

These unaudited Consolidated Financial Statements should be read in conjunction with the audited Consolidated Financial Statements, and related notes thereto, included in JPMorgan Chase's 2017 Annual Report. Certain amounts reported in prior periods have been reclassified to conform with the current presentation.

Consolidation

The Consolidated Financial Statements include the accounts of JPMorgan Chase and other entities in which the Firm has a controlling financial interest. All material intercompany balances and transactions have been eliminated. Assets held for clients in an agency or fiduciary capacity by the Firm are not assets of JPMorgan Chase and are not included on the Consolidated balance sheets.

The Firm determines whether it has a controlling financial interest in an entity by first evaluating whether the entity is a voting interest entity or a variable interest entity.

For a further description of JPMorgan Chase's accounting policies regarding consolidation, refer to Notes 1 and 14 of JPMorgan Chase's 2017 Annual Report.

Offsetting assets and liabilities

U.S. GAAP permits entities to present derivative receivables and derivative payables with the same counterparty and the related cash collateral receivables and payables on a net basis on the Consolidated balance sheets when a legally enforceable master netting agreement exists. U.S. GAAP also permits securities financing activities to be presented on a net basis when specified conditions are met, including the existence of a legally enforceable master netting agreement. The Firm has elected to net such balances when the specified conditions are met. For further information on offsetting assets and liabilities, refer to Note 1 of JPMorgan Chase's 2017 Annual Report.

Application of U.S. GAAP related to the Tax Cuts and Jobs Act ("TCJA") SEC Staff Accounting Bulletin No. 118 On December 22, 2017, the TCJA was signed into law and the Firm recorded the estimated impact of the deemed repatriation of the Firm's unremitted non-U.S. earnings and the remeasurement of deferred taxes under the TCJA. These provisional amounts represent estimates under SEC guidance, which provides a one-year measurement period in which to refine the estimates based on new information or the issuance of interpretative guidance. Based on legislative clarifications published during the second quarter of 2018, which were specific to the deemed repatriation tax on non-U.S. earnings, the Firm recorded a tax benefit of \$189 million. The Firm has made and continues to anticipate refinements to both calculations as a result of the issuance of additional legislative and accounting guidance as well as those in the normal course of business, including true-ups to the tax liability on the tax return as filed and

the resolution of tax audits. The Firm considers any legislative or accounting guidance issued as of the balance sheet date when evaluating potential refinements to these estimates.

Accounting standards adopted January 1, 2018

The following table identifies the standards adopted, and the note where further information on the impact of the new guidance can be found:

Revenue recognition – revenue from contracts with customers

Recognition and measurement of financial assets and financial liabilities

Notes 2 and 9

Treatment of restricted cash on the statement of cash flows

Note 18

Presentation of net periodic pension cost and net periodic postretirement benefit cost

Note 7

Premium amortization on purchased callable debt securities

Notes 9 and 17

Hedge accounting

Notes 4, 9 and 17

Reclassification of certain tax effects from AOCI

Note 17

Certain of the new accounting standards were applied retrospectively and prior period amounts were revised accordingly. The most significant of the new standards was revenue recognition, which requires gross presentation of certain costs that were previously offset against revenue. This change resulted in noninterest revenue and noninterest expense each increasing by \$261 million and \$525 million for the three and six months ended June 30, 2017, respectively, with no impact to net income.

Upon adoption of the restricted cash guidance, to align the Consolidated balance sheets with the Consolidated statements of cash flows, the Firm reclassified restricted cash into cash and due from banks or deposits with banks. In addition, for the Firm's Consolidated statements of cash flows, cash is defined as those amounts included in cash and due from banks and deposits with banks. This guidance was applied retrospectively and, accordingly, prior period amounts have been revised, resulting in cash and due from banks and deposits with banks increasing by \$71 million and \$1.1 billion, respectively, and other assets decreasing by \$1.2 billion at December 31, 2017.

Note 2 – Fair value measurement

For a discussion of the Firm's valuation methodologies for assets, liabilities and lending-related commitments measured at fair value and the fair value hierarchy, refer to Note 2 of JPMorgan Chase's 2017 Annual Report.

The following table presents the assets and liabilities reported at fair value as of June 30, 2018, and December 31, 2017, by major product category and fair value hierarchy.

Assets and liabilities measured at fair value on a recurring basis

	Fair valu	e hierarch	Derivative		
June 30, 2018 (in millions)	Level 1	Level 2	Level 3	netting adjustmen	ts Total fair value
Federal funds sold and securities purchased under resale agreements	\$—	\$12,793	\$—	\$ —	\$12,793
Securities borrowed		4,052			4,052
Trading assets:		,			,
Debt instruments:					
Mortgage-backed securities:					
U.S. government agencies ^(a)	_	37,805	478	_	38,283
Residential – nonagency	_	2,001	87	_	2,088
Commercial – nonagency	_	1,299	18	_	1,317
Total mortgage-backed securities	_	41,105	583	_	41,688
U.S. Treasury and government agencies ^(a)	38,363	9,192		_	47,555
Obligations of U.S. states and municipalities	_	8,465	736		9,201
Certificates of deposit, bankers' acceptances and commercial paper	er—	2,095	_		2,095
Non-U.S. government debt securities	34,787	31,647	183		66,617
Corporate debt securities	_	24,571	274		24,845
Loans ^(b)	_	43,891	1,986		45,877
Asset-backed securities		3,002	87		3,089
Total debt instruments	73,150	163,968	3,849		240,967
Equity securities	98,142	485	288		98,915
Physical commodities ^(c)	5,136	1,542			6,678
Other		13,273	406		13,679
Total debt and equity instruments ^(d)	176,428	179,268	4,543		360,239
Derivative receivables:					
Interest rate	528	278,652	1,831	(258,040)22,971
Credit		19,917	1,017	(20,310)624
Foreign exchange	1,497	194,169	806	(179,709)16,763
Equity		41,798	3,167	(34,789)10,176
Commodity		21,702	166	(13,892)7,976
Total derivative receivables ^(e)	2,025	556,238	6,987	(506,740)58,510
Total trading assets ^(f)	178,453	735,506	11,530	(506,740)418,749
Available-for-sale securities:					
Mortgage-backed securities:					
U.S. government agencies ^(a)		61,922	_		61,922
Residential – nonagency		9,679	1		9,680
Commercial – nonagency		7,827			7,827
Total mortgage-backed securities		79,428	1		79,429
U.S. Treasury and government agencies	25,344		_		25,344
Obligations of U.S. states and municipalities		39,330	_		39,330
Certificates of deposit		75			75
Non-U.S. government debt securities	17,359	8,327			25,686
Corporate debt securities		2,133	_		2,133
Asset-backed securities:					
Collateralized loan obligations	_	20,999	147	_	21,146

Other	_	8,866		_	8,866
Total available-for-sale securities	42,703	159,158	148	_	202,009
Loans		2,917	159	_	3,076
Mortgage servicing rights			6,241		6,241
Other assets ^{(f)(g)}	11,873	57	1,225	_	13,155
Total assets measured at fair value on a recurring basis	\$233,029	9\$914,483	\$19,303	\$(506,740)\$660,075
Deposits	\$ —	\$15,391	\$4,305	\$ —	\$19,696
Federal funds purchased and securities loaned or sold under		866			866
repurchase agreements	_	000			800
Short-term borrowings		6,521	2,209		8,730
Trading liabilities:					
Debt and equity instruments ^(d)	82,507	24,777	43		107,327
Derivative payables:					
Interest rate	561	252,080	1,342	(245,368)8,615
Credit	_	19,737	1,041	(19,276)1,502
Foreign exchange	1,539	184,977	1,051	(175,046)12,521
Equity		42,639	5,745	(36,902)11,482
Commodity		22,232	918	(14,759)8,391
Total derivative payables ^(e)	2,100	521,665	10,097	(491,351)42,511
Total trading liabilities	84,607	546,442	10,140	(491,351) 149,838
Accounts payable and other liabilities	6,568	57	8	_	6,633
Beneficial interests issued by consolidated VIEs			1	_	1
Long-term debt	_	31,834	18,262	_	50,096
Total liabilities measured at fair value on a recurring basis	\$91,175	\$601,111	\$34,925	\$(491,351)\$235,860

	Fair valu	e hierarch	Derivative netting		
December 31, 2017 (in millions)	Level 1	Level 2	Level 3	adjustments	Total fair value
Federal funds sold and securities purchased under resale agreements	\$—	\$14,732	\$—	\$ —	\$14,732
Securities borrowed	_	3,049	_		3,049
Trading assets:		- ,			- ,
Debt instruments:					
Mortgage-backed securities:					
U.S. government agencies ^(a)		41,515	307		41,822
Residential – nonagency	_	1,835	60		1,895
Commercial – nonagency	_	1,645	11		1,656
Total mortgage-backed securities		44,995	378		45,373
U.S. Treasury and government agencies ^(a)	30,758	6,475	1	_	37,234
Obligations of U.S. states and municipalities		9,067	744		9,811
Certificates of deposit, bankers' acceptances and commercial		226			226
paper		226		_	220
Non-U.S. government debt securities	28,887	28,831	78		57,796
Corporate debt securities		24,146	312	_	24,458
Loans ^(b)	_	35,242	2,719		37,961
Asset-backed securities		3,284	153		3,437
Total debt instruments	59,645	152,266	4,385	_	216,296
Equity securities	87,346	197	295		87,838
Physical commodities ^(c)	4,924	1,322	_		6,246
Other		14,197	690		14,887
Total debt and equity instruments ^(d)	151,915	167,982	5,370		325,267
Derivative receivables:					
Interest rate	181	314,107	1,704	(291,319)	24,673
Credit	_	21,995	1,209	(22,335)	869
Foreign exchange	841	158,834	557		16,151
Equity	_	37,722	2,318	(32,158)	7,882
Commodity	_	19,875	210		6,948
Total derivative receivables ^(e)	1,022	552,533	5,998	, , ,	56,523
Total trading assets ^(f)	152,937	720,515	11,368	(503,030)	381,790
Available-for-sale securities:					
Mortgage-backed securities:					
U.S. government agencies ^(a)		70,280			70,280
Residential – nonagency	_	11,366	1	_	11,367
Commercial – nonagency	_	5,025	_	_	5,025
Total mortgage-backed securities		86,671	1		86,672
U.S. Treasury and government agencies	22,745				22,745
Obligations of U.S. states and municipalities		32,338		_	32,338
Certificates of deposit		59			59
Non-U.S. government debt securities	18,140	9,154	_		27,294
Corporate debt securities	_	2,757		_	2,757
Asset-backed securities:		20.720	076		20.006
Collateralized loan obligations	_	20,720	276	_	20,996
Other Figure 1 and 1 an	<u> </u>	8,817			8,817
Equity securities ^(g)	547		_	_	547

Total available-for-sale securities	41,432	160,516	277	_	202,225
Loans		2,232	276		2,508
Mortgage servicing rights	_		6,030		6,030
Other assets ^{(f)(g)}	13,795	343	1,265		15,403
Total assets measured at fair value on a recurring basis	,		,	\$(503,030)	,
Deposits	\$—	\$17,179	\$4,142	\$	\$21,321
Federal funds purchased and securities loaned or sold under					
repurchase agreements	_	697	_		697
Short-term borrowings	_	7,526	1,665		9,191
Trading liabilities:					
Debt and equity instruments ^(d)	64,664	21,183	39		85,886
Derivative payables:					
Interest rate	170	282,825	1,440	(277,306)	7,129
Credit		22,009	1,244	(21,954)	1,299
Foreign exchange	794	154,075	953	(143,349)	12,473
Equity		39,668	5,727	(36,203)	9,192
Commodity		21,017	884	(14,217)	7,684
Total derivative payables ^(e)	964	519,594	10,248	(493,029)	37,777
Total trading liabilities	65,628	540,777	10,287	(493,029)	123,663
Accounts payable and other liabilities	9,074	121	13	_	9,208
Beneficial interests issued by consolidated VIEs		6	39	_	45
Long-term debt	_	31,394	16,125	_	47,519
Total liabilities measured at fair value on a recurring basis	\$74,702	\$597,700	\$32,271	\$(493,029)	\$211,644

- (a) At June 30, 2018, and December 31, 2017, included total U.S. government-sponsored enterprise obligations of \$65.6 billion and \$78.0 billion, respectively, which were predominantly mortgage-related.

 At June 30, 2018, and December 31, 2017, included within trading loans were \$14.8 billion and \$11.4 billion, respectively, of residential first-lien mortgages, and \$5.6 billion and \$4.2 billion, respectively, of commercial
- (b) first-lien mortgages. Residential mortgage loans include conforming mortgage loans originated with the intent to sell to U.S. government agencies of \$9.7 billion and \$5.7 billion, respectively, and reverse mortgages of zero and \$836 million respectively.
 - Physical commodities inventories are generally accounted for at the lower of cost or net realizable value. "Net realizable value" is a term defined in U.S. GAAP as not exceeding fair value less costs to sell ("transaction costs").
- (c) Transaction costs for the Firm's physical commodities inventories are either not applicable or immaterial to the value of the inventory. Therefore, net realizable value approximates fair value for the Firm's physical commodities inventories. When fair value hedging has been applied (or when net realizable value is below cost), the carrying

value of physical commodities approximates fair value, because under fair value hedge accounting, the cost basis is adjusted for changes in fair value. For a further discussion of the Firm's hedge accounting relationships, refer to Note 4. To provide consistent fair value disclosure information, all physical commodities inventories have been included in each period presented.

- Balances reflect the reduction of securities owned (long positions) by the amount of identical securities sold but not yet purchased (short positions).
 - As permitted under U.S. GAAP, the Firm has elected to net derivative receivables and derivative payables and the related cash collateral received and paid when a legally enforceable master netting agreement exists. For purposes of the tables above, the Firm does not reduce derivative receivables and derivative payables
- (e) balances for this netting adjustment, either within or across the levels of the fair value hierarchy, as such netting is not relevant to a presentation based on the transparency of inputs to the valuation of an asset or liability. The level 3 balances would be reduced if netting were applied, including the netting benefit associated with cash collateral.
 - Certain investments that are measured at fair value using the net asset value per share (or its equivalent) as a practical expedient are not required to be classified in the fair value hierarchy. At June 30, 2018, and
- December 31, 2017, the fair values of these investments, which include certain hedge funds, private equity funds, real estate and other funds, were \$764 million and \$779 million, respectively. Included in these balances at June 30, 2018, and December 31, 2017, were trading assets of \$50 million and \$54 million, respectively, and other assets of \$714 million and \$725 million, respectively.
- (g) Effective January 1, 2018, the Firm adopted the recognition and measurement guidance. Equity securities that were previously reported as AFS securities were reclassified to other assets upon adoption.

Transfers between levels for instruments carried at fair value on a recurring basis

For the three and six months ended June 30, 2018 and 2017 there were no individually significant transfers. All transfers are based on changes in the observability of the valuation inputs and are assumed to occur at the beginning of the quarterly reporting period in which they occur.

Level 3 valuations

For further information on the Firm's valuation process and a detailed discussion of the determination of fair value for individual financial instruments, refer to Note 2 of JPMorgan Chase's 2017 Annual Report.

The following table presents the Firm's primary level 3 financial instruments, the valuation techniques used to measure the fair value of those financial instruments, the significant unobservable inputs, the range of values for those inputs and, for certain instruments, the weighted averages of such inputs. While the determination to classify an instrument within level 3 is based on the significance of the unobservable inputs to the overall fair value measurement, level 3 financial instruments typically include observable components (that is, components that are actively quoted and can be validated to external sources) in addition to the unobservable components. The level 1 and/or level 2 inputs are not included in the table. In addition, the Firm manages the risk of the observable components of level 3 financial instruments using securities and derivative positions that are classified within levels 1 or 2 of the fair value hierarchy. The range of values presented in the table is representative of the highest and lowest level input used to value the significant groups of instruments within a product/instrument classification. Where provided, the weighted averages of the input values presented in the table are calculated based on the fair value of the instruments that the input is being used to value.

In the Firm's view, the input range and the weighted average value do not reflect the degree of input uncertainty or an assessment of the reasonableness of the Firm's estimates and assumptions. Rather, they reflect the characteristics of the various instruments held by the Firm and the relative distribution of instruments within the range of characteristics. For example, two option contracts may have similar levels of market risk exposure and valuation uncertainty, but may have significantly different implied volatility levels because the option contracts have different underlyings, tenors, or strike prices. The input range and weighted average values will therefore vary from period-to-period and parameter-to-parameter based on the characteristics of the instruments held by the Firm at each balance sheet date.

For the Firm's derivatives and structured notes positions classified within level 3 at June 30, 2018, interest rate correlation inputs used in estimating fair value were concentrated towards the upper end of the range; equity correlation, equity-FX, and equity-IR correlation inputs were concentrated in the middle of the range; credit correlation inputs were concentrated towards the lower end of the range; and the interest rate-foreign exchange ("IR-FX") correlation inputs were distributed across the range. In addition, the interest rate spread volatility inputs used in estimating fair value were distributed across the range; equity volatilities and commodity volatilities were concentrated towards the lower end of the range; and forward commodity prices used in estimating the fair value of commodity derivatives were concentrated towards the lower end of the range. Prepayment speed inputs used in estimating fair value of interest rate derivatives were concentrated towards the lower end of the range. Recovery rate, yield and prepayment speed inputs used in estimating fair value of credit derivatives were distributed across the range; credit spreads and conditional default rates were concentrated towards the lower end of the range; loss severity and price inputs were concentrated towards the upper end of the range.

Level 3 inputs^(a) June 30, 2018

Product/Instrument	Fair value (in millions	(2	Principal valuation technique	Unobservable inputs ^(g)	Ran valu	_	of inpu		Wei aver	ghteo age	d
Residential mortgage-backed	\$ 798	-,	Discounted cash flows	Yield	0	%	-23	%		6	%
securities and loans(b)				Prepayment speed	0	%	-5 0	%		8	%
				Conditional default rate	0	%	-20	%		1	%
				Loss severity	0	%	-100	%		6	%
Commercial mortgage-backed securities and loans ^(c)	445		Market comparables	Price	\$6		-\$101	1		\$91	
Obligations of U.S. states and municipalities	736		Market comparables	Price	\$59		-\$100	O		\$97	
Corporate debt securities	274		Market comparables	Price	\$2		-\$107	7		\$82	
Loans ^(d)	1,486		Market comparables	Price	\$4		-\$104	4		\$87	
Asset-backed securities	147		Discounted cash flows	Credit spread	216			bps		216	bps
				Prepayment speed	20			%		20	%
				Conditional default rate	2			%		2	%
				Loss severity	30			%		30	%
	87		Market comparables	Price	\$4		-\$100	O		\$ 59	
Net interest rate derivatives	293		Option pricing	Interest rate spread volatility	16	bp	s-38		bps		
				Interest rate correlation	(50)%	-9 7	%			
			D'a a santa da a a da	IR-FX correlation	55	%	-60	%			
	196		Discounted cash flows	Prepayment speed	0	%	-3 0	%			
Net credit derivatives	(27)	Discounted cash flows	Credit correlation	35	%	-65	%			
				Credit spread	8	•	s-1,49°	•			
				Recovery rate Yield	20 1		–70 –36	% %			
				Prepayment speed	0		-30 -18	%			
				Conditional default							
				rate	U		<u>-93</u>	%			
			Market	Loss severity	0	%	-100	%			
	3		comparables	Price	\$10)	- \$98				
Net foreign exchange derivatives	(62)	Option pricing	IR-FX correlation	(50)%	-60	%			
	(183)	Discounted cash flows	Prepayment speed	8	%	_9	%			
Net equity derivatives	(2,578)	Option pricing	Equity volatility	10	%	-60	%			

			Equity correlation	10	%	<u>-95</u>	%		
			Equity-FX correlation	(70)%	-60	%		
			Equity-IR correlation	20	%	-40	%		
Net commodity derivatives	(752)	Option pricing	Forward commodity price	\$52	2	-\$ 80	per barre	el	
			Commodity volatility	5	%	-53	%		
			Commodity correlation	(52)%	-9 5	%		
MSRs	6,241	Discounted cash flows	Refer to Note 14						
Other assets	289	Discounted cash flows	Credit spread	70			bps	70	bps
			Yield	8	%	-10	%	8	%
	1,342	Market comparables	Price	\$35	5	-\$104	4	\$46	·
		-	EBITDA multiple	3.02	X	-8.4x		8.0x	ζ.
	24,776	Option pricing	Interest rate spread volatility	16	bp	s-38	bps	3	
			Interest rate correlation	(50)%	-9 7	%		
Long-term debt, short-term			IR-FX correlation	(50)%	-60	%		
borrowings, and deposits ^(e)			Equity correlation	10	%	-9 5	%		
			Equity-FX correlation	(70)%	-60	%		
			Equity-IR correlation	20	%	-4 0	%		

Other level 3 assets and liabilities, 419

The categories presented in the table have been aggregated based upon the product type, which may differ from their classification on the Consolidated balance sheets. Furthermore, the inputs presented for each valuation technique in the table are, in some cases, not applicable to every instrument valued using the technique as the characteristics of the instruments can differ.

- (b) Includes U.S. government agency securities of \$471 million, nonagency securities of \$88 million and trading loans of \$239 million.
- (c) \$261 million and non-trading loans of \$159 million.
- (d) Comprises trading loans.

Long-term debt, short-term borrowings and deposits include structured notes issued by the Firm that are predominantly financial instruments containing embedded derivatives. The estimation of the fair value of

- (e) structured notes includes the derivative features embedded within the instrument. The significant unobservable inputs are broadly consistent with those presented for derivative receivables.
- (f) Includes level 3 assets and liabilities that are insignificant both individually and in aggregate.

Price is a significant unobservable input for certain instruments. When quoted market prices are not readily

(g) available, reliance is generally placed on price-based internal valuation techniques. The price input is expressed assuming a par value of \$100.

Changes in and ranges of unobservable inputs

For a discussion of the impact on fair value of changes in unobservable inputs and the relationships between unobservable inputs as well as a description of attributes of the underlying instruments and external market factors that affect the range of inputs used in the valuation of the Firm's positions refer to Note 2 of JPMorgan Chase's 2017 Annual Report.

Changes in level 3 recurring fair value measurements

The following tables include a rollforward of the Consolidated balance sheets amounts (including changes in fair value) for financial instruments classified by the Firm within level 3 of the fair value hierarchy for the three and six months ended June 30, 2018 and 2017. When a determination is made to classify a financial instrument within level 3, the determination is based on the significance of the unobservable parameters to the overall

fair value measurement. However, level 3 financial instruments typically include, in addition to the unobservable or level 3 components, observable components (that is, components that are actively quoted and can be validated to external sources); accordingly, the gains and losses in the table below include changes in fair value due in part to observable factors that are part of the valuation methodology. Also, the Firm risk-manages the observable components of level 3 financial instruments using securities and derivative positions that are classified within level 1 or 2 of the fair value hierarchy; as these level 1 and level 2 risk management instruments are not included below, the gains or losses in the following tables do not reflect the effect of the Firm's risk management activities related to such level 3 instruments.

	raii vaii	ue measureme	ciits usi	ng significant	unouse	i vadie ii	iputs		Change in
Three months ended June 30, 2018 (in millions)	Fair value at April 1, 2018	Total realized/unre gains/(losses	ealized Purch	a sealó s	Settlei	Transinto medes (**) 3(h)	unrealized egains/(losses) related to financial instruments held at June 30, 2018		
Assets: Trading assets: Debt instruments:									2010
Mortgage-backed securities									
U.S. government agencies	\$508	\$ —	\$ 5	\$(11)	\$ (19) \$ 5	\$(10) \$478	\$—
Residential – nonagency	55	2	45	(11)	(1) 11	(14) 87	1
Commercial – nonagency	14	2	1	(1)	(12) 17	(3) 18	1
Total mortgage-backed securities	577	4	51	(23)	(32) 33	(27) 583	2
U.S. Treasury and									
government agencies		_		_					_
Obligations of U.S. states	704	(0)	42		(1	`		726	(0)
and municipalities	704	(9)	42	_	(1) —		736	(9)
Non-U.S. government debt securities	197	(12)	126	(92)	_	_	(36) 183	(12)
Corporate debt securities	306	(3)	60	(40)	(10) 36	(75) 274	4
Loans	2,368	(21)	565	(806)	(192) 251	(179) 1,986	(30)
Asset-backed securities	63	4	45	(9)	(6) 2	(12) 87	4
Total debt instruments	4,215	(37)	889	(970)	(241) 322	(329) 3,849	(41)
Equity securities	300	(13)	65	(50)	(1) —	(13) 288	(8)
Other	608	(254)	16	(34)	(18) —	(2) 406	(259)
Total trading assets – debt a equity instruments	nd 5,213	(304) ^(c)	970	(1,05)	(260) 322	(344) 4,543	(308) (c)
Net derivative receivables:	1)								
Interest rate	472	287	38	(51)	(179) (54	(24) 489	254
Credit	5	21	1	(5)	(29		(13		9
Foreign exchange		94	13	(3)	(8	(74			95
Equity	(2,512)		606	(1,04)2	(13	38	202	(2,578)	
Commodity	(519)				(186		(3		(65)
Total net derivative receivables	(2,842)		658	(1,10)	(415) (103)		(3,110)	
Available-for-sale securities	S:								
Asset-backed securities	204				(57) —		147	
Other	1							1	
Total available-for-sale securities	205	(d)	_	_	(57) —	_	148	(d)
Loans	396	(9) ^(c)			(154) —	(74) 159	(9) ^(c)
Mortgage servicing rights	6,202	94 (e)	236	(104)	(187) —	—	6,241	94 (e)
Other assets	1,220	$(13)^{(c)}$	24	(2)	(5) 1		1,225	$(17)^{(c)}$
Callet abbets	1,220	(10)	- '	(-)	(5	, -		1,220	(-1)

Three months ended June 30, 2018 (in millions)	Fair value at April 1, 2018	Tota realiz (gain		ealized Purcha s	a Sca les	Issuan	c S ettlen		(t - C	erFair valu) at June 30, 2018	unrea (gain elosse relate to fin	s ed ancial aments at 30,
Liabilities:(b)												
Deposits	\$4,017	\$ 49	(c)(i)	\$ —	\$ —	\$ 434	\$ (57) \$ 1	\$(139	\$4,305	\$50	(c)(i)
Short-term borrowings	2,125	(197) (c)(i)			862	(614) 43	(10) 2,209	(27) (c)(i)
Trading liabilities – debt and equity instruments	¹ 50	(11) ^(c)	(25)	33			_	(4) 43	(4) ^(c)
Accounts payable and other liabilities	7	(1)	_	1	_	_	1	_	8	(1)
Beneficial interests issued by consolidated VIEs	^y 1	_		_	_	_	_	_	_	1		
Long-term debt	16,950	(344) (c)(i)			3,740	(2,083) 219	(220) 18,262	(427) (c)(i)
97												

	Fair						Transf ðirs ansfer s air valu						Change in unrealized gains/(losses)		
Three months ended	value	Total						into	(out of) at			related			
June 30, 2017 (in millions)	at April 1, 2017	l realiza gains/	realized/unrealized Purchas Ss fes gains/(losses)				Settlemeines/el 3(h)		level June 30, 3 ^(h) 2017		une 30,	to fin	ancial uments at June		
Assets: Trading assets: Debt instruments: Mortgage-backed securities:												50, 2	017		
U.S. government agencies	\$353	\$ (11)	\$ 82	\$(54	1)	\$ (19) \$ 20	\$(6) 5	\$365	\$(14)		
Residential – nonagency Commercial – nonagency		(1 (1)	31 10	(3 (6)	(5 (2) 46) 30	(5 (11) 9		(4 (1)		
Total mortgage-backed securities	433	(13)	123	(63	ĺ	(26) 96	(22	-	528	•)		
Obligations of U.S. states and municipalities	668	4		9	_		_	_	_	(681	3			
Non-U.S. government debt securities	47	3		102	(95)	_	1	(21) .	37	2			
Corporate debt securities	s 738	2		74	(38)	(254) 27	(88)) 4	461	1			
Loans	4,588	68		729	(323	•	(390) 122	(306) 4	4,488	83			
Asset-backed securities	245	8		11	(30)	(25) 6	(132) 8	83	6			
Total debt instruments	6,719	72		1,048	(549))	(695) 252	(569) (6,278	76			
Equity securities	271	21		57	(41)		1	(25) 2	284	10			
Other	763	43		3	(7)	(65) 2	(8) ′	731	31			
Total trading assets – del and equity instruments Net derivative receivables: ^(a)	bt _{7,753}	136	(c)	1,108	(597	')	(760) 255	(602) ′	7,293	117	(c)		
Interest rate	1,009	37		21	(30)	(348) 30	(7) ′	712	(90)		
Credit	17	(48)	1	(1)	(20) 6	_	((45)	(37)		
Foreign exchange	(1,490)95		3	(2)	656	12	40	((686)	101			
Equity	(1,896)(35)	149	(83)	(504) (108)	33	((2,444)	(38)		
Commodity	(56)(22)				23	(2)	(1) ((58)	(32)		
Total net derivative receivables	(2,416)27	(c)	174	(116	5)	(193) (62	65	((2,521)	(96) ^(c)		
Available-for-sale securities:															
Asset-backed securities	622	2					(77) —	_		547	2			
Other	1	_		_	_				_		1	_			
Total available-for-sale securities	623	2	(d)	_	_		(77) —	_		548	2	(d)		
Loans	404 6,079	18 (200	(c)) (e)	 154	— (67)	(117 (213) —) —	_		305 5,753	13 (200	(c))(e)		

Mortgage servicing rights												
Other assets	2,077	193	(c)	28	(78)	(286) —	_	1,934	120	(c)
	Fair val	ue mea	sureme	ents usi	ing sigr	nificant u	nobserv	able inp	uts		Chang	_
Three months ended June 30, 2017 (in millions)	Fair value at April 1, 2017	1	ed/unre)/losses		as Sa les	s Issuance	e Se ttler	into	ferransfe (out of) level 3 ^(h)	at June 30, 2017	relate to fina instru	s)/losses d ancial ments at June
Liabilities:(b)											,	
Deposits	\$2,133	\$ 30	(c)	\$ —	\$ —	\$292) \$ —		\$2,131	\$27	(c)
Short-term borrowings	1,261	46	(c)	—	—	683	(657) 23	(42	1,314	53	(c)
Trading liabilities – debt and equity instruments	45	(1)	(7) 2	_	_	1	(4	36	_	
Accounts payable and other liabilities	11	_		(1) —	_	_	_	_	10	_	
Beneficial interests issued by consolidated VIEs	51	_		(44) —	_	(6) —	_	1	_	
Long-term debt	14,094	70	(c)(j)	_	_	2,941 ^(j)	(2,274) 53	(152	14,732 (5)	15	(c)(j)
98												

	ran value measurements using significant unooservable inputs										
Six months ended June 30, 2018 (in millions)	Fair value at January 1, 2018		ed/unrea ((losses)	Purchas	seStales	Settlemo	Change in unrealized legains/(losses) related to financial instruments held at June 30, 2018				
Assets: Trading assets: Debt instruments: Mortgage-backed securities:											
U.S. government agencies	\$307	\$ 3		\$ 334	\$(98)	\$ (39) \$ 9	\$(38) \$478	\$1	
Residential – nonagency				45	(13)	(3) 40	(42) 87	1	
Commercial – nonagency		3		7	(8)	(13) 21	(3) 18	(2)
Total mortgage-backed securities	378	6		386	(119)	(55	70	(83) 583	_	,
U.S. Treasury and government agencies	1	_			_	_	_	(1) —	_	
Obligations of U.S. states and municipalities	744	(11)	81	_	(78)—		736	(11)
Non-U.S. government debt securities	78	(10)	351	(184)	_	17	(69) 183	(9)
Corporate debt securities	312	(4)	141	(140)	(11) 167	(191) 274	3	
Loans	2,719	41		1,035	(1,53)	(329) 374	(320) 1,986	(24)
Asset-backed securities	153	9		59	(22)	(40) 13	(85) 87	5	
Total debt instruments	4,385	31		2,053	(1,999)	(513) 641	(749) 3,849	(36)
Equity securities	295	(21)	93	(60)	(1) 4	(22) 288	(8)
Other	690	(239)	34	(40)	(38) 1	(2) 406	(251)
Total trading assets – debt and equity instruments Net derivative	5,370	`) (c)	2,180	(2,099)	(552) 646	(773) 4,543	(295	
receivables:(a)											
Interest rate	264	340		55	(55)	(133) (28)		489	314	
Credit	(35)			2	(7)	(25)(1)			11	
Foreign exchange	. ,	240		13	(8)	3	(112)			190	
Equity	(3,409)			824	(1,28)	421	(73)		(2,578)		
Commodity	(674)	150		_		(174) (8)	(46) (752)	154	
Total net derivative receivables	(4,250)	1,550	(c)	894	(1,35)	92	(222)	180	(3,110)	1,183	3 (c)
Available-for-sale securities:											
Asset-backed securities	276	1				(130) —		147	1	
Other	1	_		_		_	_		1		
Total available-for-sale securities	277	1	(d)	_	_	(130)—	_	148	1	(d)
Loans Mortgage servicing rights	276 6,030	(4 478) (c) (e)	122 479	(399)	(161 (347) —) —	(74 —) 159 6,241	(5 478)(c) (e)

Other assets	1,265	(50) (c)	47	(16)	(21) 1	(1) 1,225	(52)(c)
	Fair val	ue mea	.suremei	nts usin	g signif	icant u	nobserva	ble inpu	ıts			
Six months ended June 30, 2018 (in millions)	Fair value at January 1, 2018	realiz	ed/unre s)/losses	Purch	ase S ales	s Issuar	nc S ettlem	into	(out of	erFair valu) at June 30, 2018	unrea e(gain losse relate to fir instru	ed nancial uments at June
Liabilities:(b)												
Deposits	\$4,142) (c)(i)	\$ —	\$ —		\$ (255) \$ 1	\$(297) \$4,305) (c)(i)
Short-term borrowings	1,665	(182) (c)(i)			2,070	(1,360) 55	(39) 2,209	(31) (c)(i)
Trading liabilities – debt and equity instruments	39	(8) ^(c)	(62) 76	_	1	2	(5) 43	(1) ^(c)
Accounts payable and other liabilities	13	(1)	(6) 1	_		1	_	8	(1)
Beneficial interests issued by consolidated VIEs	¹ 39			_			(38)—	_	1		
Long-term debt	16,125	(590) (c)(i)	_	_	6,831	(4,346) 594	(352) 18,262	(706) (c)(i)
99												

Fair value measurements using significant unobservable inputs								Change in		
Six months ended June 30, 2017 (in millions)	Fair value at January 1, 2017	Total realized/unr gains/(losse	Fotal ealized/unrealized purchasesales ains/(losses)			Trans into nerlts(©l 3 ^(h)	(out o	fersair value f) at June 30, 2017	unrealized gains/(losses) related to financial instruments held at June 30, 2017	
Assets: Trading assets: Debt instruments: Mortgage-backed securities:										
U.S. government agencies	\$392	\$ (7)	\$ 161	\$(151)	\$ (35) \$ 27	\$(22) \$365	\$(16)	
Residential – nonagen	c § 3	8	36	(20)	(9) 61	(61) 98	1	
Commercial – nonagency	17	2	17	(14)	(5) 60	(12) 65	(1)	
Total mortgage-backed securities Obligations of U.S.	¹ 492	3	214	(185)	(49) 148	(95) 528	(16)	
states and municipalities	649	12	95	(70)	(5)		681	11	
Non-U.S. government debt securities	46	3	174	(178)	_	27	(35) 37	3	
Corporate debt securities	576	(7)	497	(146)	(376) 60	(143) 461	1	
Loans	4,837	178	1,491	(1,067)	(765) 318	(504) 4,488	98	
Asset-backed	302	22	109	(168)	(36) 14	(160) 83	7	
securities Total debt instruments		211	2,580	(1,814)	(1,231) 567	(937) 6,278	104	
Equity securities	231	34	113	(47)	(1,231 —	2	(49) 284	20	
Other	761	65	22	(7)	(112) 10	(8)) 731	49	
Total trading assets –		()							()	
debt and equity instruments	7,894	310 ^(c)	2,715	(1,868)	(1,343) 579	(994) 7,293	173 ^(c)	
Net derivative										
receivables:(a)										
Interest rate	1,263	81	37	(53)	(651) 34	1	712	(151)	
Credit	98	(94)	1	(3)	(62) 17	(2) (45)	(50)	
Foreign exchange	(1,384)		4	(4)	565	23	40	(686)	60	
Equity	(2,252)		485	(128)	(528) (181)		(2,444)	(37)	
Commodity Total net derivative receivables	(85) (2,360)		527	(188)	25 (651	4) (103)	2) 167	(58) (2,521)	30 (148) ^(c)	
Available-for-sale securities:										
Asset-backed securities	663	12	_	(50)	(78)—		547	10	

Other	1	_		_			_	_		1	_	
Total available-for-sal securities	e 664	12	(d)	_	(50)	(78)—	_	548	10	(d)
Loans	570	24	(c)	_	_		(289)—		305	16	(c)
Mortgage servicing rights	6,096	(157)) ^(e)	371	(138)	(419)—		5,753	(157) ^(e)
Other assets	2,223	230	(c)	32	(155)	(396)—		1,934	132	(c)
	Fair val	ue mea	surem	ents usir	ng signi	ficant uno	bservab	le inputs	s		Chan	re in
Six months ended June 30, 2017	Fair value at January		ed/unr	ealized Purcha	s&ales	Issuance	sSettlem	into	fæisansfe (out of) level	Fair value at June 30,	unrea (gains losses relate	lized s)/ d
(in millions)	1, 2017	(gain	s)/losse	es				3 ^(h)	3 ^(h)	2017	instru held a	ancial ments at June
Liabilities:(b)	1, 2017			es				3(h)			instru held a 30, 20	ments at June 017
Liabilities:(b) Deposits	1, 2017 \$2,117	\$ 6	(c)(i)	\$ —	\$ —	\$ 601	\$ (111	3 ^(h)) \$ —	\$(482)	\$2,131	instru held a 30, 20 \$45	ments at June 017 (c)(i)
Liabilities:(b) Deposits Short-term borrowings	1, 2017 \$2,117 \$ 1,134			\$ — —				3 ^(h)) \$ —	\$(482)		instru held a 30, 20	ments at June 017
Liabilities:(b) Deposits Short-term borrowings Trading liabilities – de	1, 2017 \$2,117 \$ 1,134	\$ 6 47	(c)(i)	\$ — —		\$ 601	\$ (111	3 ^(h)) \$ —	\$ (482) (55)	\$2,131	instru held a 30, 20 \$45	ments at June 017 (c)(i)
Liabilities: (b) Deposits Short-term borrowings Trading liabilities – de and equity instruments Accounts payable and other liabilities	\$2,117 \$2,117 \$1,134 \$2b43 \$3	\$ 6 47	(c)(i) (c)(i)	\$ — —	\$—	\$ 601	\$ (111 (1,242	3 ^(h)) \$ —) 40	\$ (482) (55)	\$2,131 1,314	instru held a 30, 20 \$45	ments at June 017 (c)(i)
Liabilities: (b) Deposits Short-term borrowing: Trading liabilities – de and equity instruments Accounts payable and	\$2,117 \$1,134 \$2bt 33 13	\$ 6 47	(c)(i) (c)(i)	\$— — (8	\$—	\$ 601	\$ (111 (1,242 1	3 ^(h)) \$ —) 40	\$ (482) (55)	\$2,131 1,314 36	instru held a 30, 20 \$45	ments at June 017 (c)(i)

(a) All level 3 derivatives are presented on a net basis, irrespective of the underlying counterparty.

12,850 599 (c)(j) —

6,733 ^(j) (5,085) 88

(453) 14,732 ^(j) 398

which are reported in mortgage fees and related income.

Realized gains/(losses) on AFS securities, as well as other-than-temporary impairment ("OTTI") losses that are

(d) recorded in earnings, are reported in investment securities losses. Unrealized gains/(losses) are reported in OCI. There were no realized gains/(losses) or foreign exchange hedge accounting adjustments recorded in income on **AFS**

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VIEs

Long-term debt

Level 3 liabilities as a percentage of total Firm liabilities accounted for at fair value (including liabilities measured at fair value on a nonrecurring basis) were 15% at both June 30, 2018 and December 31, 2017, respectively. Predominantly reported in principal transactions revenue, except for changes in fair value for CCB mortgage loans (c) and lending-related commitments originated with the intent to sell, and mortgage loan purchase commitments,

securities for the three and six months ended June 30, 2018 and 2017, respectively. Unrealized gains/(losses) recorded on AFS securities in OCI were zero and \$2 million for the three months ended June 30, 2018 and 2017, respectively and \$1 million and \$12 million for the six months ended June 30, 2018 and 2017, respectively.

- (e) Changes in fair value for CCB MSRs are reported in mortgage fees and related income.
- (f)Loan originations are included in purchases.
- (g) Includes financial assets and liabilities that have matured, been partially or fully repaid, impacts of modifications, deconsolidation associated with beneficial interests in VIEs and other items.
- (h) All transfers into and/or out of level 3 are based on changes in the observability of the valuation inputs and are assumed to occur at the beginning of the quarterly reporting period in which they occur.
 - Realized (gains)/losses due to DVA for fair value option elected liabilities are reported in principal transactions
- revenue. Unrealized (gains)/losses are reported in OCI. Unrealized gains were \$71 million and \$123 million for the three and six months ended June 30, 2018, respectively. There were no realized gains for the three and six months ended June 30, 2018, respectively.
- (i) The prior period amounts have been revised to conform with the current period presentation.

Level 3 analysis

Consolidated balance sheets changes

Level 3 assets (including assets measured at fair value on a nonrecurring basis) were 0.8% of total Firm assets at June 30, 2018. The following describes significant changes to level 3 assets since December 31, 2017, for those items measured at fair value on a recurring basis. For further information on changes impacting items measured at fair value on a nonrecurring basis, refer to Assets and liabilities measured at fair value on a nonrecurring basis on page 102.

Three months ended June 30, 2018

Level 3 assets were \$19.3 billion at June 30, 2018, reflecting a decrease of \$180 million from March 31, 2018 with no movements that were individually significant.

Six months ended June 30, 2018

Level 3 assets at June 30, 2018 increased by \$87 million from December 31, 2017 with no movements that were individually significant.

Gains and losses

The following describes significant components of total realized/unrealized gains/(losses) for instruments measured at fair value on a recurring basis for the periods indicated. For further information on these instruments, refer to Changes in level 3 recurring fair value measurements rollforward tables on pages 96–101.

Three months ended June 30, 2018

\$278 million of net gains on assets and \$504 million of net gains on liabilities, none of which were individually significant.

Three months ended June 30, 2017

\$176 million of net gains on assets and \$145 million of net losses on liabilities, none of which were individually significant.

Six months ended June 30, 2018

\$1.7 billion of net gains on assets predominantly driven by market movements in derivative receivables, in particular equity derivative receivables.

\$822 million of net gains on liabilities, none of which were individually significant.

Six months ended June 30, 2017

\$506 million of of net gains on assets and \$654 million of net losses on liabilities, none of which were individually significant.

Credit and funding adjustments — derivatives

The following table provides the impact of credit and funding adjustments on principal transactions revenue in the respective periods, excluding the effect of any associated hedging activities. The FVA presented below includes the impact of the Firm's own credit quality on the inception value of liabilities as well as the impact of changes in the

Firm's own credit quality over time.

Three months Six months ended June

ended June 30,

30,

(in millions) 20182017 2018 2017

Credit and funding adjustments:

Derivatives CVA \$73 \$249 \$157 \$470 Derivatives FVA 97 (60) 14 (67)

For further information about both credit and funding adjustments, as well as information about valuation adjustments on fair value option elected liabilities, refer to Note 2 of JPMorgan Chase's 2017 Annual Report.

Assets and liabilities measured at fair value on a nonrecurring basis

The following tables present the assets still held as of June 30, 2018 and 2017, respectively, for which a nonrecurring fair value adjustment was recorded during the six months ended June 30, 2018 and 2017, respectively, by major product category and fair value hierarchy.

	Fair val hierarch L exes lel	ny		Total fair
June 30, 2018 (in millions)	12	3		value
Loans	\$ \$3 25	\$210	(a)	\$535
Other assets ^(b)	-2 17	823		1,040
Total assets measured at fair value on a nonrecurring basis	\$ \$5 42	\$1,03	3	\$1,575
	Fair val	ue	Tot	to1
	hierarch	ny	fair	
June 30, 2017 (in millions)	Lebedel	Level	val	
June 30, 2017 (III IIIIIII0118)	12	3	vai	ue
Loans	\$ \$2 92	\$430	\$7	22
Other assets	-10	245	255	5
Total assets measured at fair value on a nonrecurring basis	\$ \$3 02	\$675	\$9	77

Of the \$210 million in level 3 assets measured at fair value on a nonrecurring basis as of June 30, 2018, \$166 million related to residential real estate loans carried at the net realizable value of the underlying collateral (e.g., colleteral dependent loans and other loans observed off in accordance with regulatory guidence). These amounts are

collateral-dependent loans and other loans charged off in accordance with regulatory guidance). These amounts are classified as level 3 as they are valued using a broker's price opinion and discounted based upon the Firm's experience with actual liquidation values. These discounts to the broker price opinions ranged from 13% to 40% with a weighted average of 22%.

Primarily includes equity securities without readily determinable fair values that were adjusted based on observable price changes in orderly transactions from an identical or similar investment of the same issuer (measurement alternative) as a result of the adoption of the recognition and measurement guidance. Of the \$823 million in level 3

assets measured at fair value on a nonrecurring basis as of June 30, 2018, \$641 million related to such equity securities. These equity securities are classified as level 3 due to the infrequency of the observable prices and/or the restrictions on the shares.

There were no material liabilities measured at fair value on a nonrecurring basis at June 30, 2018 and 2017. Nonrecurring fair value changes

The following table presents the total change in value of assets and liabilities for which a fair value adjustment has been recognized for the three and six months ended June 30, 2018 and 2017, related to financial instruments held at those dates.

	Three m ended June 30,		Six months ended June 30,		
	2018	2017	2018	2017	
Loans	\$(18)	\$(60)	\$(22)	\$(109)	
Other assets	37 (a)	(17)	528 (a)	(44)	
Accounts payable and other liabilities	_	(1)	_	(1)	
Total nonrecurring fair value gains/(losses)	\$19	\$(78)	\$506	\$(154)	

(a) Included \$67 million and \$562 million for the three months and six months ended June 30, 2018, respectively, of fair value gains as a result of the measurement alternative.

For further information about the measurement of impaired collateral-dependent loans, and other loans where the carrying value is based on the fair value of the underlying collateral (e.g., residential mortgage loans charged off in accordance with regulatory guidance), refer to Note 12 of JPMorgan Chase's 2017 Annual Report.

Additional disclosures about the fair value of financial instruments that are not carried on the Consolidated balance sheets at fair value

The following table presents by fair value hierarchy classification the carrying values and estimated fair values at June 30, 2018, and December 31, 2017, of financial assets and liabilities, excluding financial instruments that are carried at fair value on a recurring basis, and their classification within the fair value hierarchy. For additional information regarding the financial instruments within the scope of this disclosure, and the methods and significant assumptions used to estimate their fair value, refer to Note 2 of JPMorgan Chase's 2017 Annual Report.

	June 30	, 2018				Decemb	er 31,	2017		
			nated fair					nated fair		
		value	hierarch	y			value	hierarch	y	
(in billions)	Carrying value	g Level	Level 2	Lev 3	Total estimated fair value	Carrying value	gLeve 1	l Level 2	Lev 3	Total el estimated fair value
Financial assets										
Cash and due from banks	\$23.7	\$23.7	7\$—	\$	\$ 23.7	\$25.9	\$25.9	9\$—	\$	\$ 25.9
Deposits with banks	381.5	377.7	3.8		381.5	405.4	401.8	33.6	_	405.4
Accrued interest and accounts receivable	74.9		74.8	0.1	74.9	67.0		67.0	_	67.0
Federal funds sold and securities purchased under resale agreements	213.7		213.7		213.7	183.7		183.7	_	183.7
Securities borrowed	104.2	_	104.2	_	104.2	102.1	_	102.1	_	102.1
Securities, held-to-maturity	31.0	_	30.9	_	30.9	47.7	_	48.7	_	48.7
Loans, net of allowance for loan losses ^(a)	932.1		221.9	709	.2931.1	914.6		213.2	707	.920.3
Other ^(b)	56.5		55.6	1.0	56.6	53.9		52.1	9.2	61.3
Financial liabilities										
Deposits	\$1,432.	4\$—	\$1,432.4	4\$	\$ -1,432.4	\$1,422.	7\$—	\$1,422.	7\$	\$ -1,422.7
Federal funds purchased and securities	3									
loaned or sold under repurchase	174.4		174.4		174.4	158.2		158.2	—	158.2
agreements	55.1		7.4.0	0.0	55.1	10.6		10.1	0.2	10.6
Short-term borrowings	55.1	_	54.9		55.1	42.6		42.4		42.6
1 3	165.2		162.6	2.4	165.0	152.0		148.9	2.9	151.8
Beneficial interests issued by consolidated VIEs	21.3	_	21.3	_	21.3	26.0	_	26.0	_	26.0
Long-term debt and junior										
subordinated deferrable interest	223.0		219.5	3.2	222.7	236.6		240.3	3.2	243.5
debentures										

Effective January 1, 2018, the Firm adopted several new accounting standards. Certain of the new accounting standards were applied retrospectively and, accordingly, prior period amounts were revised.

Fair value is typically estimated using a discounted cash flow model that incorporates the characteristics of the underlying loans (including principal, contractual interest rate and contractual fees) and other key inputs, including expected lifetime credit losses, interest rates, prepayment rates, and primary origination or secondary market spreads. For certain loans, the fair value is measured based on the value of the underlying collateral. The difference between the estimated fair value and carrying value of a financial asset or liability is the result of the different

(a) methodologies used to determine fair value as compared with carrying value. For example, credit losses are estimated for a financial asset's remaining life in a fair value calculation but are estimated for a loss emergence period in the allowance for loan loss calculation; future loan income (interest and fees) is incorporated in a fair value calculation but is generally not considered in the allowance for loan losses. For a further discussion of the Firm's methodologies for estimating the fair value of loans and lending-related commitments, refer to Valuation hierarchy on pages 156–159 of JPMorgan Chase's 2017 Annual Report.

(b) The prior period amounts have been revised to conform with the current period presentation.

The majority of the Firm's lending-related commitments are not carried at fair value on a recurring basis on the Consolidated balance sheets. The carrying value of the wholesale allowance for lending-related commitments and the estimated fair value of these wholesale lending-related commitments were as follows for the periods indicated.

June 30, 2018

Estimated
fair value
hierarchy

Carrylidge velLevel
value (a) 2 3 Total
estimated
fair value
hierarchy

Carrylidge velLevel
fair value
value (a) 2 3 Total
estimated
fair value
value (a) 2 3 Total
estimated
value (a) 2 3 Fotal
estimated
fair value

Wholesale lending-related commitments \$1.1\$ \$ \$1.7 \$ 1.7 \$1.1\$ \$ -\$1.6 \$ 1.6

⁽a) Excludes the current carrying values of the guarantee liability and the offsetting asset, each of which is recognized at fair value at the inception of the guarantees.

The Firm does not estimate the fair value of consumer lending-related commitments. In many cases, the Firm can reduce or cancel these commitments by providing the borrower notice or, in some cases as permitted by law, without notice. For a further discussion of the valuation of lending-related commitments, refer to page 157 of JPMorgan Chase's 2017 Annual Report.

Equity securities without readily determinable fair values

As a result of the adoption of the recognition and measurement guidance and the election of the measurement alternative in the first quarter of 2018, the Firm measures equity securities without readily determinable fair values at cost less impairment (if any), plus or minus observable price changes from an identical or similar investment of the same issuer, with such changes recognized in earnings.

In its determination of the new carrying values upon observable price changes, the Firm may adjust the prices if deemed necessary to arrive at the Firm's estimated fair values. Such adjustments may include adjustments to reflect the different rights and obligations of similar securities, and other adjustments that are consistent with the Firm's valuation techniques for private equity direct investments.

The following table presents the carrying value of equity securities without readily determinable fair values still held as of June 30, 2018, that are measured under the measurement alternative and the related adjustments recorded during the periods presented for those securities with observable price changes. These securities are included in the nonrecurring fair value tables when applicable price changes are observable.

	As of or	for the
	Three	Six
	months	months
(in millions)	ended	ended
	June 30,	June 30,
	2018	2018
Other assets		
Carrying value	\$1,471	\$1,471
Upward carrying value changes	67	562
Downward carrying value changes/impairment	(26)	(28)

Included in other assets above is the Firm's interest in approximately 40 million Visa Class B shares, recorded at a nominal carrying value. These shares are subject to certain transfer restrictions currently and will be converted into Visa Class A shares upon final resolution of certain litigation matters involving Visa. The conversion rate of Visa Class B shares into Visa Class A shares is 1.6298 at June 30, 2018, and may be adjusted by Visa depending on developments related to the litigation matters.

Note 3 – Fair value option

For a discussion of the primary financial instruments for which the fair value option was elected, including the basis for those elections and the determination of instrument-specific credit risk, where relevant, refer to Note 3 of JPMorgan Chase's 2017 Annual Report.

Changes in fair value under the fair value option election

The following table presents the changes in fair value included in the Consolidated statements of income for the three months ended June 30, 2018 and 2017, for items for which the fair value option was elected. The profit and loss information presented below only includes the financial instruments that were elected to be measured at fair value; related risk management instruments, which are required to be measured at fair value, are not included in the table.

	Three months ended June 30,					
	2018		2017			
		Total		Total		
	Δ11	changes	Δ11	changes		
(in millions)	Principal other	in fair	Principal Principal	in fair		
	transactions	e value	transactions	value		
		recorded (e)		recorded (e)		
Federal funds sold and securities purchased under resale agreements	\$(33)\$ —	\$ (33)	\$(12) \$ —	\$ (12)		
Securities borrowed	29 —	29	13 —	13		
Trading assets:						
Debt and equity instruments, excluding loans	(259)1 (c)	(258)	334 2 (c)	336		
Loans reported as trading assets:						
Changes in instrument-specific credit risk	214 (1) (c)	213	69 9 (c)	78		
Other changes in fair value	29 65 ^(c)	94	43 229 ^(c)	272		
Loans:						
Changes in instrument-specific credit risk	(1)—	(1)	()			
Other changes in fair value	(1)—	(1)	1 3 (c)	4		
Other assets	- (3) (d)	(3)	$3 \qquad (1)^{(d)}$	(13)		
Deposits ^(a)	129 —	129	(86) —	(86)		
Federal funds purchased and securities loaned or sold under	9 —	9	(3) —	(3)		
repurchase agreements	(162)	(162)	42	12		
Short-term borrowings ^(a)	(162)— 6 —	(162)	43 —	43		
Trading liabilities Beneficial interests issued by consolidated VIEs	0 —	6				
Long-term debt ^{(a)(b)}	 196	— 196	— — — (170) —	(170)		
Long term deat with	170	170	(110)	(1/0)		

	Six months ended June 30,					
	2018		2017			
(in millions)	Principal Other transactions income	Total changes in fair value recorded ^(e)	transactions	Total changes in fair value recorded ^(e)		
Federal funds sold and securities purchased under resale agreements	\$(26) \$ —	\$ (26)	\$(33) \$—	\$ (33)		
Securities borrowed	2 —	2	90 —	90		
Trading assets:						
Debt and equity instruments, excluding loans	(445) 1 ^(c)	(444)	695 2 (c)	697		
Loans reported as trading assets:	_					
Changes in instrument-specific credit risk	336 4 (c)	340	243 15 ^(c)	258		
Other changes in fair value	70 (2 5 ^(c)	45	77 352 ^(c)	429		
Loans:						
Changes in instrument-specific credit risk	(1) —	(1)	(1) —	(1)		
Other changes in fair value	(2) —	(2)	1 3 (c)	4		
Other assets	2 (10)(d)	(8)	7 (2) (d)	(15)		
Deposits ^(a)	339 —	339	(245) —	(245)		
Federal funds purchased and securities loaned or sold under repurchase agreements	19 —	19	2 —	2		
Other borrowed funds ^(a)	111 —	111	(431) —	(431)		
Trading liabilities	(1) —	(1)	(131) —	(1)		
Beneficial interests issued by consolidated VIEs	(1)—	(1)	(1)—	(1)		
Other liabilities						
Long-term debt ^{(a)(b)}	 1,227	1,227	<u> </u>	(923)		
Long-term deores	1,441 —	1,441	(343) —	(343)		

Unrealized gains/(losses) due to instrument-specific credit risk (DVA) for liabilities for which the fair value option has been elected is recorded in OCL, while realized gains/(losses) are recorded in principal transactions revenue.

(a) has been elected is recorded in OCI, while realized gains/(losses) are recorded in principal transactions revenue. Realized gains/(losses) due to instrument-specific credit risk recorded in principal transaction revenue were not material for the three and six months ended June 30, 2018 and 2017, respectively.

Long-term debt measured at fair value predominantly relates to structured notes. Although the risk associated with

- (b) the structured notes is actively managed, the gains/(losses) reported in this table do not include the income statement impact of the risk management instruments used to manage such risk.
- (c) Reported in mortgage fees and related income.
- (d)Reported in other income.

Changes in fair value exclude contractual interest, which is included in interest income and interest expense for all (e) instruments other than hybrid financial instruments. For further information regarding interest income and interest expense, refer to Note 6.

Difference between aggregate fair value and aggregate remaining contractual principal balance outstanding. The following table reflects the difference between the aggregate fair value and the aggregate remaining contractual principal balance outstanding as of June 30, 2018, and December 31, 2017, for loans, long-term debt and long-term beneficial interests for which the fair value option has been elected.

June 30, 2018				December 31, 2017				
Contractual Fair principal value outstanding Fair contractual principal			principai	Fair value over/(under) contractual principal outstanding				
\$4,078	\$1,159	\$ (2,919)	\$4,219	\$1,371	\$ (2,848)	
				39		(39)	
4,078	1,159	(2,919)	4,258	1,371	(2,887)	
46,105	44,718	(1,387)	38,157	36,590	(1,567)	
3,167	3,076	(91)	2,539	2,508	(31)	
\$53,350	\$48,953	3\$ (4,397)	\$44,954	\$40,469	9\$ (4,485)	
\$29,380 ^(c)	\$25,563	3\$ (3,817)	\$26,297 ^(c)	\$23,848	3\$ (2,449)	
NA	24,533	NA		NA	23,671	NA		
NA	\$50,090	6NA		NA	\$47,519	NA		
NA	\$1	NA		NA	\$45	NA		
s NA	\$1	NA		NA	\$45	NA		
	\$4,078 \$4,078 4,078 46,105 3,167 \$53,350 \$29,380 ^(c) NA NA	\$4,078 \$1,159 	Contractual Fair principal outstanding value over/(under contractual principal outstanding value) \$4,078	Fair value over/(under) contractual principal outstanding \$4,078	Fair value over/(under) contractual principal outstanding value outstanding value over/(under) contractual principal outstanding value outstanding va	Fair value over/(under) contractual principal outstanding value over/(under) contractual principal outstanding value out	Contractual principal outstanding value over/(under) contractual principal outstanding value outstandi	

- (a) There were no performing loans that were ninety days or more past due as of June 30, 2018, and December 31, 2017, respectively.
 - Remaining contractual principal is not applicable to nonprincipal-protected notes. Unlike principal-protected structured notes, for which the Firm is obligated to return a stated amount of principal at the maturity of the note,
- (b) but to return an amount based on the performance of an underlying variable or derivative feature embedded in the note. However, investors are exposed to the credit risk of the Firm as issuer for both nonprincipal-protected and principal protected notes.
- Where the Firm issues principal-protected zero-coupon or discount notes, the balance reflects the contractual principal payment at maturity or, if applicable, the contractual principal payment at the Firm's next call date. At June 30, 2018, and December 31, 2017, the contractual amount of lending-related commitments for which the fair value option was elected was \$10.9 billion and \$7.4 billion, respectively, with a corresponding fair value of \$(225) million and \$(76) million, respectively. For further information regarding off-balance sheet lending-related financial instruments, refer to Note 27 of JPMorgan Chase's 2017 Annual Report, and Note 20 of this Form 10-Q. Structured note products by balance sheet classification and risk component

The following table presents the fair value of the structured notes issued by the Firm, by balance sheet classification and the primary risk type.

	June 30, 2018		December 31, 2017	
(in millions)	Long-ter Si hort-term debt borrowings	Deposits Total	Long-ter Si hort-term debt borrowings	Deposits Total
Risk exposure			-	
Interest rate	\$22,895\$ 120	\$8,352 \$31,36	7\$22,056\$ 69	\$8,058 \$30,183
Credit	3,976 1,134	5,110	4,329 1,312	5,641
Foreign exchange	2,801 91	39 2,931	2,841 147	38 3,026

Equity	19,688	6,969	6,891	33,548	17,581	7,106	6,548	31,235
Commodity	259	13	2,256	2,528	230	15	4,468	4,713
Total structured notes	\$49,619	9\$ 8.327	\$17,538	\$75,484	1\$47.037	7\$ 8,649	\$19.112	\$74,798

Note 4 – Derivative instruments

JPMorgan Chase makes markets in derivatives for clients and also uses derivatives to hedge or manage its own risk exposures. For a further discussion of the Firm's use of and accounting policies regarding derivative instruments, refer to Note 5 of JPMorgan Chase's 2017 Annual Report.

The Firm's disclosures are based on the accounting treatment and purpose of these derivatives. A limited number of the Firm's derivatives are designated in hedge accounting relationships and are disclosed according to the type of hedge (fair value hedge, cash flow hedge, or net investment hedge). Derivatives not designated in hedge accounting relationships include certain derivatives that are used to manage certain risks associated with specified assets or liabilities ("specified risk management" positions) as well as derivatives used in the Firm's market-making businesses or for other purposes.

Derivatives designated as hedges

The adoption of the new hedge accounting guidance in the first quarter of 2018 better aligns hedge accounting with the economics of the Firm's risk management activities. For additional information, refer to Note 17.

To qualify for hedge accounting, a derivative must be highly effective at reducing the risk associated with the exposure being hedged. In addition, for a derivative to be designated as a hedge, the risk management objective and strategy must be documented. Hedge documentation must identify the derivative hedging instrument, the asset or liability or forecasted transaction and type of risk to be hedged, and how the effectiveness of the derivative is assessed prospectively and retrospectively. To assess effectiveness, the Firm uses statistical methods such as regression analysis, nonstatistical methods such as dollar-value comparisons of the change in the fair value of the derivative to the change in the fair value or cash flows of the hedged item, and qualitative comparisons of critical terms and the evaluation of any changes in those terms. The extent to which a derivative has been, and is expected to continue to be, highly effective at offsetting changes in the fair value or

cash flows of the hedged item must be assessed and documented at least quarterly. If it is determined that a derivative is not highly effective at hedging the designated exposure, hedge accounting is discontinued.

For qualifying fair value hedges, changes in the fair value of the derivative, and in the value of the hedged item for the risk being hedged, are recognized in earnings. Certain amounts excluded from the assessment of effectiveness are recorded in OCI and recognized in earnings through an amortization approach over the life of the derivative. If the hedge relationship is terminated, then the adjustment to the hedged item continues to be reported as part of the basis of the hedged item, and for benchmark interest rate hedges, is amortized to earnings as a yield adjustment. Derivative amounts affecting earnings are recognized consistent with the classification of the hedged item - primarily net interest income and principal transactions revenue.

For qualifying cash flow hedges, changes in the fair value of the derivative are recorded in OCI and recognized in earnings as the hedged item affects earnings. Derivative amounts affecting earnings are recognized consistent with the classification of the hedged item - primarily interest income, interest expense, noninterest revenue and compensation expense. If the hedge relationship is terminated, then the change in value of the derivative recorded in AOCI is recognized in earnings when the cash flows that were hedged affect earnings. For hedge relationships that are discontinued because a forecasted transaction is not expected to occur according to the original hedge forecast, any related derivative values recorded in AOCI are immediately recognized in earnings.

For qualifying net investment hedges, changes in the fair value of the derivatives due to changes in spot foreign exchange rates are recorded in OCI as translation adjustments. Amounts excluded from the assessment of effectiveness are recorded directly in earnings.

The following table outlines the Firm's primary uses of derivatives and the related hedge accounting designation or disclosure category.

Type of Derivative	Use of Derivative	Designation and disclosure	Affected segment or unit	10-Q page reference
Manage specifically identified risk exposures in qualifying hedge accounting relationships:				
 Interest rate 	Hedge fixed rate assets and liabilities	Fair value hedge	Corporate	115-116
 Interest rate 	Hedge floating-rate assets and liabilities	Cash flow hedge	Corporate	117
• Foreign exchange	Hedge foreign currency-denominated assets and liabilities	Fair value hedge	Corporate	115-116
• Foreign exchange	Hedge foreign currency-denominated forecasted revenue and expense	Cash flow hedge	Corporate	117
• Foreign exchange	Hedge the value of the Firm's investments in non-U.S. dollar functional currency entities	Net investment hedge	Corporate	118
• Commodity	Hedge commodity inventory	Fair value hedge	CIB	115-116
Manage specifically identified risk exposures not designated in				
qualifying hedge accounting relationships:				
• Interest rate	Manage the risk of the mortgage pipeline, warehouse loans and MSRs	e Specified risk management	CCB	118
• Credit	Manage the credit risk of wholesale lending exposures	Specified risk management	CIB	118
• Interest rate	•	C		
and	Manage the risk of certain other specified assets and	Specified risk	Component	110
foreign	liabilities	management	Corporate	118
exchange				
Market-making derivatives and other activities:				
• Various	Market-making and related risk management	Market-making and other	CIB	118
• Various	Other derivatives	Market-making and other	CIB, Corporate	118
109				

Notional amount of derivative contracts

The following table summarizes the notional amount of derivative contracts outstanding as of June 30, 2018, and December 31, 2017.

December 31, 2017.					
	Notional amounts(b)				
(in hillians)	June 30, December 31,				
(in billions)	2018	2017			
Interest rate contracts					
Swaps	\$25,329	9\$ 21,043			
Futures and forwards	6,335	4,904			
Written options	4,402	3,576			
Purchased options	4,691	3,987			
Total interest rate contracts	40,757	33,510			
Credit derivatives ^(a)	1,528	1,522			
Foreign exchange contracts					
Cross-currency swaps	3,920	3,953			
Spot, futures and forwards	7,143	5,923			
Written options	910	786			
Purchased options	898	776			
Total foreign exchange contracts	12,871	11,438			
Equity contracts					
Swaps	377	367			
Futures and forwards	87	90			
Written options	579	531			
Purchased options	529	453			
Total equity contracts	1,572	1,441			
Commodity contracts					
Swaps	144	116			
Spot, futures and forwards	177	168			
Written options	142	98			
Purchased options	128	93			
Total commodity contracts	591	475			
Total derivative notional amounts	\$57,319	9\$ 48,386			

Total derivative notional amounts \$57,319\$ 48,386

While the notional amounts disclosed above give an indication of the volume of the Firm's derivatives activity, the notional amounts significantly exceed, in the Firm's view, the possible losses that could arise from such transactions. For most derivative transactions, the notional amount is not exchanged; it is used simply as a reference to calculate payments.

For more information on volumes and types of credit derivative contracts, refer to the Credit derivatives discussion on page 119.

⁽b) Represents the sum of gross long and gross short third-party notional derivative contracts.

Impact of derivatives on the Consolidated balance sheets

The following table summarizes information on derivative receivables and payables (before and after netting adjustments) that are reflected on the Firm's Consolidated balance sheets as of June 30, 2018, and December 31, 2017, by accounting designation (e.g., whether the derivatives were designated in qualifying hedge accounting relationships or not) and contract type.

Free-standing derivative receivables and payables^(a)

	Gross derivative receivables			Gross derivative payables				
June 30, 2018	Not	Designated	Total	Net	Not	Designated	Total	Net
(in millions)	designated	as	derivative	derivative	designated	as	derivative	derivative
(III IIIIIIIIIIIII)	as hedges	hedges	receivables	receivables ⁶	^b às hedges	hedges	payables	payables(b)
Trading assets and								
liabilities								
Interest rate	\$280,176	\$ 835	\$281,011	\$ 22,971	\$253,982	\$ 1	\$253,983	\$ 8,615
Credit	20,934		20,934	624	20,778		20,778	1,502
Foreign exchange	195,436	1,036	196,472	16,763	186,487	1,080	187,567	12,521
Equity	44,965		44,965	10,176	48,384		48,384	11,482
Commodity	21,637	231	21,868	7,976	23,049	101	23,150	8,391
Total fair value of								
trading assets and	\$563,148	\$ 2,102	\$565,250	\$ 58,510	\$532,680	\$ 1,182	\$533,862	\$ 42,511
liabilities								
	Gross deriva	ative receival	bles		Gross deriva	ntive payable	s	
December 31 2017	Gross deriva	ative receival Designated		Net	Gross deriva	ntive payable Designated		Net
December 31, 2017 (in millions)	Not designated	Designated as	Total derivative	derivative	Not designated	Designated as	Total derivative	derivative
(in millions)	Not	Designated	Total derivative		Not designated	Designated	Total	
(in millions) Trading assets and	Not designated	Designated as	Total derivative	derivative	Not designated	Designated as	Total derivative	derivative
(in millions)	Not designated as hedges	Designated as hedges	Total derivative receivables	derivative receivables	Not designated bas hedges	Designated as hedges	Total derivative payables	derivative payables ^(b)
(in millions) Trading assets and	Not designated as hedges \$314,962 ^(c)	Designated as hedges	Total derivative receivables \$315,992	derivative receivables \$ 24,673	Not designated bas hedges \$284,433(c)	Designated as hedges	Total derivative payables \$284,436	derivative payables ^(b) \$ 7,129
(in millions) Trading assets and liabilities Interest rate Credit	Not designated as hedges	Designated as hedges \$ 1,030 (c)	Total derivative receivables \$315,992 23,205	derivative receivables	Not designated bas hedges	Designated as hedges \$ 3 (c)	Total derivative payables	derivative payables ^(b)
(in millions) Trading assets and liabilities Interest rate	Not designated as hedges \$314,962 ^(c)	Designated as hedges	Total derivative receivables \$315,992	derivative receivables \$ 24,673 869 16,151	Not designated bas hedges \$284,433(c)	Designated as hedges	Total derivative payables \$284,436	derivative payables ^(b) \$ 7,129 1,299 12,473
(in millions) Trading assets and liabilities Interest rate Credit Foreign exchange Equity	Not designated as hedges \$314,962 ^(c) 23,205 159,740 40,040	Designated as hedges \$ 1,030 (c) 491 —	Total derivative receivables \$315,992 23,205 160,231 40,040	\$ 24,673 869 16,151 7,882	Not designated bas hedges \$284,433(c) 23,252 154,601 45,395	Designated as hedges \$ 3 (c) 1,221	Total derivative payables \$284,436 23,252 155,822 45,395	derivative payables ^(b) \$7,129 1,299 12,473 9,192
(in millions) Trading assets and liabilities Interest rate Credit Foreign exchange Equity Commodity	Not designated as hedges \$314,962 ^(c) 23,205 159,740	Designated as hedges \$ 1,030 (c) 491	Total derivative receivables \$315,992 23,205 160,231	derivative receivables \$ 24,673 869 16,151	Not designated bas hedges \$284,433(c) 23,252 154,601	Designated as hedges \$ 3 (c)	Total derivative payables \$284,436 23,252 155,822	derivative payables ^(b) \$ 7,129 1,299 12,473
(in millions) Trading assets and liabilities Interest rate Credit Foreign exchange Equity Commodity Total fair value of	Not designated as hedges \$314,962 ^(c) 23,205 159,740 40,040	Designated as hedges \$ 1,030 (c)	Total derivative receivables \$315,992 23,205 160,231 40,040 20,085	\$ 24,673 869 16,151 7,882 6,948	Not designated bas hedges \$284,433(c) 23,252 154,601 45,395	Designated as hedges \$ 3 (c) -1,221 -403	Total derivative payables \$284,436 23,252 155,822 45,395 21,901	derivative payables ^(b) \$ 7,129 1,299 12,473 9,192 7,684
(in millions) Trading assets and liabilities Interest rate Credit Foreign exchange Equity Commodity	Not designated as hedges \$314,962 ^(c) 23,205 159,740 40,040	Designated as hedges \$ 1,030 (c)	Total derivative receivables \$315,992 23,205 160,231 40,040	\$ 24,673 869 16,151 7,882	Not designated bas hedges \$284,433(c) 23,252 154,601 45,395	Designated as hedges \$ 3 (c) -1,221 -403	Total derivative payables \$284,436 23,252 155,822 45,395	derivative payables ^(b) \$ 7,129 1,299 12,473 9,192 7,684

⁽a) Balances exclude structured notes for which the fair value option has been elected. Refer to Note 3 for further information.

⁽b) As permitted under U.S. GAAP, the Firm has elected to net derivative receivables and derivative payables and the related cash collateral receivables and payables when a legally enforceable master netting agreement exists.

⁽c) The prior period amounts have been revised to conform with the current period presentation.

Derivatives netting

June 30, 2018

Foreign exchange

The following tables present, as of June 30, 2018, and December 31, 2017, gross and net derivative receivables and payables by contract and settlement type. Derivative receivables and payables, as well as the related cash collateral from the same counterparty have been netted on the Consolidated balance sheets where the Firm has obtained an appropriate legal opinion with respect to the master netting agreement. Where such a legal opinion has not been either sought or obtained, amounts are not eligible for netting on the Consolidated balance sheets, and those derivative receivables and payables are shown separately in the tables below.

In addition to the cash collateral received and transferred that is presented on a net basis with derivative receivables and payables, the Firm receives and transfers additional collateral (financial instruments and cash). These amounts mitigate counterparty credit risk associated with the Firm's derivative instruments, but are not eligible for net presentation:

collateral that consists of non-cash financial instruments (generally U.S. government and agency securities and other G7 government securities) and cash collateral held at third party custodians, which are shown separately as "Collateral not nettable on the Consolidated balance sheets" in the tables below, up to the fair value exposure amount.

the amount of collateral held or transferred that exceeds the fair value exposure at the individual counterparty level, as of the date presented, which is excluded from the tables below; and

collateral held or transferred that relates to derivative receivables or payables where an appropriate legal opinion has not been either sought or obtained with respect to the master netting agreement, which is excluded from the tables below.

December 31, 2017

Gross (in derivative millions) receivabl	Amounts netted on Consolida es balance sh		Net derivative receivables	Gross derivative receivable			Net derivative receivables
U.S.							
GAAP							
nettable							
derivative	e						
receivabl	es						
Interest							
rate							
contracts							
Over-the ("OTC")	s(249,903	3)	\$ 19,388	\$305,569	\$(284,917	7)	\$ 20,652
Ø,95 8-cle	a(r e,9 36)	22	6,531	(6,318)	213
Ek@hange	e(Dadl ed ^(a))	109	185	(84)	101
Total							
interest 277,559 rate	(258,040)	19,519	312,285	(291,319)	20,966
contracts							
Credit							
contracts							
	(12,244)	344	15,390	(15,165)	225
6) T 6 7-cle	a(18 2,0 166)	71	7,225	(7,170)	55
Total	(20.216	,	415	22 (17	(22.225	,	200
20e, a 25	(20,310)	415	22,615	(22,335)	280
contracts							

contracts:						
)	12,808	155,289	(142,420)	12,869
OII /C-clear#018		9		(1,654		42
·)		1,696)	
Exchange(Praded(a))	18	141	(7)	134
Total						
foreign 192,544 exchange (179,709)	12,835	157,126	(144,081)	13,045
exchange (17),70	,	12,030	157,120	(111,001	,	15,015
contracts						
Equity						
contracts:						
24 (300) (21,376))	2,924	22,024	(19,917)	2,107
Examenge(tradeda))	2,423	14,188	(12,241)	1,947
Total		•				•
40 y 1 86 (34,789)	5,347	36,212	(32,158)	4,054
contracts	,	0,0	00,212	(02,100	,	.,00 .
Commodity						
contracts:						
	`	6 900	10.002	(1.126	`	6 167
OITC 43 (4,553)	6,890	10,903	(4,436)	6,467
Exchange(1:2001(a))	467	8,854	(8,701)	153
Total						
2d12d20dit(13,892)	7,357	19,757	(13,137)	6,620
contracts						
Derivative						
receivables						
with 552,213 (506,740)(b)	15 172	547,995	(503,030) (b)	11 065
appropriate (300,740)(-)	43,473	347,993	(303,030)(-)	44,903
legal						
opinion						
Derivative						
receivables						
where						
an						
appropriate						
legal						
· .						
opinion 13,037		13,037	11,558			11,558
nat						
not						
been						
either						
sought						
or						
obtained						
Total						
derivative						
receivables						
recognized						
\$5 65,250		\$ 58,510	\$559,553			\$ 56,523
the						
Consolidated						
balance						
sheets						

Collateral not

nettable

on the (13,572) (13,363)

Consolidated balance sheets^{(c)(d)}

Net \$44,938 \$43,160

amounts

June 30, 2018		December	r 31, 2017		
Gross Amounts (in netted on the derivative millions) Consolidate payables balance she	ed derivative		Amounts netted on the Consolida balance sh		
U.S. GAAP nettable derivative payables Interest rate					
contracts: \$244,282\$(237,947) Q301-clea(72,220) EkOhange(20dled(a))	81	\$276,960 6,004 127	\$(271,294) (5,928) (84)	1))	\$ 5,666 76 43
Total interest 251,793 (245,368) rate	6,425	283,091	(277,306)	5,785
contracts Credit contracts:					
O31,25 5 (11,898) O,420 -clea(7 e,3 78)	-	16,194 6,801	(15,170 (6,784)	1,024 17
Total 26:675 (19,276) contracts	1,399	22,995	(21,954)	1,041
Foreign exchange contracts:					
OSDC 951 (174,600) OSDC -clea(1430) Exchange (Traded (a))		150,966 1,555 98	(141,789 (1,553 (7)	9,177 2 91
Total foreign 184,424 exchange (175,046)	9,378	152,619	(143,349)	9,270
contracts Equity contracts:					
28,724 7 (23,402) E4,744 nge(173,500 ^{a)}) Total	*	28,193 12,720	(23,969 (12,234)	4,224 486
dqud00 (36,902) contracts Commodity	5,588	40,913	(36,203)	4,710
contracts: OST21 5 (5,492	7,723	12,645	(5,508)	7,137
Exchange(£:adet d(a)) 22,617 (14,759)	135	8,870 21,515	(8,709 (14,217)	161 7,298

Total					
commodity					
contracts Derivative					
payables					
with 521,999. (491,351 appropriate) ^(b) 30,648	521,133	(493,029) ^(b) 28,104	
legal					
opinion					
Derivative					
payables					
where					
an					
appropriate					
legal					
	11 062	0.672		0.672	
opinion 11,863 has	11,863	9,673		9,673	
not					
been					
either					
sought					
or					
obtained					
Total					
derivative					
payables					
recognized	¢ 42 511	¢ 520,000		¢ 27 777	,
\$5 33,862	\$42,511	\$530,806		\$37,777	
the Consolidated					
balance					
sheets					
Collateral					
not					
nettable					
on	(4.2.52			(4.400	
the	(4,363)			(4,180)
Consolidated					
balance					
sheets(c)(d)					
Net	\$ 38,148			\$ 33,597	,
amounts					
(a) Exchange-traded	l derivative bala	inces that re	elate to futi	ures contracts	are settled daily

- Net derivatives receivable included cash collateral netted of \$57.3 billion and \$55.5 billion at June 30, 2018, and December 31, 2017, respectively. Net derivatives payable included cash collateral netted of \$41.9 (b) billion and \$45.5 billion related to OTC and OTC-cleared derivatives at June 30, 2018, and December 31, 2017, respectively.
- (c) Represents liquid security collateral as well as cash collateral held at third party custodians related to derivative instruments where an appropriate legal opinion has been obtained. For some counterparties, the collateral amounts of financial instruments may exceed the derivative receivables and derivative payables balances. Where this is the case, the total amount reported is limited to the net derivative receivables and net derivative payables balances with

that counterparty.

(d) Derivative collateral relates only to OTC and OTC-cleared derivative instruments.

Liquidity risk and credit-related contingent features

For a more detailed discussion of liquidity risk and credit-related contingent features related to the Firm's derivative contracts, refer to Note 5 of JPMorgan Chase's 2017 Annual Report.

The following table shows the aggregate fair value of net derivative payables related to OTC and OTC-cleared derivatives that contain contingent collateral or termination features that may be triggered upon a ratings downgrade, and the associated collateral the Firm has posted in the normal course of business, at June 30, 2018, and December 31, 2017.

OTC and OTC-cleared derivative payables containing downgrade triggers

(in millions) June 30, December 31,

2018 2017

Aggregate fair value of net derivative payables \$10,796\$ 11,916

Collateral posted 9,066 9,973

The following table shows the impact of a single-notch and two-notch downgrade of the long-term issuer ratings of JPMorgan Chase & Co. and its subsidiaries, predominantly JPMorgan Chase Bank, National Association ("JPMorgan Chase Bank, N.A."),

at June 30, 2018, and December 31, 2017, related to OTC and OTC-cleared derivative contracts with contingent collateral or termination features that may be triggered upon a ratings downgrade. Derivatives contracts generally require additional collateral to be posted or terminations to be triggered when the predefined threshold rating is breached. A downgrade by a single rating agency that does not result in a rating lower than a preexisting corresponding rating provided by another major rating agency will generally not result in additional collateral, (except in certain instances in which additional initial margin may be required upon a ratings downgrade), nor in termination payments requirements. The liquidity impact in the table is calculated based upon a downgrade below the lowest current rating of the rating agencies referred to in the derivative contract.

Liquidity impact of downgrade triggers on OTC and OTC-cleared derivatives

June 30, 2018 December 31,

2017

(in millions)

Singlet-worterbotch Singlet-worterbotch downglewategrade downglewategrade

Amount of additional collateral to be posted upon downgrade^(a)

\$118\$ 2,027 242 860 \$ 79 \$ 1,989 320 650

Amount required to settle contracts with termination triggers upon downgrade $^{\left(b\right) }$

(a) Includes the additional collateral to be posted for initial margin.

(b) Amounts represent fair values of derivative payables, and do not reflect collateral posted.

Derivatives executed in contemplation of a sale of the underlying financial asset

In certain instances the Firm enters into transactions in which it transfers financial assets but maintains the economic exposure to the transferred assets by entering into a derivative with the same counterparty in contemplation of the initial transfer. The Firm generally accounts for such transfers as collateralized financing transactions as described in Note 10, but in limited circumstances they may qualify to be accounted for as a sale and a derivative under U.S. GAAP. The amount of such transfers accounted for as a sale where the associated derivative was outstanding at June 30, 2018 was not material, and there were no such transfers at December 31, 2017.

Impact of derivatives on the Consolidated statements of income

The following tables provide information related to gains and losses recorded on derivatives based on their hedge accounting designation or purpose.

Fair value hedge gains and losses

The following tables present derivative instruments, by contract type, used in fair value hedge accounting relationships, as well as pre-tax gains/(losses) recorded on such derivatives and the related hedged items for the three and six months ended June 30, 2018 and 2017, respectively. The Firm includes gains/(losses) on the hedging derivative in the same line item in the Consolidated statements of income as the related hedged item.

	Gains/(losses) recorded in income	Income statement impact of excluded	OCI impact
Three months ended June 30, 201 (in millions)	8 Hedged Income Derivatives statement impact	Changes Amortization. In fair approach value	Derivatives - Gains/(losses) recorded in OCI ^(g)
Contract type Interest rate ^{(a)(b)} Foreign exchange ^(c) Commodity ^(d) Total	\$(400)\$ 553 \$ 153 376 (254)122 11 (18)(7) \$(13)\$ 281 \$ 268 Gains/(losses) recorded i income	\$ (145) \$ 290 n Income statem impact due to:	\$ — (89) — (89) ent
Three months ended June 30, 201 (in millions)	7 Hedged stateme impact	Hedge Exclu	
Contract type Interest rate ^{(a)(b)} Foreign exchange ^(c) Commodity ^(d) Total	\$128 \$46 \$ 174 (1,497)1,493 (4 97 (64)33 \$(1,272)\$1,475 \$ 203	\$ (13) \$ 18) — (4 3 30 \$ (10) \$ 21 Income)
	Gains/(losses) recorded in income	statement impact of excluded components ^(f)	OCI impact
Six months ended June 30, 2018 (in millions)	Derivatives Hedged statement impact	Changes Amortization. In fair approach value	Derivatives - Gains/(losses) recorded in OCI ^(g)
Contract type Interest rate ^{(a)(b)} Foreign exchange ^(c) Commodity ^(d) Total	\$(1,877)\$2,182 \$ 305 520 (287)233 195 (165)30 \$(1,162)\$1,730 \$ 568	\$— \$ 299 (267) 233 — 34 \$ (267) \$ 566	\$ — (141) — (141)
Six months ended June 30, 2017 (in millions)	Gains/(losses) recorded in income DerivativHedgedIncome	Income statement impact due to: Hedge Excluded ineffectivemps/fle	I

impact

Contract type						
Interest rate ^{(a)(b)}	\$(153)\$577	\$ 424	\$ (14) \$ 438	
Foreign exchange(c)	(2,272)2,233	(39) —	(39)
Commodity ^(d)	(366)400	34	19	15	
Total	\$(2,79	1)\$3,210	\$ 419	\$ 5	\$ 414	

- (a) Primarily consists of hedges of the benchmark (e.g., London Interbank Offered Rate ("LIBOR")) interest rate risk of fixed-rate long-term debt and AFS securities. Gains and losses were recorded in net interest income.
- Excludes the amortization expense associated with the inception hedge accounting adjustment applied to the (b) hedged item. This expense is recorded in net interest income and substantially offsets the income statement impact of the excluded components. Also excludes the accrual of interest on interest rate swaps and the related hedged
- Primarily consists of hedges of the foreign currency risk of long-term debt and AFS securities for changes in spot (c) foreign currency rates. Gains and losses related to the derivatives and the hedged items due to changes in foreign currency rates and the income statement impact of excluded components were recorded primarily in principal transactions revenue and net interest income.
- Consists of overall fair value hedges of physical commodities inventories that are generally carried at the lower of (d)cost or net realizable value (net realizable value approximates fair value). Gains and losses were recorded in principal transactions revenue.
- (e) Hedge ineffectiveness is the amount by which the gain or loss on the designated derivative instrument does not exactly offset the gain or loss on the hedged item attributable to the hedged risk.
 - The assessment of hedge effectiveness excludes certain components of the changes in fair values of the derivatives and hedged items such as forward points on foreign exchange forward contracts, time values and cross-currency
- (f) basis spreads. Under the new hedge accounting guidance, the initial amount of the excluded components may be amortized into income over the life of the derivative, or changes in fair value may be recognized in current period earnings.
- Represents the change in value of amounts excluded from the assessment of effectiveness under the amortization (g) approach, predominantly cross-currency basis spreads. The amount excluded at inception of the hedge is recognized in earnings over the life of the derivative.

items.

As of June 30, 2018, the following amounts were recorded on the Consolidated balance sheets related to certain cumulative fair value hedge basis adjustments that are expected to impact the income statement in future periods (e.g., as adjustments to yield or to securities gains/losses).

	Carrying amount of the	Cumulative amount of fair value hedging adjustments included in the carrying amount of hedged items:				
June 30, 2018 (in millions)	hedged items ^{(a)(b)}	Active Discontinued hedging hedging relationshipationships (d)	Total			
Assets						
Investment securities - AFS	\$47,402 (c)	\$(1,861)\$ 488	\$(1,373)			
Liabilities						
Long-term debt	\$131,705	\$(1,413)\$ (11)	\$(1,424)			
Beneficial interests issued by consolidated VIEs	7,665	— (51)	(51)			

Excludes physical commodities with a carrying value of \$6.2 billion to which the Firm applies fair value hedge accounting. As a result of the application of hedge accounting, these inventories are carried at fair value, thus recognizing unrealized gains and losses in current periods. Given the Firm exits these positions at fair value, there is no incremental impact to net income in future periods.

Excludes hedged items where only foreign currency risk is the designated hedged risk, as basis adjustments related (b) to foreign currency hedges generally will not impact the income statement in future periods. The carrying amount excluded for available-for-sale securities is \$15.4 billion and for long-term debt is \$7.2 billion.

- (c) Carrying amount represents the amortized cost.
- (d) Represents hedged items no longer designated in qualifying fair value hedging relationships for which an associated basis adjustment exists at the balance sheet date.

Cash flow hedge gains and losses

The following tables present derivative instruments, by contract type, used in cash flow hedge accounting relationships, and the pre-tax gains/(losses) recorded on such derivatives, for the three and six months ended June 30, 2018 and 2017, respectively. The Firm includes the gain/(loss) on the hedging derivative in the same line item in the Consolidated statements of income as the change in cash flows on the related hedged item.

Consolidated statements of meon			vatives	in cush mo
				له دادست دسار
				s) recorded
			come an	
			prehensi	
			me/(loss	;)
			ounts	Total
	1	recla	ssified	nts change
Three months ended June 30, 201	18 1	from	record	nts change ed in OCI
(in millions)	1	AOC	in OC	I for
	t	to	III OCI	period
	i	inco	me	period
Contract type				
Interest rate ^(a)	9	\$13	\$ (33) \$ (46)
Foreign exchange ^(b)	(6	(166) (172)
Total	9) \$ (218)
]	Deri	vatives	
	9	gain	s/(losses	s) recorded
	•	_	come an	*
			prehensi	
			me/(loss	
			ounts	
				Total
Three months ended June 30, 201	1 17 1	from	Amou	nts change
(in millions)	. / .	1011 1011	record	ed in OCI
(III IIIIIIOIIS)		to	in OC	(c) for
		inco:	ma	period
Contract type	,	IIICO.	ille	
Contract type Interest rate ^(a)		ф <i>(С</i>	\	¢ 7
)\$1	\$7
Foreign exchange ^(b))22	81
Total			5)\$ 23	\$88
			tives	
	_			recorded
			me and	
		_	ehensive	•
			e/(loss)	
	An	nour	nts	Total
	rec	lass	ified	ts change
Six months ended June 30, 2018	fro	m		d in OCI
(in millions)	AC	OCI	in OCI	for
	to		III OCI	
	inc	ome		period
Contract type				
Interest rate ^(a)	\$2	6	\$ (111) \$ (137)
Foreign exchange(b)	45		(132)(177)

Total	\$71	\$ (243)\$(314)
Six months ended June 30, 2017 (in millions)	in incomprince incomprince Amount reclass	(losses) rome and orehensive de/(loss) ants sified Amount recorded in OCI(control of the control	Total as change d in OCI
Contract type			
Interest rate ^(a)	\$(17)\$ 12	\$29
Foreign exchange(b)	(133)70	203
Total	\$(150)\$ 82	\$232

Primarily consists of benchmark interest rate hedges of LIBOR-indexed floating-rate assets and floating-rate liabilities. Gains and losses were recorded in net interest income.

Primarily consists of hedges of the foreign currency risk of non-U.S. dollar-denominated revenue and expense. The

(b)income statement classification of gains and losses follows the hedged item – primarily noninterest revenue and compensation expense.

Represents the effective portion of changes in value of the related hedging derivative. Hedge ineffectiveness is the amount by which the cumulative gain or loss on the designated derivative instrument exceeds the present value of the cumulative expected change in cash flows on the hedged item attributable to the hedged risk. The Firm did not recognize any ineffectiveness on cash flow hedges during the three and six months ended June 30, 2017.

The Firm did not experience any forecasted transactions that failed to occur for the three and six months ended June 30, 2018 and 2017.

Over the next 12 months, the Firm expects that approximately \$(54) million (after-tax) of net losses recorded in AOCI at June 30, 2018, related to cash flow hedges will be recognized in income. For terminated cash flow hedges, the maximum length of time over which

forecasted transactions are remaining is approximately five years.

For open cash flow hedges, the maximum length of time over which forecasted transactions are hedged is approximately seven years. The Firm's longer-dated forecasted transactions relate to core lending and borrowing activities.

Net investment hedge gains and losses

The following table presents hedging instruments, by contract type, that were used in net investment hedge accounting relationships, and the pre-tax gains/(losses) recorded on such instruments for the three and six months ended June 30, 2018 and 2017.

	2018	2017
Three months ended June 30, (in millions)	Amounts recorded in recorded in in OCI income ^{(a)(c)}	$\begin{matrix} Amounts \\ recorded \\ in & recorded \\ in & in OCI^{(b)} \\ income^{(a)(C)} \end{matrix}$
Foreign exchange derivatives	\$4 \$ 1,204	\$(50) \$(319)
	2018	2017
Six months ended June 30, (in millions)	Amounts recorded in recorded in in OCI	Amounts recorded in income ^(a) in OCI ^(b)
Foreign exchange derivatives	\$(7) \$815	\$(112) \$ (828)

Certain components of hedging derivatives are permitted to be excluded from the assessment of hedge

(a) effectiveness, such as forward points on foreign exchange forward contracts. The Firm elects to record changes in fair value of these amounts directly in other income.

Represents the effective portion of changes in value of the related hedging derivative. The Firm did not recognize (b) any ineffectiveness on net investment hedges directly in income during the three and six months ended June 30, 2017.

(c) Excludes amounts reclassified from AOCI to income on the sale or liquidation of hedged entities. For additional information, refer to Note 17.

Gains and losses on derivatives used for specified risk management purposes

The following table presents pre-tax gains/(losses) recorded on a limited number of derivatives, not designated in hedge accounting relationships, that are used to manage risks associated with certain specified assets and liabilities, including certain risks arising from the mortgage pipeline, warehouse loans, MSRs, wholesale lending exposures, and foreign currency-denominated assets and liabilities.

```
Derivatives gains/(losses)
                  recorded in income
                  Three
                              Six months
                  months
                              ended June
                  ended June
                              30.
                  2018 2017 2018 2017
(in millions)
Contract type
Interest rate(a)
                  $(25)$238 $(235)$221
Credit(b)
                  (3
                     (7)(7)(10)(52)
Foreign exchange^{(c)} 130 (14) 100 (34)
Total
                  $102 $217 $(145)$135
```

Primarily represents interest rate derivatives used to hedge the interest rate risk inherent in the mortgage pipeline,

(a) warehouse loans and MSRs, as well as written commitments to originate warehouse loans. Gains and losses were recorded predominantly in mortgage fees and related income.

Relates to credit derivatives used to mitigate credit risk associated with lending exposures in the Firm's wholesale businesses. These derivatives do not include credit derivatives used to mitigate counterparty credit risk arising from derivative receivables, which is included in gains and losses on derivatives related to market-making activities and other derivatives. Gains and losses were recorded in principal transactions revenue.

(c)

Primarily relates to derivatives used to mitigate foreign exchange risk of specified foreign currency-denominated assets and liabilities. Gains and losses were recorded in principal transactions revenue.

Gains and losses on derivatives related to market-making activities and other derivatives

The Firm makes markets in derivatives in order to meet the needs of customers and uses derivatives to manage certain risks associated with net open risk positions from its market-making activities, including the counterparty credit risk arising from derivative receivables. All derivatives not included in the hedge accounting or specified risk management categories above are included in this category. Gains and losses on these derivatives are primarily recorded in principal transactions revenue. Refer to Note 5 for information on principal transactions revenue.

Credit derivatives

For a more detailed discussion of credit derivatives, refer to Note 5 of JPMorgan Chase's 2017 Annual Report. The Firm does not use notional amounts of credit derivatives as the primary measure of risk management for such derivatives, because the notional amount does not take into account the probability of the occurrence of a credit event, the recovery value of the reference obligation, or related cash instruments and economic hedges, each of which reduces, in the Firm's view, the risks associated with such derivatives.

Total credit derivatives and credit-related notes

	Maximum payout/Notional amount						
June 30, 2018 (in millions)	Protection sold	Protection purchased with identical underlyings ^(b)	Net protection (sold)/purchased ^(c)	Other protection purchased ^(d)			
Credit derivatives	Φ.(600.00 2)	φ π οο οο1	4. 10.000	Φ. 7. 402			
Credit default swaps		\$ 709,891	\$ 10,809	\$ 5,492			
Other credit derivatives ^(a)		52,285	1,290	10,956			
Total credit derivatives		762,176	12,099	16,448			
Credit-related notes	(18		(18)	7,516			
Total	\$(750,095)	\$ 762,176	\$ 12,081	\$ 23,964			
December 31, 2017 (in millions)	Maximum Protection sold	payout/Notional Protection purchased with identical underlyings ^(b)	Net protection (sold)/purchased ^(c)	Other protection purchased ^(d)			
Credit derivatives	Protection sold	Protection purchased with identical underlyings ^(b)	Net protection (sold)/purchased ^(c)	protection purchased ^(d)			
Credit derivatives Credit default swaps	Protection sold \$(690,224)	Protection purchased with identical underlyings ^(b)) \$ 702,098	Net protection (sold)/purchased ^(c) \$ 11,874	protection purchased ^(d) \$ 5,045			
Credit derivatives Credit default swaps Other credit derivatives ^(a)	Protection sold \$(690,224)(54,157)	Protection purchased with identical underlyings ^(b)) \$ 702,098) 59,158	Net protection (sold)/purchased ^(c) \$ 11,874 5,001	protection purchased ^(d) \$ 5,045 11,747			
Credit derivatives Credit default swaps Other credit derivatives ^(a) Total credit derivatives	Protection sold \$(690,224)(54,157)(744,381)	Protection purchased with identical underlyings ^(b)) \$ 702,098	Net protection (sold)/purchased ^(c) \$ 11,874 5,001 16,875	protection purchased ^(d) \$ 5,045 11,747 16,792			
Credit derivatives Credit default swaps Other credit derivatives ^(a)	Protection sold \$(690,224 (54,157 (744,381 (18	Protection purchased with identical underlyings ^(b)) \$ 702,098) 59,158	Net protection (sold)/purchased ^(c) \$ 11,874 5,001	protection purchased ^(d) \$ 5,045 11,747			

(a) Other credit derivatives largely consists of credit swap options.

Represents the total notional amount of protection purchased where the underlying reference instrument is identical (b) to the reference instrument on protection sold; the notional amount of protection purchased for each individual identical underlying reference instrument may be greater or lower than the notional amount of protection sold.

(c) Does not take into account the fair value of the reference obligation at the time of settlement, which would generally reduce the amount the seller of protection pays to the buyer of protection in determining settlement value.

(d) Represents protection purchased by the Firm on referenced instruments (single-name, portfolio or index) where the Firm has not sold any protection on the identical reference instrument.

The following tables summarize the notional amounts by the ratings, maturity profile, and total fair value, of credit derivatives and credit-related notes as of June 30, 2018, and December 31, 2017, where JPMorgan Chase is the seller of protection. The maturity profile is based on the remaining contractual maturity of the credit derivative contracts. The ratings profile is based on the rating of the reference entity on which the credit derivative contract is based. The ratings and maturity profile of credit derivatives and credit-related notes where JPMorgan Chase is the purchaser of protection are comparable to the profile reflected below.

Protection sold — credit derivatives and credit-related notes rating/maturity profile

June 30, 2018				1 otai	Fair value of	Fair value	net
,	<1 vear	1–5 years	>5 years	notional		$\circ f$	fair
(in millions)	VI year	1 5 years	23 years	notionai	receivables(b)	01	
				amount		payables ^(b)	value

Risk rating of reference entity

Investment-grade	\$(124,866)	\$(359,780)	\$(43,198)	\$(527,844)	\$ 6,831	\$ (1,926)	\$4,905
Noninvestment-grade	(59,660)	(145,949)	(16,642)	(222,251)	6,925	(4,435)	2,490
Total	\$(184,526)	\$(505,729)	\$(59,840)	\$(750,095)	\$ 13,756	\$ (6,361)	\$7,395
December 31, 2017 (in millions)	<1 year	1–5 years	>5 years	Total notional amount	Fair value of receivables ^(b)	Fair value of payables ^(b)	Net fair value
Risk rating of reference entity							
Investment-grade	\$(159,286)	\$(319,726)	\$(39,429)	\$(518,441)	\$ 8,516	\$ (1,134)	\$7,382
Noninvestment-grade	(73,394)	(134,125)	(18,439)	(225,958)	7,407	(5,313)	2,094
Total	\$(232,680)	\$(453,851)	\$(57,868)	\$(744,399)	\$ 15,923	\$ (6,447)	\$9,476

⁽a) The ratings scale is primarily based on external credit ratings defined by S&P and Moody's.

Amounts are shown on a gross basis, before the benefit of legally enforceable master netting agreements and cash collateral received by the Firm.

Note 5 – Noninterest revenue and noninterest

expense

Noninterest revenue

For a discussion of the components of and accounting policies for the Firm's noninterest revenue, refer to Note 6 of JPMorgan Chase's 2017 Annual Report.

The adoption of the revenue recognition guidance in the first quarter of 2018, requires gross presentation of certain costs previously offset against revenue, predominantly associated with certain distribution costs (previously offset against asset management, administration and commissions), with the remainder associated with certain underwriting costs (previously offset against investment banking fees). Adoption of the guidance did not result in any material changes in the timing of revenue recognition. This guidance was adopted retrospectively and, accordingly, prior period amounts were revised, which resulted in an increase in both noninterest revenue and noninterest expense. For additional information, refer to Note 1.

Investment banking fees

The following table presents the components of investment banking fees.

	Three n		Six months ended June '30,			
(in millions)	2018	2017	2018	2017		
Underwriting						
Equity	\$573	\$379	\$925	\$803		
Debt	964	968	1,760	1,928		
Total underwriting	1,537	1,347	2,685	2,731		
Advisory	631	499	1,219	995		
Total investment banking fees	\$2,168	\$1,846	\$3,904	\$3,726		

Principal transactions

The following table presents all realized and unrealized gains and losses recorded in principal transactions revenue. This table excludes interest income and interest expense on trading assets and liabilities, which are an integral part of the overall performance of the Firm's client-driven market-making activities. Refer to Note 6 for further information on interest income and interest expense. Trading revenue is presented primarily by instrument type. The Firm's client-driven market-making businesses generally utilize a variety of instrument types in connection with their market-making and related risk-management activities; accordingly, the trading revenue presented in the table below is not representative of the total revenue of any individual line of business.

	Three n		Six mon ended Ju	
(in millions)	2018	2017	2018	2017
Trading revenue by instrument type				
Interest rate	\$672	\$588	\$1,446	\$1,383
Credit	648	278	1,028	958
Foreign exchange	745	901	1,769	1,682
Equity	1,386	1,118	3,013	2,238
Commodity	246	120	523	305
Total trading revenue	3,697	3,005	7,779	6,566
Private equity gains/(losses)	85	132	(45)	153
Principal transactions	\$3,782	\$3,137	\$7,734	\$6,719
Lending- and deposit-related fees				

The following table presents the components of lending- and deposit-related fees.

	Three r	nonths	Six mo	onths
	ended J	June 30,	ended.	June 30,
(in millions)	2018	2017	2018	2017

 Lending-related fees
 \$280
 \$269
 \$54
 \$544

 Deposit-related fees
 1,215
 1,213
 2,418
 2,386

 Total lending- and deposit-related fees
 \$1,495
 \$1,482
 \$2,972
 \$2,930

Asset management, administration and commissions

The following table presents the components of Firmwide asset management, administration and commissions.

	Three months		Six months	
	ended J	une 30,	ended J	une 30,
(in millions)	2018	2017	2018	2017
Asset management fees				
Investment management fees ^(a)	\$2,671	\$2,551	\$5,365	\$4,967
All other asset management fees ^(b)	66	84	132	163
Total asset management fees	2,737	2,635	5,497	5,130
Total administration fees ^(c)	557	504	1,118	986
Commission and other fees				
Brokerage commissions	631	567	1,283	1,145
All other commissions and fees	379	341	715	663
Total commissions and fees	1,010	908	1,998	1,808
	0.4.204	Φ 4 O 47	00.612	Φ 7 004

Total asset management, administration and commissions \$4,304 \$4,047 \$8,613 \$7,924

⁽a) Represents fees earned from managing assets on behalf of the Firm's clients, including investors in Firm-sponsored funds and owners of separately managed investment accounts.

⁽b) Represents fees for services that are ancillary to investment management services, such as commissions earned on the sales or distribution of mutual funds to clients.

⁽c) Predominantly includes fees for custody, securities lending, funds services and securities clearance.

Card income

The following table presents the components of card income:

	Three m	onths	Six mon	ths
	ended Ju	ine 30,	ended Ju	ne 30,
(in millions)	2018	2017	2018	2017
Interchange and merchant processing income	\$4,723	\$4,309	\$9,082	\$8,215
Rewards costs and partner payments ^(a)	(3,527)	(2,689)	(6,411)	(5,214)
Other card income ^(b)	(176)	(453)	(376)	(920)
Total card income	\$1,020	\$1,167	\$2,295	\$2,081

Includes an adjustment to the credit card rewards liability of approximately \$330 (a)

(b) Predominantly represents annual fees and new account origination costs, which are deferred and recognized on a straight-line basis over a 12-month period.

Other income

Other income on the Firm's Consolidated statements of income included the following:

Three months Six months ended June ended June 30, 30.

(in millions) 2018 2017 2018 2017 Operating lease income \$1,112 \$873 \$2,159 \$1,697

Noninterest expense

Other expense

(in millions)

Legal expense

Other expense on the Firm's Consolidated statements of income included the following:

Three Six months months ended ended June 30, June 30, 2012/017 2018/2017 \$-\$61 \$70 \$279 FDIC-related expense 36876 751 757

Note 6 – Interest income and Interest expense

For a description of JPMorgan Chase's accounting policies regarding interest income and interest expense, refer to Note 7 of JPMorgan Chase's 2017 Annual Report.

The following table presents the components of interest income and interest expense.

	ended	Three months ended June 30,		ths ended	d
(in millions)	2018	2017	2018	2017	
Interest income					
Loans ^(a)	\$11,634	\$9,995	\$22,708	\$19,746	5
Taxable securities	1,383	1,410	2,696	2,840	
Non-taxable securities ^(b)	395	479	805	937	
Total investment securities ^(a)	1,778	1,889	3,501	3,777	
Trading assets	2,111	1,806	4,214	3,664	
Federal funds sold and securities purchased under resale agreements	807	528	1,538	1,054	
Securities borrowed ^(c)	148	(21) 210	(65)
Deposits with banks	1,543	1,018	2,864	1,743	

All other interest-earning assets ^(d)	848	435	1,529	773
Total interest income	18,869	15,650	36,564	30,692
Interest expense				
Interest-bearing deposits	1,340	629	2,400	1,112
Federal funds purchased and securities loaned or sold under repurchase agreements	759	387	1,337	680
Short-term borrowings ^(e)	260	96	469	169
Trading liabilities – debt and all other interest-bearing liabilities	901	515	1,561	920
Long-term debt	2,003	1,687	3,756	3,276
Beneficial interest issued by consolidated VIEs	121	128	244	263
Total interest expense	5,384	3,442	9,767	6,420
Net interest income	13,485	12,208	26,797	24,272
Provision for credit losses	1,210	1,215	2,375	2,530
Net interest income after provision for credit losses	\$12,275	\$10,993	\$24,422	\$21,742

Includes the amortization/accretion of unearned income (e.g., purchase premiums/discounts, net deferred fees/costs, etc.).

- (b) Represents securities which are tax-exempt for U.S. federal income tax purposes.
 - Negative interest income is related to client-driven demand for certain securities combined with the impact of low
- (c)interest rates. This is matched book activity and the negative interest expense on the corresponding securities loaned is recognized in interest expense.
- (d) Includes held-for-investment margin loans, which are classified in accrued interest and accounts receivable, and all other interest-earning assets included in other assets on the Consolidated balance sheets.
- (e) Includes commercial paper.
- (f)Other interest-bearing liabilities include brokerage customer payables.

Note 7 – Pension and other postretirement employee benefit plans

For a discussion of JPMorgan Chase's pension and OPEB plans, refer to Note 8 of JPMorgan Chase's 2017 Annual Report.

The following table presents the components of net periodic benefit costs reported in the Consolidated statements of income for the Firm's U.S. and non-U.S. defined benefit pension, defined contribution and OPEB plans.

·	Three months ended June 30,				Six months ended June 30,			June	
	2018 Defi	2017 ned	2018	3 2017	2018 Defi	2017 ned	2018	3 2017	
(in millions)	benef pensi	on	OPE plan		benet pensi	on	OPE plan		
Components of net periodic benefit cost	plans				plans	i			
Benefits earned during the period	\$89	\$82	\$	\$ —	\$179	\$164	\$ —	\$ —	
Interest cost on benefit obligations	139	150	6	7	278	299	12	14	
Expected return on plan assets	(247)(242)	(26)(24)	(495)(483)	(52)(48)
Amortization:									
Net (gain)/loss	26	62	—		52	124	_		
Prior service cost/(credit)	(6)(9)	—		(12)(18)			
Settlement	_		—		_	(3)			
Net periodic defined benefit cost ^(a)	1	43	(20)(17)	2	83	(40)(34)
Other defined benefit pension plans ^(b)	9	6	NA	NA	15	10	NA	NA	
Total defined benefit plans	10	49	(20)(17)	17	93	(40)(34)
Total defined contribution plans	222	210	NA	NA	432	396	NA	NA	
Total pension and OPEB cost included in noninterest expense	\$232	\$259	\$(20)\$(17)	\$449	\$489	\$(40)\$(34)

Effective January 1, 2018, benefits earned during the period are reported in compensation expense; all other

The following table presents the fair values of plan assets for the U.S. defined benefit pension and OPEB plans and for the material non-U.S. defined benefit pension plans.

Fair value of plan assets

Defined benefit pension plans \$ 19.2 \$ 19.6

OPEB plans 2.7 2.8

There are no expected contributions to the U.S. defined benefit pension plan for 2018.

⁽a) components of net periodic defined benefit costs are reported within other expense in the Consolidated statements of income.

⁽b) Includes various defined benefit pension plans which are individually immaterial.

Note 8 – Employee share-based incentives

For a discussion of the accounting policies and other information relating to employee share-based incentives, refer to Note 9 of JPMorgan Chase's 2017 Annual Report.

The Firm recognized the following noncash compensation expense related to its various employee share-based incentive plans in its Consolidated statements of income.

	montle ended June	ns I	Six more ended June 30	
(in millions)	2018	2017	2018	2017
Cost of prior grants of RSUs, stock appreciation rights ("SARs") and performance share units ("PSUs") that are amortized over their applicable vesting periods		\$290	\$674	\$600
Accrual of estimated costs of share-based awards to be granted in future periods including those to full-career eligible employees	304	235	612	526
Total noncash compensation expense related to employee share-based incentive plans	\$580	\$525	\$1,286	\$1,126
In the first quarter of 2018, in connection with its annual incentive grant for the 2017 perfect	orman	ce year	r, the Fir	m
granted 17 million RSUs and 516 thousand PSUs with weighted-average grant date fair va	lues o	f \$111	.17 per I	RSU

123

and \$110.46 per PSU.

Note 9 – Investment securities

Investment securities consist of debt securities that are classified as AFS or HTM. Debt securities classified as trading assets are discussed in Note 2. Predominantly all of the Firm's AFS and HTM securities are held by Treasury and CIO in connection with its asset-liability management activities. At June 30, 2018, the investment securities portfolio consisted of debt securities with an average credit rating of AA+ (based upon external ratings where available, and where not available, based primarily upon internal ratings which correspond to ratings as defined by S&P and Moody's). For additional information regarding the investment securities portfolio, refer to Note 10 of JPMorgan Chase's 2017 Annual Report.

As a result of the adoption of the premium amortization accounting guidance in the first quarter of 2018, premiums

on purchased callable debt securities must be amortized to the earliest call date for debt securities with call features that are explicit, noncontingent and callable at fixed prices and on preset dates. The guidance primarily impacts obligations of U.S. states and municipalities held in the Firm's investment securities portfolio. For additional information, refer to Note 17.

As permitted by the new hedge accounting guidance, the Firm also elected to transfer U.S. government agency MBS, commercial MBS, and obligations of U.S. states and municipalities with a carrying value of \$22.4 billion from HTM to AFS in the first quarter of 2018. This transfer was a non-cash transaction. For additional information, refer to Note 17.

The amortized costs and estimated fair values of the investment securities portfolio were as follows for the dates indicated.

indicated.	June 30, 2018				December 31, 2017			
(in millions)	Amortize	Gross unrealize gains	Gross dunrealize losses	d Value	Amortize	Gross unrealize gains	Gross dunrealize losses	Fair ed value
Available-for-sale securities								
Mortgage-backed securities:								
U.S. government agencies ^(a)	\$62,595	\$ 521	\$ 1,194	\$61,922	\$69,879	\$ 736	\$ 335	\$70,280
Residential:								
U.S.	6,996	152	30	7,118	8,193	185	14	8,364
Non-U.S.	2,457	107	2	2,562	2,882	122	1	3,003
Commercial	7,961	75	209	7,827	4,932	98	5	5,025
Total mortgage-backed securities	80,009	855	1,435	79,429	85,886	1,141	355	86,672
U.S. Treasury and government agencies	24,962	524	142	25,344	22,510	266	31	22,745
Obligations of U.S. states and municipalities	37,459	1,926	55	39,330	30,490	1,881	33	32,338
Certificates of deposit	75	_		75	59	_	_	59
Non-U.S. government debt securities	25,307	413	34	25,686	26,900	426	32	27,294
Corporate debt securities	2,078	58	3	2,133	2,657	101	1	2,757
Asset-backed securities:								
Collateralized loan obligations	21,145	22	21	21,146	20,928	69	1	20,996
Other	8,819	74	27	8,866	8,764	77	24	8,817
Total available-for-sale debt securities	199,854	3,872	1,717	202,009	198,194	3,961	477	201,678
Available-for-sale equity securities(b)	_	_			547	_	_	547
Total available-for-sale securities	199,854	3,872	1,717	202,009	198,741	3,961	477	202,225
Held-to-maturity securities	,	,	,	,	,	,		,
Mortgage-backed securities:								
U.S. government agencies ^(c)	26,168	60	269	25,959	27,577	558	40	28,095
Commercial	_			_	5,783	1	74	5,710

Total mortgage-backed securities	26,168	60	269	25,959	33,360	559	114	33,805
Obligations of U.S. states and municipalities	4,838	96	20	4,914	14,373	554	80	14,847
Total held-to-maturity securities	31,006	156	289	30,873	47,733	1,113	194	48,652
Total investment securities	\$230,860	0\$ 4,028	\$ 2,006	\$232,882	\$246,474	1\$ 5,074	\$ 671	\$250,877

Includes total U.S. government-sponsored enterprise obligations with fair values of \$39.1 billion and \$45.8 billion at June 30, 2018, and December 31, 2017, respectively.

⁽b) Effective January 1, 2018, the Firm adopted the recognition and measurement guidance. Equity securities that were previously reported as AFS securities were reclassified to other assets upon adoption.

⁽c) Included total U.S. government-sponsored enterprise obligations with amortized cost of \$20.1 billion and \$22.0 billion at June 30, 2018, and December 31, 2017, respectively.

Investment securities impairment

The following tables present the fair value and gross unrealized losses for investment securities by aging category at June 30, 2018, and December 31, 2017.

	Investment securities with gross unrealized losses						
	Less than 12 months		12 months or more				
June 30, 2018 (in millions)	Fair value	Gross unrealized losses	Fair value	Gross unrealized losses	Total dfair value	Total gross unrealized losses	
Available-for-sale securities							
Mortgage-backed securities:							
U.S. government agencies	\$36,060)\$ 868	\$6,309	\$ 326	\$42,369	9\$ 1,194	
Residential:							
U.S.	1,345	23	455	7	1,800	30	
Non-U.S.	513	1	157	1	670	2	
Commercial	3,248	124	1,463	85	4,711	209	
Total mortgage-backed securities	41,166	1,016	8,384	419	49,550	1,435	
U.S. Treasury and government agencies	3,761	118	294	24	4,055	142	
Obligations of U.S. states and municipalities	2,217	21	1,220	34	3,437	55	
Certificates of deposit							
Non-U.S. government debt securities	3,786	13	1,308	21	5,094	34	
Corporate debt securities	191	3		_	191	3	
Asset-backed securities:							
Collateralized loan obligations	7,379	21			7,379	21	
Other	4,650	24	482	3	5,132	27	
Total available-for-sale securities	63,150	1,216	11,688	501	74,838	1,717	
Held-to-maturity securities							
Mortgage-backed securities							
U.S. government agencies	15,887	201	1,607	68	17,494	269	
Commercial		_		_	_	_	
Total mortgage-backed securities	15,887	201	1,607	68	17,494	269	
Obligations of U.S. states and municipalities	546	4	683	16	1,229	20	
Total held-to-maturity securities	16,433	205	2,290	84	18,723	289	
Total investment securities with gross unrealized losses	\$79,583	3\$ 1,421	\$13,978	3\$ 585	\$93,561	\$ 2,006	

	Investment securities with gross unrealized losses						
	Less than 12 months		12 months or more				
December 31, 2017 (in millions)	Fair value	Gross unrealized losses	Fair value	Gross unrealize losses	Total dfair value	Total gross unrealized losses	
Available-for-sale securities							
Mortgage-backed securities:							
U.S. government agencies	\$36,03	7\$ 139	\$7,711	\$ 196	\$43,748	3\$ 335	
Residential:							
U.S.	1,112	5	596	9	\$1,708	14	
Non-U.S.		_	266	1	266	1	
Commercial	528	4	335	1	863	5	
Total mortgage-backed securities	37,677	148	8,908	207	46,585	355	
U.S. Treasury and government agencies	1,834	11	373	20	2,207	31	
Obligations of U.S. states and municipalities	949	7	1,652	26	2,601	33	
Certificates of deposit		_	_			_	
Non-U.S. government debt securities	6,500	15	811	17	7,311	32	
Corporate debt securities		_	52	1	52	1	
Asset-backed securities:							
Collateralized loan obligations		_	276	1	276	1	
Other	3,521	20	720	4	4,241	24	
Total available-for-sale securities	50,481	201	12,792	276	63,273	477	
Held-to-maturity securities							
Mortgage-backed securities							
U.S. government agencies	4,070	38	205	2	4,275	40	
Commercial	3,706	41	1,882	33	5,588	74	
Total mortgage-backed securities	7,776	79	2,087	35	9,863	114	
Obligations of U.S. states and municipalities	584	9	2,131	71	2,715	80	
Total held-to-maturity securities	8,360	88	4,218	106	12,578	194	
Total investment securities with gross unrealized losses	\$58,84	1\$ 289	\$17,010)\$ 382	\$75,85	1\$ 671	
Gross unrealized losses							

The Firm has recognized unrealized losses on investment securities that it intends to sell as OTTI. The Firm does not intend to sell any of the remaining investment securities with an unrealized loss in AOCI as of June 30, 2018, and it is not likely that the Firm will be required to sell these securities before recovery of their amortized cost basis. Except for the securities for which credit losses have been recognized in income, the Firm believes that the investment securities with an unrealized loss in AOCI as of June 30, 2018, are not other-than-temporarily impaired. For additional information on other-than-temporary impairment, refer to Note 10 of the JPMorgan Chase's 2017 Annual Report. Investment securities gains and losses

The following table presents realized gains and losses and OTTI from AFS securities that were recognized in income.

	Three months ended June 30,	
(in millions)	2018 2017 2018 2017	
Realized gains	\$9 \$393 \$79 \$542	
Realized losses	(88)(427) (403)(572)	
OTTI losses	(1)— $(1)(7)$	1
Net investment securities gains/(losses)	\$(80)\$(34) \$(325)\$(37)	

OTTI losses

Credit-related losses recognized in income \$— \$— \$— \$— Investment securities the Firm intends to sell^(a) (1)— (1)(7) Total OTTI losses recognized in income \$(1)\$— \$(1)\$(7)

(a) Excludes realized losses on securities sold of \$20 million and \$5 million for the six months ended June 30, 2018 and 2017 that had been previously reported as an OTTI loss due to the intention to sell the securities.

Changes in the credit loss component of credit-impaired debt securities

The cumulative credit loss component, including any changes therein, of OTTI losses that have been recognized in income related to AFS securities that the Firm does not intend to sell was not material as of and during the six month periods ended June 30, 2018 and 2017.

Contractual maturities and yields

The following table presents the amortized cost and estimated fair value at June 30, 2018, of JPMorgan Chase's investment securities portfolio by contractual maturity.

Due in Due after Due after

	Due in	l	Due afte	r	Due afte	r				
By remaining maturity	one		one year	•	five year	rs	Due after	•	Total	
June 30, 2018 (in millions)	year or	r	through		through		10 years	c)	Total	
	less		five year	rs	10 years	;	•			
Available-for-sale securities			•		•					
Mortgage-backed securities ^(a)										
Amortized cost	\$261		\$429		\$5,664		\$73,655		\$80,009	
Fair value	264		433		5,742		72,990		79,429	
Average yield ^(b)	1.81	%	2.49	%	3.49	%	3.48	%	3.47	%
U.S. Treasury and government agencies										
Amortized cost	\$79		\$ —		\$19,446		\$5,437		\$24,962	
Fair value	79		_		19,516		5,749		25,344	
Average yield ^(b)	1.99	%		%	3.53	%	2.91	%	3.39	%
Obligations of U.S. states and municipalities										
Amortized cost	\$148		\$701		\$2,501		\$34,109		\$37,459	
Fair value	149		716		2,597		35,868		39,330	
Average yield ^(b)	1.94				-		4.91	%	4.87	%
Certificates of deposit										
Amortized cost	\$75		\$—		\$		\$ —		\$75	
Fair value	75		_		_		_		75	
Average yield ^(b)	0.49	%		%		%		%	0.49	%
Non-U.S. government debt securities										
Amortized cost	\$4,745	5	\$14,565		\$5,997		\$—		\$25,307	
Fair value	4,745		14,782		6,159		_		25,686	
Average yield(b)	3.27					%		%	1.86	%
Corporate debt securities										
Amortized cost	\$70		\$968		\$901		\$139		\$2,078	
Fair value	70		989		929		145		2,133	
Average yield ^(b)	3.98					%	3.45	%	4.34	%
Asset-backed securities										
Amortized cost	\$—		\$4,295		\$7,785		\$17,884		\$29,964	
Fair value			4,271		7,790		17,951		30,012	
Average yield ^(b)					3.25	%	2.98	%	3.00	%
Total available-for-sale securities										
Amortized cost	\$5,378	3	\$20,958		\$42,294		\$131,224	ļ	\$199,854	4
Fair value	5,382		21,191		42,733		132,703		202,009	
Average yield ^(b)	3.11				-		3.76	%	3.46	%
Held-to-maturity securities										
Mortgage-backed securities ^(a)										
Amortized cost	\$		\$ —		\$2,083		\$24,085		\$26,168	
Fair value	_		_		2,068		23,891		25,959	
Average yield ^(b)		%			-		3.33	%	3.34	%
Obligations of U.S. states and municipalities										
Amortized cost	\$ —		\$		\$—		\$4,838		\$4,838	
Fair value							4,914		4,914	
Average yield ^(b)		%		%			4.12	%	4.12	%
Total held-to-maturity securities										
→ ************************************										

Amortized cost	\$ \$	\$2,083	\$28,923	\$31,006)
Fair value	 	2,068	28,805	30,873	
Average yield ^(b)	 % —	%3.52	%3.46	% 3.46	%

As of June 30, 2018, mortgage-backed securities issued by Fannie Mae exceeded 10% of JPMorgan Chase's total (a) stockholders' equity; the amortized cost and fair value of such securities was \$51.3 billion and \$51.1 billion, respectively.

Average yield is computed using the effective yield of each security owned at the end of the period, weighted based on the amortized cost of each security. The effective yield considers the contractual coupon, amortization of (b) premiums and accretion of discounts, and the effect of related hedging derivatives. Taxable-equivalent amounts are

- (b) used where applicable. The effective yield excludes unscheduled principal prepayments; and accordingly, actual maturities of securities may differ from their contractual or expected maturities as certain securities may be prepaid.
 - Includes investment securities with no stated maturity. Substantially all of the Firm's U.S. residential MBS and collateralized mortgage obligations are due in 10 years or more, based on contractual maturity. The estimated
- (c) weighted-average life, which reflects anticipated future prepayments, is approximately 7 years for agency residential MBS, 3 years for agency residential collateralized mortgage obligations and 3 years for nonagency residential collateralized mortgage obligations.

Note 10 – Securities financing activities

For a discussion of accounting policies relating to securities financing activities, refer to Note 11 of JPMorgan Chase's 2017 Annual Report. For further information regarding securities borrowed and securities lending agreements for which the fair value option has been elected, refer to Note 3. For further information regarding assets pledged and collateral received in securities financing agreements, refer to Note 21.

The table below summarizes the gross and net amounts of the Firm's securities financing agreements as of June 30, 2018 and December 31, 2017. When the Firm has obtained an appropriate legal opinion with respect to the master netting agreement with a counterparty and where other relevant netting criteria under U.S. GAAP are met, the Firm nets, on the Consolidated balance sheets, the balances

outstanding under its securities financing agreements with the same counterparty. In addition, the Firm exchanges securities and/or cash collateral with its counterparties; this collateral also reduces the economic exposure with the counterparty. Such collateral, along with securities financing balances that do not meet all these relevant netting criteria under U.S. GAAP, is presented as "Amounts not nettable on the Consolidated balance sheets," and reduces the "Net amounts" presented below, if the Firm has an appropriate legal opinion with respect to the master netting agreement with the counterparty. Where a legal opinion has not been either sought or obtained, the securities financing balances are presented gross in the "Net amounts" below, and related collateral does not reduce the amounts presented.

presented.	June 30,	2018			
(in millions)	Gross amounts	Amounts netted on the Consolidated balance sheets	the	Amounts not nettable on the Consolidated balance sheets ^(c)	Net
Assets Securities purchased under resale agreements	\$ \$5/1.76	0\$ (315 405) \$ 226,355	\$ (217,139) \$9,216
Securities borrowed) 108,246	(75,197) 33,049
Liabilities	127,331	(17,003) 100,210	(13,171) 55,047
Securities sold under repurchase agreements	\$480,09	7\$ (315,405) \$ 164,692	\$ (149,808) \$14,884
Securities loaned and other ^(a)) 16,435	(16,015) 420
	Decembe	er 31, 2017			
(in millions)	Gross amounts	Amounts netted on the Consolidated balance sheets	the	Amounts not nettable on the Consolidated balance sheets ^(c)	Net
Assets					
Securities purchased under resale agreements) \$ 198,103		\$ 9,601
Securities borrowed Liabilities	113,926	(8,814) 105,112	(76,805) 28,307
Securities sold under repurchase agreements	\$308.21	8 \$ (250 505) \$ 1 <i>47 7</i> 13	\$ (129,178) \$18,535
Securities loaned and other ^(a)	27,228) 18,414) 263
Includes securities-for-securities lending t		` '	, ,		/

(a) December 31, 2017, respectively, accounted for at fair value, where the Firm is acting as lender. These amounts are presented within other liabilities in the Consolidated balance sheets.

⁽b) Includes securities financing agreements accounted for at fair value. At June 30, 2018 and December 31, 2017, included securities purchased under resale agreements of \$12.8 billion and \$14.7 billion, respectively and securities sold under agreements to repurchase of \$866 million and \$697 million, respectively. There

were \$4.1 billion and \$3.0 billion of securities borrowed at June 30, 2018 and December 31, 2017, respectively. There were no securities loaned accounted for at fair value in either period.

In some cases, collateral exchanged with a counterparty exceeds the net asset or liability balance with that (c) counterparty. In such cases, the amounts reported in this column are limited to the related asset or liability with that counterparty.

Includes securities financing agreements that provide collateral rights, but where an appropriate legal opinion with respect to the master netting agreement has not been either sought or obtained. At June 30, 2018 and December 31, 2017, included \$5.2 billion and \$7.5 billion, respectively, of securities purchased under resale agreements; \$30.0 billion and \$25.5 billion, respectively, of securities borrowed; \$13.4 billion and \$16.5 billion, respectively, of securities sold under agreements to repurchase; and \$50 million and \$29 million, respectively, of securities loaned and other.

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(d)

The tables below present as of June 30, 2018, and December 31, 2017 the types of financial assets pledged in securities financing agreements and the remaining contractual maturity of the securities financing agreements.

securities infancing agreements and the fema	ming commuctual mate	integration of the security			
	Gross liability balance				
	June 30, December				
	2018	2017			
(in millions)	Securities Securities sold loaned under and repurchase other a agreements	Securities sold Securities under and repurchase other(a) agreements			
Mortgage-backed securities					
U.S. government agencies	19 ,277	13,100—			
Residential - nonagency	2,3 37	2,972 —			
Commercial - nonagency	1,4 15	1,594 —			
U.S. Treasury and government agencies	236 ,381	177,5814			
Obligations of U.S. states and municipalities	405	1,557 —			
Non-U.S. government debt	1,9478,1813	170,1926,485			
Corporate debt securities	1 9 ,390	14,23 287			
Asset-backed securities	3,320				