

Nuveen Core Equity Alpha Fund
Form N-CSR
March 09, 2012

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-CSR

**CERTIFIED SHAREHOLDER REPORT OF REGISTERED
MANAGEMENT INVESTMENT COMPANIES**

Investment Company Act file number 811-22003

Nuveen Core Equity Alpha Fund
(Exact name of registrant as specified in charter)

Nuveen Investments
333 West Wacker Drive
Chicago, IL 60606
(Address of principal executive offices) (Zip code)

Kevin J. McCarthy

Nuveen Investments

333 West Wacker Drive

Chicago, IL 60606
(Name and address of agent for service)

Registrant's telephone number, including area code: (312) 917-7700

Date of fiscal year end: December 31

Date of reporting period: December 31, 2011

Form N-CSR is to be used by management investment companies to file reports with the Commission not later than 10 days after the transmission to stockholders of any report that is required to be transmitted to stockholders under Rule 30e-1 under the Investment Company Act of 1940 (17 CFR 270.30e-1). The Commission may use the information provided on Form N-CSR in its regulatory, disclosure review, inspection, and policymaking roles.

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

A registrant is required to disclose the information specified by Form N-CSR, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-CSR unless the Form displays a currently valid Office of Management and Budget (OMB) control number. Please direct comments concerning the accuracy of the information collection burden estimate and any suggestions for reducing the burden to Secretary, Securities and Exchange Commission, 450 Fifth Street, NW, Washington, DC 20549-0609. The OMB has reviewed this collection of information under the clearance requirements of 44 U.S.C. ss. 3507.

ITEM 1. REPORTS TO SHAREHOLDERS

Closed-End Funds

Nuveen Investments

Closed-End Funds

Mathematically-driven investment strategy that seeks to generate excess risk-adjusted returns

Annual Report

December 31, 2011

**Nuveen Core Equity
Alpha Fund**

JCE

LIFE IS COMPLEX.

Nuveen makes things e-simple.

It only takes a minute to sign up for e-Reports. Once enrolled, you'll receive an e-mail as soon as your Nuveen Fund information is ready. No more waiting for delivery by regular mail. Just click on the link within the e-mail to see the report and save it on your computer if you wish.

Free e-Reports right to your e-mail!

www.investordelivery.com

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

If you receive your Nuveen Fund distributions and statements from your financial advisor or brokerage account.

OR

www.nuveen.com/accountaccess

If you receive your Nuveen Fund distributions and statements directly from Nuveen.

Table of Contents

Chairman's Letter to Shareholders	4
Portfolio Managers' Comments	5
Share Distribution and Price Information	9
Performance Overview	11
Report of Registered Independent Public Accounting Firm	12
Portfolio of Investments	13
Statement of Assets & Liabilities	23
Statement of Operations	24
Statement of Changes in Net Assets	25
Financial Highlights	26
Notes to Financial Statements	28
Board Members & Officers	38
Reinvest Automatically Easily and Conveniently	43
Glossary of Terms Used in this Report	45
Additional Fund Information	47

Chairman's
Letter to Shareholders

Dear Shareholders,

These are perplexing times for investors. The global economy continues to struggle. The solutions being implemented in the eurozone to deal with the debt crises of many of its member countries are not yet seen as sufficient by the financial markets. The political paralysis in the U.S. has prevented the compromises necessary to deal with the fiscal imbalance and government spending priorities. The efforts by individual consumers, governments and financial institutions to reduce their debts are increasing savings but reducing demand for the goods and services that drive employment. These developments are undermining the rebuilding of confidence by consumers, corporations and investors that is so essential to a resumption of economic growth.

Although it is painfully slow, progress is being made. In Europe, the turnover of a number of national governments reflects the realization by politicians and voters alike that leaders who practiced business as usual had to be replaced by leaders willing to face problems and accept the hard choices needed to resolve them. The recent coordinated efforts by central banks in the U.S. and Europe to provide liquidity to the largest European banks indicates that these monetary authorities are committed to facilitating a recovery in the European banking sector.

In the U.S., the failure of the congressionally appointed Debt Reduction Committee was a blow to those who hoped for a bipartisan effort to finally begin addressing the looming fiscal crisis. Nevertheless, Congress and the administration cannot ignore the issue for long. The Bush era tax cuts are scheduled to expire on December 31, 2012, and six months later the \$1.2 trillion of mandatory across-the-board spending cuts under the Budget Control Act of 2011 begin to go into effect. Any legislative modification would require bipartisan support and the prospects for a bipartisan solution are unclear. The impact of these two developments would be a mixed blessing: a meaningful reduction in the annual budget deficit at the cost of slowing the economic recovery.

It is in these particularly volatile markets that professional investment management is most important. Skillful investment teams who have experienced challenging markets and remain committed to their investment disciplines are critical to the success of an investor's long-term objectives. In fact, many long-term investment track records are built during challenging markets when managers are able to protect investors against these economic crosscurrents. Experienced investment teams know that volatile markets put a premium on companies and investment ideas that will weather the short-term volatility and that compelling values and opportunities are opened up when markets overreact to negative developments. By maintaining appropriate time horizons, diversification and relying on practiced investment teams, we believe that investors can achieve their long-term investment objectives.

As always, I encourage you to contact your financial consultant if you have any questions about your investment in a Nuveen Fund. On behalf of the other members of your Fund Board, we look forward to continuing to earn your trust in the months and years ahead.

Sincerely,

Robert P. Bremner
Chairman of the Board
February 22, 2012

Nuveen Investments

4

Portfolio Managers' Comments

Certain statements in this report are forward-looking statements. Discussions of specific investments are for illustration only and are not intended as recommendations of individual investments. The forward-looking statements and other views expressed herein are those of the portfolio managers as of the date of this report. Actual future results or occurrences may differ significantly from those anticipated in any forward-looking statements and the views expressed herein are subject to change at any time, due to numerous market and other factors. The Fund disclaims any obligation to update publicly or revise any forward-looking statements or views expressed herein.

Nuveen Core Equity Alpha Fund (JCE)

The equity portion of the Nuveen Core Equity Alpha Fund (JCE) is managed by INTECH Investment Management LLC (INTECH), an independently managed subsidiary of Janus Capital Group Inc. INTECH's Co-Chief Investment Officer Dr. E. Robert Fernholz, PhD, leads the portfolio management team that also includes Dr. Adrian Banner and Joseph Runnels, CFA.

The Fund also employs a call option strategy managed by Nuveen Asset Management, LLC, an affiliate of Nuveen Investments. Keith Hembre, CFA, David Friar and James Colon, CFA, oversee this program.

Here Dr. Fernholz and the other INTECH team members, along with the Nuveen Asset Management, LLC team, talk about their management strategies and the performance of the Fund for the twelve-month period ended December 31, 2011.

What were the general market conditions for the reporting period?

During this period, the U.S. economy continued to recover from the recent recession, but progress remained slow. The country's gross domestic product (GDP) grew in 2011, but at a slower rate than 2010 (1.7% vs. 3.0%), respectively. The unemployment picture showed some improvement, with the national unemployment rate standing at 8.5% as of December 2011, compared with 9.4% one year earlier. However, the housing market continued to be a weak spot. For the twelve months ended November 2011 (the most recent data available at the time this report was prepared), the average home price in the Standard & Poor's (S&P)/Case-Shiller Index lost 1.3%, with 18 of the 20 major metropolitan areas reporting lower values. In addition, the U.S. economic picture continued to be clouded by concerns about the European debt crisis and efforts to reduce the federal deficit.

In an attempt to improve the overall economic environment, the Federal Reserve (Fed) continued to hold the benchmark fed funds rate at the record low level of zero to 0.25% that it had established in December 2008. In January 2012 (following the close of this reporting period), the central bank stated that economic conditions would likely warrant maintaining this low rate through 2014. The Fed also implemented a program to extend the average maturity of its U.S. Treasury holdings by purchasing \$400 billion of these securities with maturities of six to thirty years and selling an equal amount of U.S. Treasury securities with maturities of three years or less. The goals of this program, which the Fed expects to complete by the end of June 2012, are to lower longer-term interest rates, support a stronger economic recovery and help ensure that inflation remains at levels consistent with the Fed's mandates of maximum employment and price stability.

The U.S. equity markets experienced periods of extreme volatility over the twelve-month reporting period, and posted mixed results for the full year. The Dow Jones Industrial Average gained 8.38% in 2011, and the broader S&P 500 Index ended the year up 2.11%. The NASDAQ Composite Index finished in the red, slipping 0.83% during 2011.

What key strategies were used to manage the Fund during this reporting period?

The investment objective of the Fund is to provide an attractive level of total return, primarily through long-term capital appreciation and secondarily through income and gains. The Fund invests in a portfolio of common stocks selected from among the stocks comprising the S&P 500 Index, using a proprietary mathematical process designed by INTECH, and also employs risk reduction techniques. Typically, the Fund's equity portfolio will hold 150 - 450 stocks included in the S&P 500 Index.

The Fund also employs an option strategy that seeks to enhance the Fund's risk-adjusted performance over time through a meaningful reduction in the volatility of the Fund's returns relative to the returns of the S&P 500 Index. The Fund expects to write call options on a custom basket of equities with a notional value of up to 50% of the value of the equity portfolio. During the period, the Fund's writing of call options on a basket of stocks, while investing in a portfolio of equities enhanced returns while foregoing some upside potential.

The goal of the Fund's equity portfolio is to produce long-term returns in excess of the S&P 500 Index with an equal or lesser amount of risk. The continued market uncertainty during this period reconfirmed the importance of disciplined risk management, which is at the heart of INTECH's investment process. The firm's core risk controls are focused on minimizing the volatility of excess returns relative to the S&P 500 Index, so that any excess return is as consistent as possible and any relative underperformance is limited in magnitude and duration. We believe this helps minimize tracking error vis a vis the S&P 500 Index during periods of short-term market instability.

INTECH seeks to generate excess returns by harnessing the natural volatility of stock prices to build a potentially more efficient portfolio than the S&P 500 Index. INTECH's investment process focuses solely on relative volatility and correlation. Specifically, the process searches for stocks with high relative volatility and low correlation, attempting to combine stocks in a manner that outperforms the benchmark. The actual positioning of the portfolio from a sector and stock specific standpoint is a residual of the process, and the rationale for over and underweighted positions is a function of stocks' relative volatility and correlation characteristics in aggregate.

Because INTECH's process does not forecast the direction of stock prices, equity holdings that are overweighted or underweighted relative to the index are expected to beat the benchmark in approximately equal proportions over time.

While INTECH does not employ fundamental analysis in the management of the equity portfolio, fundamentals can have a significant impact on the general direction of the market. As stock prices moved naturally throughout the period, we continued to implement our mathematical process in a disciplined and precise manner in an effort to

Past performance is not predictive of future results. Current performance may be higher or lower than the data shown. Returns do not reflect the deduction of taxes that shareholders may have to pay on Fund distributions or upon the sale of Fund shares.

For additional information, see the Performance Overview page in this report.

* Since inception returns are from 3/27/07.

** Refer to Glossary of Terms Used in this Report for definitions.

maintain a more efficient portfolio than the S&P 500 Index, without increasing relative risk. While other factors may influence performance over the short term, we believe that the consistent application of our process will help long-term performance.

The Fund also entered into futures contracts, buying equity index futures to gain equity market exposure where the portfolio holds cash.

How did the Fund perform over this twelve-month period?

The performance of the Fund, as well as for comparative indexes, is presented in the accompanying table.

Average Annual Total Returns on Net Asset Value

For periods ended 12/31/11

Fund	1-Year	Since Inception*
JCE	6.70%	2.09%
S&P 500 Index**	2.11%	-0.50%
Comparative Benchmark**	3.95%	0.47%

For the twelve-month period ended December 31, 2011, the Fund outperformed both the S&P 500 Stock Index and its comparative benchmark.

INTECH's investment process focuses solely on relative volatility and correlation and seeks to minimize tracking error for a target level of excess return. In general, the process searches for stocks with high relative volatility and low correlation attempting to combine stocks in a manner in which the opportunity to outperform the benchmark index exists. Within specific risk and turnover controls, INTECH continues to structure the portfolio to attempt to overweight stocks with high relative volatility and underweight stocks with low relative volatility, while keeping tracking error low.

Over the course of 2011, global stock markets were volatile and unpredictable. INTECH's disciplined investment process is engineered to work in varying market environments, and adapts to changes over the long term. INTECH's relative performance is typically impacted by the market's relative volatility structure and size (market diversity).

Relative volatility, or how stocks move relative to each other or a benchmark, exhibited greater stability in 2011, which tends to be conducive to INTECH's process. Relative volatility increased in the third quarter,

but remained well below the high levels observed during the Global Financial Crisis. The fourth quarter saw relative volatility levels similar to the third quarter, but higher than the first half of the year.

Market diversity, or how capital is distributed among stocks throughout a market or index, decreased overall in 2011. Typically, this can be a headwind for INTECH's relative performance. In particular, a steady diversity environment in the first half was followed by a sharp decline in the third quarter. However, there was a modest increase in market diversity in the fourth quarter relative to the third quarter. Therefore, despite the decline in diversity over the year, there was sufficient market diversity over the course of the period for the portfolio to capture enough relative volatility to outperform the benchmark.

Nuveen Investments

7

Relative volatility is stable over time, and INTECH's investment process is engineered to gradually adapt to changes in the relative volatility structure through time. Changes in diversity can act as a short-term headwind or tailwind, but typically have a neutral impact on relative performance over the long term. We are confident in our ability to continue to exploit volatility as an alpha source and believe conditions remain conducive to INTECH's investment process in the longer term.

RISK CONSIDERATIONS

Fund shares are not guaranteed or endorsed by any bank or other insured depository institution, and are not federally insured by the Federal Deposit Insurance Corporation. Past performance is no guarantee of future results. Fund common shares are subject to a variety of risks, including:

Investment Risk. The possible loss of the entire principal amount that you invest.

Price Risk. Shares of closed-end investment companies like the Fund frequently trade at a discount to their net asset value (NAV). Your common shares at any point in time may be worth less than your original investment, even after taking into account the reinvestment of Fund dividends and distributions.

Tax Risk. The tax treatment of Fund distributions may be affected by new IRS interpretations of the Internal Revenue Code and future changes in tax laws and regulations. This is particularly true for funds employing a managed distribution program.

Common Stock Risk. Common stock returns often have experienced significant volatility.

Call Option Risks. The value of call options sold (written) by the Fund will fluctuate. The Fund may not participate in any appreciation of its equity portfolio as fully as it would if the Fund did not sell call options. In addition, the Fund will continue to bear the risk of declines in the value of the equity portfolio.

Derivatives Strategy Risk. Derivative securities, such as calls, puts, warrants, swaps and forwards, carry risks different from, and possibly greater than, the risks associated with the underlying investments.

Investment Process Risk. INTECH uses a proprietary mathematical process that strives to identify common stocks with high volatility relative to the index and low correlation to one another. The use of this process may not produce the expected results.

Share Distribution and
Price Information

Distribution Information

The following information regarding the Fund's distributions is current as of December 31, 2011, and likely will vary over time based on the Fund's investment activities and portfolio investment value changes.

During the twelve-month reporting period, the Fund did not make any changes to its quarterly distribution to shareholders. Some of the factors affecting the amount and composition of these distributions are summarized below.

The Fund has a managed distribution program. The goal of this program is to provide shareholders with relatively consistent and predictable cash flow by systematically converting the Fund's expected long-term return potential into regular distributions. As a result, regular distributions throughout the year are likely to include a portion of expected long-term gains (both realized and unrealized), along with net investment income.

Important points to understand about a managed distribution program are:

- The Fund seeks to establish a relatively stable distribution rate that roughly corresponds to the projected total return from its investment strategy over an extended period of time. However, you should not draw any conclusions about the Fund's past or future investment performance from its current distribution rate.
- Actual returns will differ from projected long-term returns (and therefore the Fund's distribution rate), at least over shorter time periods. Over a specific timeframe, the difference between actual returns and total distributions will be reflected in an increasing (returns exceed distributions) or a decreasing (distributions exceed returns) Fund net asset value.
- Each distribution is expected to be paid from some or all of the following sources:
 - net investment income (regular interest and dividends),
 - realized capital gains, and
 - unrealized gains, or, in certain cases, a return of principal (non-taxable distributions).
- A non-taxable distribution is a payment of a portion of the Fund's capital. When the Fund's returns exceed distributions, it may represent portfolio gains generated, but not realized as a taxable capital gain. In periods when the Fund's returns fall short of distributions, the shortfall will represent a portion of your original principal, unless the shortfall is offset during other time periods over the life of your investment (previous or subsequent) when the Fund's total return exceeds distributions.

- Because distribution source estimates are updated during the year based on the Fund's performance and forecast for its current fiscal year (which is the calendar year for the Fund), estimates on the nature of your distributions provided at the time the distributions are paid may differ from both the tax information reported to you in your Fund's IRS Form 1099 statement provided at year end, as well as the ultimate economic sources of distributions over the life of your investment.

The following table provides estimated information regarding the Fund's distributions and total return performance for the fiscal year ended December 31, 2011. This information is intended to help you better understand whether the Fund's returns for the specified time period were sufficient to meet the Fund's distributions.

As of 12/31/11	JCE
Inception date	3/27/07
Fiscal year (calendar year) ended December 31, 2011:	
Per share distribution:	
From net investment income	\$ 1.08
From long-term capital gains	0.00
From short-term capital gains	0.00
Return of capital	0.00
Total per share distribution	\$ 1.08
Distribution rate on NAV	7.78%
Average annual total returns:	
1-Year on NAV	6.70%
Since inception on NAV	2.09%

Share Repurchases and Price Information

As of December 31, 2011, and since the inception of the Fund's repurchase program, the Fund has cumulatively repurchased and retired its outstanding shares as shown in the accompanying table.

Shares Repurchased and Retired	% of Outstanding Shares
449,800	2.8%

During the twelve-month reporting period, the Fund repurchased and retired its shares at a weighted average price and a weighted average discount per share as shown in the accompanying table.

Shares Repurchased and Retired	Weighted Average Price Per Share Repurchased and Retired	Weighted Average Discount Per Share Repurchased and Retired
5,000	\$ 11.29	15.92%

As of December 31, 2011, the Fund was trading at a -10.16% discount to its common share NAV, compared with an average discount of -6.46% for the entire twelve-month period.

JCE

Performance

OVERVIEW

(Unaudited)

Nuveen Core Equity Alpha Fund

December 31, 2011

Portfolio Allocation (as a % of total investments)^{2, 3}

2010-2011 Distributions Per Share

Share Price Performance Weekly Closing Price

Refer to Glossary of Terms used in this Report for further definition of the terms used within this Fund's Performance Overview page.

1 Current Distribution Rate is based on the Fund's current annualized quarterly distribution divided by the Fund's current market price. The Fund's quarterly distributions to its shareholders may be comprised of ordinary income, net realized capital gains and, if at the end of the calendar year the Fund's cumulative net ordinary income and net realized gains are less than the amount of the Fund's distributions, a return of capital for tax purposes.

2 Excluding investments in derivatives.

3 Holdings are subject to change.

4 Rounds to less than 0.1%.

Fund Snapshot

Share Price	\$ 12.47
-------------	----------

Net Asset Value (NAV)	\$	13.88
Premium/(Discount) to NAV		-10.16%
Current Distribution Rate ¹		8.66%
Net Assets (\$000)	\$	222,461

Average Annual Total Returns

(Inception 3/27/07)

	On Share Price	On NAV
1-Year	3.11%	6.70%
Since Inception	-0.22%	2.09%

Portfolio Composition

(as a % of total investments)^{2, 3}

Oil, Gas, & Consumable Fuels	7.6%
Food Products	6.4%
Health Care Providers & Services	5.3%
Media	4.6%
Multi-Utilities	4.4%
Computers & Peripherals	4.2%
Specialty Retail	4.0%
Hotels, Restaurants & Leisure	3.8%
Machinery	3.5%
Real Estate Investment Trust	3.3%
IT Services	3.3%
Tobacco	3.3%
Electric Utilities	2.9%
Internet Software & Services	2.8%
Pharmaceuticals	2.6%
Energy Equipment & Services	2.3%
Insurance	2.1%
Health Care Equipment & Supplies	1.8%
Personal Products	1.7%
Diversified Financial Services	1.6%
Gas Utilities	1.6%
Chemicals	1.5%
Beverages	1.5%
Aerospace & Defense	1.4%
Air Freight & Logistics	1.3%
Short-Term Investments	2.4%
Other	18.8%

Nuveen Investments

Report of INDEPENDENT REGISTERED

PUBLIC ACCOUNTING FIRM

**To the Board of Trustees and Shareholders of
Nuveen Core Equity Alpha Fund:**

In our opinion, the accompanying statement of assets and liabilities, including the portfolio of investments, and the related statements of operations and of changes in net assets and the financial highlights present fairly, in all material respects, the financial position of Nuveen Core Equity Alpha Fund (hereinafter referred to as the "Fund") at December 31, 2011, the results of its operations for the year ended, the changes in its net assets for each of two years in the period then ended, and the financial highlights for each of the periods presented, in conformity with accounting principles generally accepted in the United States of America. These financial statements and financial highlights (hereafter referred to as "financial statements") are the responsibility of the Fund's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits, which included confirmation of securities at December 31, 2011 by correspondence with the custodian and brokers, provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP

Chicago, IL
February 28, 2012

Nuveen Investments
12

JCE

Nuveen Core Equity Alpha Fund

Portfolio of INVESTMENTS

December 31, 2011

Shares	Description (1)	Value
	Common Stocks 98.7%	
	Aerospace & Defense 1.4%	
1,500	Boeing Company	\$ 110,025
800	General Dynamics Corporation	53,128
1,400	Goodrich Corporation	173,180
3,000	Honeywell International Inc.	163,050
2,200	L-3 Communications Holdings, Inc.	146,696
5,400	Lockheed Martin Corporation	436,860
9,900	Northrop Grumman Corporation	578,952
3,800	Precision Castparts Corporation	626,202
5,100	Raytheon Company	246,738
6,900	Rockwell Collins, Inc.	382,053
2,600	United Technologies Corporation	190,034
	Total Aerospace & Defense	3,106,918
	Air Freight & Logistics 1.3%	
21,700	C.H. Robinson Worldwide, Inc.	1,514,226
3,900	Expeditors International of Washington, Inc.	159,744
15,300	FedEx Corporation	1,277,703
	Total Air Freight & Logistics	2,951,673
	Auto Components 0.1%	
1,700	BorgWarner Inc., (2)	108,358
7,300	Goodyear Tire & Rubber Company, (2)	103,441
	Total Auto Components	211,799
	Automobiles 0.0%	
1,500	Harley-Davidson, Inc.	58,305
	Beverages 1.5%	
23,700	Beam Inc.	1,214,151
4,700	Brown-Forman Corporation	378,397
21,300	Coca Cola Enterprises Inc.	549,114
12,700	Coca-Cola Company	888,619
7,800	Dr. Pepper Snapple Group	307,944
400	PepsiCo, Inc.	26,540
	Total Beverages	3,364,765
	Biotechnology 0.8%	
14,700	Biogen Idec Inc., (2)	1,617,735
1,300	Celgene Corporation, (2)	87,880
2,400	Gilead Sciences, Inc., (2)	98,232

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

	Total Biotechnology	1,803,847
	Capital Markets 0.8%	
10,100	Ameriprise Financial, Inc.	501,364
5,100	E*Trade Group Inc., (2)	40,596
9,400	Franklin Resources, Inc.	902,964
13,700	Morgan Stanley	207,281

Nuveen Investments

13

JCE

Nuveen Core Equity Alpha Fund (continued)

Portfolio of INVESTMENTS December 31, 2011

Shares	Description (1)	Value
	Capital Markets (continued)	
800	T. Rowe Price Group Inc.	\$ 45,560
	Total Capital Markets	1,697,765
	Chemicals 1.6%	
37,700	E.I. Du Pont de Nemours and Company	1,725,906
31,600	Eastman Chemical Company	1,234,296
600	Mosaic Company	30,258
5,200	Sherwin-Williams Company	464,204
	Total Chemicals	3,454,664
	Commercial Banks 0.9%	
15,000	BB&T Corporation	377,550
26,100	Fifth Third Bancorp.	331,992
8,100	First Horizon National Corporation	64,800
24,800	Huntington BancShares Inc.	136,152
15,000	KeyCorp.	115,350
3,600	M&T Bank Corporation	274,824
23,000	Regions Financial Corporation	98,900
11,500	U.S. Bancorp	311,075
3,550	Wells Fargo & Company	97,838
16,300	Zions Bancorporation	265,364
	Total Commercial Banks	2,073,845
	Commercial Services & Supplies 0.9%	
3,000	Cintas Corporation	104,430
44,800	Iron Mountain Inc.	1,379,840
3,400	R.R. Donnelley & Sons Company	49,062
3,900	Stericycle Inc., (2)	303,888
8,000	Waste Management, Inc.	261,680
	Total Commercial Services & Supplies	2,098,900
	Communications Equipment 0.5%	
600	F5 Networks, Inc., (2)	63,672
1,625	Motorola Mobility Holdings Inc., (2)	63,050
13,928	Motorola Solutions Inc.	644,727
6,800	QUALCOMM, Inc.	371,960
	Total Communications Equipment	1,143,409
	Computers & Peripherals 4.2%	
22,300	Apple, Inc., (2)	9,031,499
6,700	Dell Inc., (2)	98,021
10,000	EMC Corporation, (2)	215,400
1,700	Lexmark International, Inc., Class A	56,219
	Total Computers & Peripherals	9,401,139

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

	Construction & Engineering	0.0%
1,000	Fluor Corporation	50,250
	Construction Materials	0.0%
1,700	Vulcan Materials Company	66,895
	Consumer Finance	0.6%
7,500	American Express Company	353,775
7,900	Capital One Financial Corporation	334,091
25,600	Discover Financial Services	614,400
7,100	SLM Corporation	95,140
	Total Consumer Finance	1,397,406

Nuveen Investments

14

Shares	Description (1)	Value
	Containers & Packaging 0.1%	
4,600	Ball Corporation	\$ 164,266
	Distributors 0.1%	
4,200	Genuine Parts Company	257,040
	Diversified Consumer Services 0.6%	
5,700	Apollo Group, Inc., (2)	307,059
13,600	Devry, Inc.	523,056
25,900	H & R Block Inc.	422,947
	Total Diversified Consumer Services	1,253,062
	Diversified Financial Services 1.6%	
25,200	Bank of America Corporation	140,112
3,500	Citigroup Inc.	92,085
10,205	JP Morgan Chase & Co.	339,316
57,200	Leucadia National Corporation	1,300,728
24,700	Moody's Corporation	831,896
14,700	NASDAQ Stock Market, Inc., (2)	360,297
20,900	New York Stock Exchange Euronext	545,490
	Total Diversified Financial Services	3,609,924
	Diversified Telecommunication Services 1.3%	
8,500	AT&T Inc.	257,040
63,570	CenturyLink Inc.	2,364,804
20,500	Windstream Corporation	240,670
	Total Diversified Telecommunication Services	2,862,514
	Electric Utilities 2.9%	
12,700	American Electric Power Company, Inc.	524,637
39,200	Duke Energy Corporation	862,400
4,200	Exelon Corporation	182,154
27,200	FirstEnergy Corp.	1,204,960
1,500	NextEra Energy Inc.	91,320
17,200	Northeast Utilities	620,404
10,700	Pepco Holdings, Inc.	217,210
12,700	Pinnacle West Capital Corporation	611,886
12,900	PPL Corporation	379,518
20,300	Progress Energy, Inc.	1,137,206
14,300	Southern Company	661,947
	Total Electric Utilities	6,493,642
	Electrical Equipment 1.2%	
1,900	Cooper Industries Inc.	102,885
34,500	Rockwell Automation, Inc.	2,531,265
	Total Electrical Equipment	2,634,150
	Electronic Equipment & Instruments 0.2%	
4,000	Jabil Circuit Inc.	78,640
8,300	TE Connectivity Limited	255,723
	Total Electronic Equipment & Instruments	334,363
	Energy Equipment & Services 2.3%	
9,800	Baker Hughes Incorporated	476,672

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

6,400	Halliburton Company	220,864
2,400	Helmerich & Payne Inc.	140,064
3,000	Nabors Industries Inc., (2)	52,020
38,500	National-Oilwell Varco Inc.	2,617,615
4,800	Noble Corporation	145,056

Nuveen Investments

15

JCE

Nuveen Core Equity Alpha Fund (continued)

Portfolio of INVESTMENTS December 31, 2011

Shares	Description (1)	Value
	Energy Equipment & Services (continued)	
22,642	Schlumberger Limited	\$ 1,546,675
	Total Energy Equipment & Services	5,198,966
	Food & Staples Retailing 1.1%	
4,200	Costco Wholesale Corporation	349,944
8,900	CVS Caremark Corporation	362,942
2,500	Kroger Co.	60,550
16,900	SUPERVALU INC.	137,228
6,100	Sysco Corporation	178,913
35,900	Walgreen Co.	1,186,854
1,500	Whole Foods Market, Inc.	104,370
	Total Food & Staples Retailing	2,380,801
	Food Products 6.5%	
2,800	Archer-Daniels-Midland Company	80,080
15,400	ConAgra Foods, Inc.	406,560
53,400	Dean Foods Company, (2)	598,080
60,300	General Mills, Inc.	2,436,723
17,000	H.J. Heinz Company	918,680
14,200	Hershey Foods Corporation	877,276
20,000	Hormel Foods Corporation	585,800
31,200	JM Smucker Company	2,438,904
13,100	Kellogg Company	662,467
20,400	Kraft Foods Inc.	762,144
7,300	McCormick & Company, Incorporated	368,066
16,900	Mead Johnson Nutrition Company, Class A Shares	1,161,537
168,900	Sara Lee Corporation	3,195,588
700	Tyson Foods, Inc., Class A	14,448
	Total Food Products	14,506,353
	Gas Utilities 1.6%	
2,849	AGL Resources Inc.	120,399
39,600	ONEOK, Inc.	3,432,924
	Total Gas Utilities	3,553,323
	Health Care Equipment & Supplies 1.9%	
9,400	Baxter International, Inc.	465,112
48,500	Boston Scientific Corporation, (2)	258,990
2,000	C. R. Bard, Inc.	171,000
1,300	CareFusion Corporation, (2)	33,033
13,400	Covidien PLC	603,134
1,500	DENTSPLY International Inc.	52,485
2,400		169,680

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

Edwards Lifesciences Corporation,
(2)

1,300	Intuitive Surgical, Inc., (2)	601,913
22,900	Saint Jude Medical Inc.	785,470
10,100	Stryker Corporation	502,071
600	Varian Medical Systems, Inc., (2)	40,278
8,600	Zimmer Holdings, Inc.	459,412
	Total Health Care Equipment & Supplies	4,142,578
	Health Care Providers & Services	5.3%
17,500	Aetna Inc.	738,325
59,100	AmerisourceBergen Corporation	2,197,929
78,500	Cardinal Health, Inc.	3,187,885
13,200	CIGNA Corporation	554,400
43,800	Coventry Health Care, Inc., (2)	1,330,206
10,300	Humana Inc.	902,383
21,000	McKesson HBOC Inc.	1,636,110

Nuveen Investments

16

Shares	Description (1)	Value
	Health Care Providers & Services (continued)	
16,400	Tenet Healthcare Corporation, (2)	\$ 84,132
16,900	UnitedHealth Group Incorporated	856,492
5,200	Wellpoint Inc.	344,500
	Total Health Care Providers & Services	11,832,362
	Health Care Technology 0.5%	
16,500	Cerner Corporation, (2)	1,010,625
	Hotels, Restaurants & Leisure 3.8%	
200	Chipotle Mexican Grill, (2)	67,548
800	Darden Restaurants, Inc.	36,464
18,400	McDonald's Corporation	1,846,072
88,200	Starbucks Corporation	4,058,082
400	Wynn Resorts Ltd	44,196
40,900	YUM! Brands, Inc.	2,413,509
	Total Hotels, Restaurants & Leisure	8,465,871
	Household Durables 0.0%	
11,600	Pulte Corporation, (2)	73,196
	Household Products 0.5%	
6,700	Colgate-Palmolive Company	619,013
7,100	Kimberly-Clark Corporation	522,276
	Total Household Products	1,141,289
	Independent Power Producers & Energy Traders 0.7%	
33,200	Constellation Energy Group	1,317,044
16,600	NRG Energy Inc., (2)	300,792
	Total Independent Power Producers & Energy Traders	1,617,836
	Industrial Conglomerates 0.4%	
3,900	Danaher Corporation	183,456
27,500	General Electric Company	492,525
1,900	Tyco International Ltd.	88,749
	Total Industrial Conglomerates	764,730
	Insurance 2.2%	
3,700	Ace Limited	259,444
900	AFLAC Incorporated	38,934
34,900	Aon Corporation	1,633,320
1,000	Assurant Inc.	41,060
4,100	Chubb Corporation	283,802
33,400	Genworth Financial Inc., Class A, (2)	218,770
5,000	Hartford Financial Services Group, Inc.	81,250
8,900	Marsh & McLennan Companies, Inc.	281,418
35,800	Progressive Corporation	698,458
1,900	Prudential Financial, Inc.	95,228
1,950	Torchmark Corporation	84,611
15,000	Travelers Companies, Inc.	887,550
6,200	Unum Group	130,634
4,400	XL Capital Ltd, Class A	86,988
	Total Insurance	4,821,467

Internet & Catalog Retail 1.2%		
4,100	Amazon.com, Inc., (2)	709,710
2,150	Expedia, Inc.	62,393
3,800	Priceline.com Incorporated, (2)	1,777,298

Nuveen Investments

17

JCE

Nuveen Core Equity Alpha Fund (continued)

Portfolio of INVESTMENTS December 31, 2011

Shares	Description (1)	Value
	Internet & Catalog Retail (continued)	
2,150	TripAdvisor Inc., (2)	\$ 54,202
	Total Internet & Catalog Retail	2,603,603
	Internet Software & Services 2.8%	
20,300	eBay Inc., (2)	615,699
8,800	Google Inc., Class A, (2)	5,683,920
	Total Internet Software & Services	6,299,619
	IT Services 3.4%	
10,500	Accenture Limited	558,915
10,000	Automatic Data Processing, Inc.	540,100
30,900	Cognizant Technology Solutions Corporation, Class A, (2)	1,987,179
5,400	Fidelity National Information Services	143,586
12,100	International Business Machines Corporation (IBM)	2,224,948
2,200	MasterCard, Inc.	820,204
14,400	Paychex, Inc.	433,584
5,100	Teradata Corporation, (2)	247,401
4,700	Total System Services Inc.	91,932
4,200	Visa Inc.	426,426
	Total IT Services	7,474,275
	Leisure Equipment & Products 0.1%	
10,100	Mattel, Inc.	280,376
	Life Sciences Tools & Services 0.9%	
41,400	Agilent Technologies, Inc., (2)	1,446,102
2,300	Thermo Fisher Scientific, Inc., (2)	103,431
6,700	Waters Corporation, (2)	496,135
	Total Life Sciences Tools & Services	2,045,668
	Machinery 3.6%	
27,300	Caterpillar Inc.	2,473,380
500	Cummins Inc.	44,010
1,300	Deere & Company	100,555
800	Dover Corporation	46,440
54,800	Eaton Corporation	2,385,444
1,300	Joy Global Inc.	97,461
11,100	Pall Corporation	634,365
5,600	Parker Hannifin Corporation	427,000
24,287	Stanley Black & Decker Inc.	1,641,801
1,300	Xylem Inc.	33,397
	Total Machinery	7,883,853
	Media 4.6%	

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

43,300	Cablevision Systems Corporation	615,726
57,700	CBS Corporation, Class B	1,565,978
22,100	Comcast Corporation, Class A	523,991
120,900	DIRECTV Group, Inc., (2)	5,169,684
6,900	Gannett Company Inc.	92,253
11,400	McGraw-Hill Companies, Inc.	512,658
1,200	Omnicom Group, Inc.	53,496
4,900	Time Warner Cable, Class A	311,493
7,200	Time Warner Inc.	260,208
14,900	Viacom Inc., Class B	676,609
1,300	Washington Post Company	489,853
	Total Media	10,271,949

Nuveen Investments

18

Shares	Description (1)	Value
	Metals & Mining 0.1%	
1,300	Cliffs Natural Resources Inc.	\$ 81,055
2,900	Freeport-McMoRan Copper & Gold, Inc.	106,691
1,100	Newmont Mining Corporation	66,011
	Total Metals & Mining	253,757
	Multiline Retail 1.0%	
10,400	Big Lots, Inc., (2)	392,704
2,000	Dollar Tree Stores Inc., (2)	166,220
10,400	Family Dollar Stores, Inc.	599,664
6,200	J.C. Penney Company, Inc.	217,930
15,700	Macy's, Inc.	505,226
1,900	Nordstrom, Inc.	94,449
7,000	Sears Holding Corporation, (2)	222,460
1,200	Target Corporation	61,464
	Total Multiline Retail	2,260,117
	Multi-Utilities 4.4%	
13,200	Ameren Corporation	437,316
94,000	CenterPoint Energy, Inc.	1,888,460
38,900	CMS Energy Corporation	858,912
22,100	Consolidated Edison, Inc.	1,370,863
34,300	Dominion Resources, Inc.	1,820,644
9,600	DTE Energy Company	522,720
71,200	NiSource Inc.	1,695,272
5,100	Public Service Enterprise Group Incorporated	168,351
2,900	Scana Corporation	130,674
22,800	Wisconsin Energy Corporation	797,088
5,800	Xcel Energy, Inc.	160,312
	Total Multi-Utilities	9,850,612
	Oil, Gas, & Consumable Fuels 7.7%	
5,400	Alpha Natural Resources Inc., (2)	110,322
12,600	Cabot Oil & Gas Corporation	956,340
64,300	Chesapeake Energy Corporation	1,433,247
18,200	Chevron Corporation	1,936,480
10,100	ConocoPhillips	735,987
1,600	CONSOL Energy Inc.	58,720
5,100	Devon Energy Corporation	316,200
49,900	El Paso Corporation	1,325,843
12,100	EQT Corporation	662,959
33,500	Exxon Mobil Corporation	2,839,460
9,100	Hess Corporation	516,880
52,800	Marathon Oil Corporation	1,545,456
29,450	Marathon Petroleum Corporation	980,391
12,000	Pioneer Natural Resources Company	1,073,760
1,100	Southwestern Energy Company, (2)	35,134
11,900	Tesoro Corporation, (2)	277,984
2,000	Valero Energy Corporation	42,100
71,300	Williams Companies, Inc.	2,354,326

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

	Total Oil, Gas, & Consumable Fuels	17,201,589
	Paper & Forest Products 0.3%	
20,200	MeadWestvaco Corporation	604,990
	Personal Products 1.7%	
34,100	A Estee Lauder Companies Inc., Class	3,830,112

Nuveen Investments

19

JCE

Nuveen Core Equity Alpha Fund (continued)

Portfolio of INVESTMENTS December 31, 2011

Shares	Description (1)	Value
	Pharmaceuticals 2.6%	
7,400	Abbott Laboratories	\$ 416,102
7,300	Allergan, Inc.	640,502
31,500	Bristol-Myers Squibb Company	1,110,060
17,400	Eli Lilly and Company	723,144
17,200	Forest Laboratories, Inc., (2)	520,472
10,600	Johnson & Johnson	695,148
18,032	Merck & Company Inc.	679,806
1,500	Perrigo Company	145,950
14,500	Watson Pharmaceuticals Inc., (2)	874,930
	Total Pharmaceuticals	5,806,114
	Professional Services 0.1%	
5,000	Robert Half International Inc.	142,300
	Real Estate Investment Trust 3.4%	
30,400	American Tower Corporation, (2)	1,824,304
11,400	AvalonBay Communities, Inc.	1,488,840
8,400	Boston Properties, Inc.	836,640
13,300	Equity Residential	758,499
1,700	Health Care REIT, Inc.	92,701
6,800	Public Storage, Inc.	914,328
6,900	Simon Property Group, Inc.	889,686
36,000	Weyerhaeuser Company	672,120
	Total Real Estate Investment Trust	7,477,118
	Real Estate Management & Development 0.1%	
6,700	CBRE Group Inc., (2)	101,974
	Road & Rail 0.5%	
31,600	CSX Corporation	665,496
4,300	Norfolk Southern Corporation	313,298
1,400	Ryder System, Inc.	74,396
	Total Road & Rail	1,053,190
	Semiconductors & Equipment 1.0%	
1,800	First Solar Inc., (2)	60,768
4,100	Intel Corporation	99,425
4,600	Teradyne Inc., (2)	62,698
69,800	Texas Instruments Incorporated	2,031,878
	Total Semiconductors & Equipment	2,254,769
	Software 1.2%	
22,600	Electronic Arts Inc. (EA), (2)	465,560
27,400	Intuit, Inc.	1,440,966
26,900	Microsoft Corporation	698,324
2,900	Oracle Corporation	74,385
400	Salesforce.com, Inc., (2)	40,584

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

	Total Software	2,719,819
	Specialty Retail 4.1%	
3,400	Abercrombie & Fitch Co., Class A	166,056
8,100	AutoNation Inc., (2)	298,647
5,100	AutoZone, Inc., (2)	1,657,347
9,100	Bed Bath and Beyond Inc., (2)	527,527
6,000	CarMax, Inc., (2)	182,880
11,700	GameStop Corporation, (2)	282,321
1,900	Home Depot, Inc.	79,876
23,000	Limited Brands, Inc.	928,050

Nuveen Investments

20

Shares	Description (1)	Value
	Specialty Retail (continued)	
316	Orchard Supply Hardware Stores Corporation, (2), (4)	\$ 765
1,900	O'Reilly Automotive Inc., (2)	151,905
20,400	Ross Stores, Inc.	969,612
5,200	Tiffany & Co.	344,552
53,900	TJX Companies, Inc.	3,479,245
	Total Specialty Retail	9,068,783
	Textiles, Apparel & Luxury Goods 0.7%	
6,100	Coach, Inc.	372,344
1,700	Nike, Inc., Class B	163,829
200	Ralph Lauren Corporation	27,616
7,500	VF Corporation	952,425
	Total Textiles, Apparel & Luxury Goods	1,516,214
	Thriffs & Mortgage Finance 0.0%	
3,700	People's United Financial, Inc.	47,545
	Tobacco 3.3%	
50,600	Altria Group, Inc.	1,500,290
7,200	Lorillard Inc.	820,800
26,600	Philip Morris International	2,087,568
72,000	Reynolds American Inc.	2,982,240
	Total Tobacco	7,390,898
	Trading Companies & Distributors 0.5%	
8,900	Fastenal Company	388,129
3,900	W.W. Grainger, Inc.	730,041
	Total Trading Companies & Distributors	1,118,170
	Wireless Telecommunication Services 0.0%	
20,400	Sprint Nextel Corporation, (2)	47,736
	Total Common Stocks (cost \$187,432,321)	219,605,088

Shares	Description (1)	Coupon	Value		
	Preferred Stocks 0.0%				
	Building Products 0.0%				
316	Orchard Supply Hardware Stores Corporation, (2), (4)	0.000%	\$ 765		
	Total Preferred Stocks (cost \$1,671)		765		
Principal Amount (000)	Description (1)	Coupon	Maturity	Ratings (3)	Value
	Short-Term Investments 2.4%				
	U.S. Government and Agency Obligations 0.9%				
\$ 2,000		0.000%	3/01/12	AAA	\$ 1,999,933

	U.S. Treasury Bills, (5)			
	Repurchase Agreements	1.5%		
3,332	Repurchase Agreement with State Street Bank, dated 12/30/11, repurchase price \$3,331,943, collateralized by \$3,360,000 U.S. Treasury Notes, 1.000%, 8/31/16 value \$3,402,000	0.010%	1/03/12 N/A	3,331,939
	Total Short-Term Investments			
5,332	(cost \$5,331,872)			5,331,872
	Total Investments			
	(cost \$192,765,864)			
	101.1%			224,937,725
	Other Assets			
	Less Liabilities			
	(1.1)% (6)			(2,476,676)
	Net Assets	100%		\$ 222,461,049

Nuveen Investments

JCE

Nuveen Core Equity Alpha Fund (continued)

Portfolio of INVESTMENTS December 31, 2011

Investments in Derivatives at December 31, 2011

Call Options Written outstanding:

Number of Contracts	Type	Notional Amount (7)	Expiration Date	Strike Price	Value (6)
	Call Options (0.3)%				
	Custom Basket				
(404,680)	2 NASDAQ	\$ (40,467,958)	1/02/12	\$ 104.0	\$ (98,216)
	Custom Basket				
(390,655)	4 NASDAQ	(39,065,516)	1/25/12	104.0	(755,527)
	Total Call Options Written (premiums received				
(795,335)	\$965,140)	\$ (79,533,474)			\$ (853,743)

Futures Contracts outstanding:

Type	Contract Position	Number of Contracts	Contract Expiration	Value	Unrealized Appreciation (Depreciation) (6)
S&P 500 Index	Long	125	3/12	\$ 7,828,750	\$ 146,188

For Fund portfolio compliance purposes, the Fund's industry classifications refer to any one or more of the industry sub-classifications used by one or more widely recognized market indexes or ratings group indexes, and/or as defined by Fund management. This definition may not apply for purposes of this report, which may combine industry sub-classifications into sectors for reporting ease.

(1) All percentages shown in the Portfolio of Investments are based on net assets.

(2) Non-income producing; issuer has not declared a dividend within the past twelve months.

(3) Ratings (not covered by the report of independent registered public accounting firm): Using the highest of Standard & Poor's Group ("Standard & Poor's"), Moody's Investors Service, Inc. ("Moody's") or Fitch, Inc. ("Fitch") rating. Ratings below BBB by Standard & Poor's, Baa by Moody's or BBB by Fitch are considered to be below investment grade. Holdings designated N/R are not rated by any of these national rating agencies.

(4) Investment valued at fair value using methods determined in good faith by, or at the discretion of, the Board of Trustees. For fair value measurement disclosure purposes, investment categorized as Level 3.

See Notes to Financial Statements, Footnote 1 General Information and Significant Accounting Policies, Investment Valuation for more information.

(5) Investment, or portion of investment, has been pledged to collateralize the net payment obligations for investments in derivatives.

(6) Other Assets Less Liabilities includes Value and the Unrealized Appreciation (Depreciation) of derivative instruments as noted within Investments in Derivatives at December 31, 2011.

(7) For disclosure purposes, Notional Amount is calculated by multiplying the Number of Contracts by \$100.

N/A Not applicable.

See accompanying notes to financial statements.

Nuveen Investments

22

Statement of

ASSETS & LIABILITIES

December 31, 2011

Assets

Investments, at value (cost \$192,765,864)	\$ 224,937,725
Receivable for dividends	314,187
Other assets	11,318
Total assets	225,263,230

Liabilities

Call options written, at value (premium received \$965,140)	853,743
Cash overdraft	1,647,934
Variation margin on futures contracts	30,000
Accrued expenses:	
Management fees	174,432
Other	96,072
Total liabilities	2,802,181
Net assets	\$ 222,461,049
Shares outstanding	16,021,686
Net asset value per share outstanding	\$ 13.88

Net assets consist of:

Shares, \$.01 par value per share	\$ 160,217
Paid-in surplus	221,156,908
Undistributed (Over-distribution of) net investment income	(10,666)
Accumulated net realized gain (loss)	(31,274,856)
Net unrealized appreciation (depreciation)	32,429,446
Net assets	\$ 222,461,049
Authorized shares	Unlimited

See accompanying notes to financial statements.

Nuveen Investments

23

Statement of

OPERATIONS

Year Ended December 31, 2011

Investment Income	
Dividends	\$ 3,962,784
Interest	3,178
Total investment income	3,965,962
Expenses	
Management fees	2,111,344
Shareholders' servicing agent fees and expenses	277
Custodian's fees and expenses	91,302
Trustees' fees and expenses	6,614
Professional fees	29,547
Shareholders' reports printing and mailing expenses	59,888
Stock exchange listing fees	8,918
Investor relations expense	45,696
Other expenses	43,898
Total expenses before custodian fee credit	2,397,484
Custodian fee credit	(14)
Net expenses	2,397,470
Net investment income (loss)	1,568,492
Realized and Unrealized Gain (Loss)	
Net realized gain (loss) from:	
Investment and foreign currency	16,514,619
Call options written	3,471,517
Futures contracts	97,313
Change in net unrealized appreciation (depreciation) of:	
Investment and foreign currency	(7,358,615)
Call options written	303,752
Futures contracts	40,000
Net realized and unrealized gain (loss)	13,068,586
Net increase (decrease) in net assets from operations	\$ 14,637,078

See accompanying notes to financial statements.

Nuveen Investments

24

Statement of

CHANGES IN NET ASSETS

	Year Ended 12/31/11	Year Ended 12/31/10
Operations		
Net investment income (loss)	\$ 1,568,492	\$ 1,545,228
Net realized gain (loss) from:		
Investment and foreign currency	16,514,619	13,727,824
Call options written	3,471,517	(455,413)
Futures contracts	97,313	1,056,375
Change in net unrealized appreciation (depreciation) of:		
Investment and foreign currency	(7,358,615)	16,130,477
Call options written	303,752	(427,493)
Futures contracts	40,000	(52,187)
Net increase (decrease) in net assets from operations	14,637,078	31,524,811
Distributions to Shareholders		
From net investment income	(17,306,121)	(14,715,856)
Return of capital		(2,915,487)
Decrease in net assets from distributions to shareholders	(17,306,121)	(17,631,343)
Capital Share Transactions		
Cost of shares repurchased and retired	(56,559)	(73,692)
Net increase (decrease) in net assets from capital share transactions	(56,559)	(73,692)
Net increase (decrease) in net assets	(2,725,602)	13,819,776
Net assets at the beginning of period	225,186,651	211,366,875
Net assets at the end of period	\$ 222,461,049	\$ 225,186,651
Undistributed (Over-distribution of) net investment income at the end of period	\$ (10,666)	\$ (10,659)

See accompanying notes to financial statements.

Financial

HIGHLIGHTS

Selected data for a share outstanding throughout each period:

Year Ended	Investment Operations				Less Distributions			Discount from Shares Repurchased and Retired
	Beginning Net Asset Value	Net Investment Income (Loss)(a)	Realized/Unrealized Gain (Loss)	Net Total	Net Investment Income	Capital Gains	Return of Capital	
12/31:								
2011	\$ 14.05	\$.10	\$.81	0.91	\$ (1.08)	\$	\$	\$ (1.08) \$ *
2010	13.18	.10	1.87	1.97	(.92)		(.18)	(1.10) *
2009	11.74	.14	2.38	2.52	(.15)		(.95)	(1.10) .02
2008	18.72	.16	(5.65)	(5.49)	(.16)		(1.34)	(1.50) .01
2007(d)	19.10	.15	.81	0.96	(.14)		(1.16)	(1.30) *

Nuveen Investments

Year Ended 12/31:	Offering Costs	Ending Net Asset Value	Ending Market Value	Total Returns		Ending Net Assets (000)	Ratios/Supplemental Data Ratios to Average Net Assets(c) Net Investment Portfolio		
				Based on Market Value(b)	Based on Net Asset Value(b)		Expenses	Income (Loss)	Turnover Rate
2011	\$	\$ 13.88	\$ 12.47	3.11%	6.70%	\$ 222,461	1.05%	.69%	67%
2010		14.05	13.12	17.25	15.82	225,187	1.11	.73	131
2009	*	13.18	12.21	41.27	23.16	211,367	1.15	1.20	112
2008	*	11.74	9.61	(34.06)	(30.84)	191,180	1.11	1.04	51
2007(d)	(0.04)	18.72	16.35	(12.08)	4.84	307,877	1.07**	1.03**	73

(a) Per share Net Investment Income (Loss) is calculated using the average daily shares method.

(b) Total Return Based on Market Value is the combination of changes in the market price per share and the effect of reinvested dividend income and reinvested capital gains distributions, if any, at the average price paid per share at the time of reinvestment. The last dividend declared in the period, which is typically paid on the first business day of the following month, is assumed to be reinvested at the ending market price. The actual reinvestment for the last dividend declared in the period may take place over several days, and in some instances may not be based on the market price, so the actual reinvestment price may be different from the price used in the calculation. Total returns are not annualized.

Total Return Based on Net Asset Value is the combination of changes in net asset value, reinvested dividend income at net asset value and reinvested capital gains distributions at net asset value, if any. The last dividend declared in the period, which is typically paid on the first business day of the following month, is assumed to be reinvested at the ending net asset value. The actual reinvest price for the last dividend declared in the period may often be based on the Fund's market price (and not its net asset value), and therefore may be different from the price used in the calculation. Total returns are not annualized.

(c) Ratios do not reflect the effect of custodian fee credits earned on the Fund's net cash on deposit with the custodian bank, where applicable.

(d) For the period March 27, 2007 (commencement of operations) through December 31, 2007.

* Rounds to less than \$.01 per share.

** Annualized.

See accompanying notes to financial statements.

Notes to

FINANCIAL STATEMENTS

1. General Information and Significant Accounting Policies

General Information

Nuveen Core Equity Alpha Fund (the "Fund") is a closed-end registered investment company registered under the Investment Company Act of 1940, as amended. The Fund's shares are listed on the New York Stock Exchange ("NYSE") and trade under the ticker symbol "JCE." The Fund was organized as a Massachusetts business trust on January 9, 2007.

Effective January 1, 2011, the Fund's adviser, Nuveen Asset Management, a wholly-owned subsidiary of Nuveen Investments, Inc. ("Nuveen"), changed its name to Nuveen Fund Advisors, Inc. (the "Adviser"). Concurrently, the Adviser formed a wholly-owned subsidiary, Nuveen Asset Management, LLC, to house its portfolio management capabilities and to serve as one of the Fund's two sub-advisers.

The Fund's investment objective is to provide an attractive level of total return, primarily through long-term capital appreciation and secondarily through income and gains. The Fund will invest in a portfolio of common stocks selected from among the 500 stocks comprising the S&P 500 Index, using a proprietary mathematical process designed by the Fund's other sub-adviser INTECH Investment Management LLC ("INTECH") to select large cap, core equity securities and will also employ innovative risk reduction techniques. Typically, the Fund's equity portfolio will hold 150-450 stocks included in the S&P 500 Index. The Fund will also employ an option strategy that seeks to enhance the Fund's risk-adjusted performance over time through a meaningful reduction in the volatility of the Fund's returns relative to the returns of the S&P 500 Index. The Fund expects to write (sell) custom basket call options with a notional value of up to 50% of the value of the equity portfolio. Nuveen Asset Management, LLC is responsible for the Fund's call option strategy and overseeing the Fund's investments in futures contracts.

Significant Accounting Policies

The following is a summary of significant accounting policies followed by the Fund in the preparation of its financial statements in accordance with U.S. generally accepted accounting principles ("U.S. GAAP").

Investment Valuation

Common stocks and other equity-type securities are valued at the last sales price on the securities exchange on which such securities are primarily traded and are generally classified as Level 1 for fair value measurement purposes. Securities primarily traded on the NASDAQ National Market ("NASDAQ") are valued, except as indicated below, at the NASDAQ Official Closing Price and are generally classified as Level 1. However, securities traded on a securities exchange or NASDAQ for which there were no transactions on a given day or securities not listed on a securities exchange or NASDAQ are valued at the quoted bid price and generally classified as Level 2.

Prices of fixed-income securities are provided by a pricing service approved by the Fund's Board of Trustees. These securities are generally classified as Level 2. When price quotes are not readily available, the pricing service establishes a security's fair value using methods that may include consideration of the

following: yields or prices of investments of comparable quality, type of issue, coupon, maturity and rating, market quotes or indications of value from security dealers, evaluations of anticipated cash flows or collateral, general market conditions and other information and analysis, including the obligor's credit characteristics considered relevant. In pricing certain securities, particularly less liquid and lower quality securities, the pricing service may consider information about a security, its issuer, or market activity provided by the Adviser. These securities are generally classified as Level 2 or Level 3 depending on the priority of the significant inputs.

The value of exchange-traded options are based on the mean of the closing bid and ask prices. Futures contracts are valued using the closing settlement price or, in the absence of such a price, the last traded price. Exchange-traded options and futures contracts are generally classified as Level 1. Options traded in the over-the-counter market are valued using an evaluated mean price and are generally classified as Level 2.

Repurchase agreements are valued at contract amount plus accrued interest, which approximates market value. These securities are generally classified as Level 2.

Certain securities may not be able to be priced by the pre-established pricing methods as described above. Such securities may be valued by the Fund's Board of Trustees or its designee at fair value. These securities generally include, but are not limited to, restricted securities (securities which may not be publicly sold without registration under the Securities Act of 1933, as amended) for which a pricing service is unable to provide a market price; securities whose trading has been formally suspended; debt securities that have gone into default and for which there is no current market quotation; a security whose market price is not available from a pre-established pricing source; a security with respect to which an event has occurred that is likely to materially affect the value of the security after the market has closed but before the calculation of the Fund's net asset value (as may be the case in non-U.S. markets on which the security is primarily traded) or make it difficult or impossible to obtain a reliable market quotation; and a security whose price, as provided by the pricing service, is not deemed to reflect the security's fair value. As a general principle, the fair value of a security would appear to be the amount that the owner might reasonably expect to receive for it in a current sale. A variety of factors may be considered in determining the fair value of such securities, which may include consideration of the following: yields or prices of investments of comparable quality, type of issue, coupon, maturity and rating, market quotes or indications of value from security dealers, evaluations of anticipated cash flows or collateral, general market conditions and other information and analysis, including the obligor's credit characteristics considered relevant. These securities are generally classified as Level 2 or Level 3 depending on the priority of the significant inputs. Regardless of the method employed to value a particular security, all valuations are subject to review by the Fund's Board of Trustees or its designee.

Refer to Footnote 2 Fair Value Measurements for further details on the leveling of securities held by the Fund as of the end of the reporting period.

Investment Transactions

Investment transactions are recorded on a trade date basis. Realized gains and losses from investment transactions are determined on the specific identification method, which is the same basis used for federal income tax purposes.

Investment Income

Dividend income is recorded on the ex-dividend date or, for foreign securities, when information is available. Interest income is recorded on an accrual basis.

Income Taxes

The Fund intends to distribute substantially all of its investment company taxable income to shareholders and to otherwise comply with the requirements of Subchapter M of the Internal Revenue Code applicable to regulated investment companies ("RICs"). In any year when the Fund realizes net capital gains, the Fund may choose to distribute all or a portion of its net capital gains to shareholders, or alternatively, to retain all or a portion of its net capital gains and pay federal corporate income taxes on such retained gains.

For all open tax years and all major taxing jurisdictions, management of the Fund has concluded that there are no significant uncertain tax positions that would require recognition in the financial statements. Open tax years are those that are open for examination by taxing authorities (i.e., generally the last four tax year ends and the interim tax period since then). Furthermore, management of the Fund is also not aware of any tax positions for which it is reasonably possible that the total amounts of unrecognized tax benefits will significantly change in the next twelve months.

Dividends and Distributions to Shareholders

Distributions to shareholders are recorded on the ex-dividend date. The amount and timing of distributions are determined in accordance with federal income tax regulations, which may differ from U.S. GAAP.

The Fund makes quarterly cash distributions to shareholders of a stated dollar amount per share. Subject to approval and oversight by the Fund's Board of Trustees, the Fund seeks to maintain a stable distribution level designed to deliver the long-term return potential of the Fund's investment strategy through regular quarterly distributions (a "Managed Distribution Program"). Total distributions during a calendar year generally will be made from the Fund's net investment income, net realized capital gains and net unrealized capital gains in the Fund's portfolio, if any. The portion of distributions paid attributed to net unrealized gains, if any, is distributed from the Fund's assets and is treated by shareholders as a non-taxable distribution ("Return of Capital") for tax purposes. In the event that total distributions during a calendar year exceed the Fund's total return on net asset value, the difference will reduce net asset value per share. If the Fund's total return on net asset value exceeds total distributions during a calendar year, the excess will be reflected as an increase in net asset value per share. The final determination of the source and character of all distributions for the fiscal year are made after the end of the fiscal year and are reflected in the financial statements contained in the annual report as of December 31 each year.

The actual character of distributions made by the Fund during the fiscal years ended December 31, 2011 and December 31, 2010, are reflected in the accompanying financial statements.

Foreign Currency Transactions

The Fund is authorized to engage in foreign currency exchange transactions, including foreign currency forward, futures, options and swap contracts. To the extent that the Fund invests in securities and/or contracts that are denominated in a currency other than U.S.

Notes to

FINANCIAL STATEMENTS (continued)

dollars, the Fund will be subject to currency risk, which is the risk that an increase in the U.S. dollar relative to the foreign currency will reduce returns or portfolio value. Generally, when the U.S. dollar rises in value against a foreign currency, the Fund's investments denominated in that currency will lose value because its currency is worth fewer U.S. dollars; the opposite effect occurs if the U.S. dollar falls in relative value. Investments and other assets and liabilities denominated in foreign currencies are converted into U.S. dollars on a spot (i.e. cash) basis at the spot rate prevailing in the foreign currency exchange market at the time of valuation. Purchases and sales of investments and income denominated in foreign currencies are translated into U.S. dollars on the respective dates of such transactions.

The books and records of the Fund are maintained in U.S. dollars. Foreign currencies, investments and other assets and liabilities are translated into U.S. dollars at 4:00 p.m. Eastern time. Investments, income and expenses are translated on the respective dates of such transactions. Net realized foreign currency gains and losses resulting from changes in exchange rates include foreign currency gains and losses between trade date and settlement date of the transactions, foreign currency transactions, and the difference between the amounts of interest and dividends recorded on the books of the Fund and the amounts actually received.

The realized gains and losses resulting from changes in foreign currency exchange rates and changes in foreign exchange rates associated with other assets and liabilities on investments are recognized as a component of "Net realized gain (loss) from investments and foreign currency" on the Statement of Operations, when applicable.

The unrealized gains and losses resulting from changes in foreign currency exchange rates and changes in foreign exchange rates associated with other assets and liabilities on investments are recognized as a component of "Change in net unrealized appreciation (depreciation) of investments and foreign currency" on the Statement of Operations, when applicable.

Futures Contracts

The Fund is subject to equity price risk in the normal course of pursuing its investment objectives and is authorized to invest in futures contracts in an attempt to manage such risk. Upon entering into a futures contract, the Fund is required to deposit with the broker an amount of cash or liquid securities equal to a specified percentage of the contract amount. This is known as the "initial margin." Cash held by the broker to cover initial margin requirements on open futures contracts, if any, is recognized as "Deposits with brokers for open futures contracts" on the Statement of Assets and Liabilities. Subsequent payments ("variation margin") are made or received by the Fund each day, depending on the daily fluctuation of the value of the contract. Variation margin is recognized as a receivable or payable for "Variation margin on futures contracts" on the Statement of Assets and Liabilities, when applicable.

During the period the futures contract is open, changes in the value of the contract are recognized as an unrealized gain or loss by "marking-to-market" on a daily basis to reflect the changes in market value of the contract and is recognized as a component of "Change in net unrealized appreciation (depreciation) of futures contracts" on the Statement of Operations. When the contract is closed or expired, the Fund records a realized gain or loss equal to the difference between the value of the contract on the closing date and value of the contract when originally entered into, and is recognized as a component of "Net realized

gain (loss) from futures contracts" on the Statement of Operations.

Risks of investments in futures contracts include the possible adverse movement in the price of the securities or indices underlying the contracts, the possibility that there may not be a liquid secondary market for the contracts and/or that a change in the value of the contract may not correlate with a change in the value of the underlying securities or indices.

During the fiscal year ended December 31, 2011, the Fund entered into equity index futures to gain equity market exposure where the portfolio holds cash.

The average number of futures contracts outstanding during the fiscal year ended December 31, 2011, was 125. The average number of outstanding contracts is calculated based on the outstanding contracts at the beginning of the fiscal year and at the end of each fiscal quarter within the current fiscal year. Refer to Footnote 3 Derivative Instruments and Hedging Activities for further details on futures contract activity.

Options Transactions

The Fund is subject to equity price risk in the normal course of pursuing its investment objectives and is authorized to write (sell) call options, primarily on custom baskets of securities, in an attempt to manage such risk. When the Fund writes a call option, an amount equal to the net premium received (the premium less commission) is recognized as a component of "Call options written, at value" on the Statement of Asset and Liabilities and is subsequently adjusted to reflect the current value of the written option until the option expires or the Fund enters into a closing purchase transaction. The changes in value of the options during the reporting period are recognized as a component of "Change in net unrealized appreciation (depreciation) of call options written" on the Statement of Operations. When a call option expires or the Fund enters into a closing purchase transaction, the difference between the net premium received and any amount paid at expiration or upon executing a closing purchase transaction, including commission, is recognized as a component of "Net realized gain (loss) from call options written" on the Statements of Operations. The Fund, as writer of a call option, has no control over whether the underlying instrument may be sold (called) and as a result bears the risk of an unfavorable change in the market value of the instrument or index underlying the written option. There is also the risk the Fund may not be able to enter into a closing transaction because of an illiquid market.

During fiscal year ended December 31, 2011, the Fund wrote call options on a basket of stocks, while investing in a portfolio of equities, to enhance returns while foregoing some upside potential of its equity portfolio.

The average notional amount of call options written during the fiscal year ended December 31, 2011, was \$83,361,674. The average notional amount is calculated based on the outstanding notional at the beginning of the fiscal year and at the end of each fiscal quarter within the current fiscal year. Refer to Footnote 3 Derivative Instruments and Hedging Activities and Footnote 5 Investment Transactions for further details on call options written.

Market and Counterparty Credit Risk

In the normal course of business the Fund may invest in financial instruments and enter into financial transactions where risk of potential loss exists due to changes in the market (market risk) or failure of the other party to the transaction to perform (counterparty credit risk). The potential loss could exceed the value of the financial assets recorded on the financial statements. Financial assets, which potentially expose the Fund to counterparty credit risk, consist principally of cash due from counterparties on forward, option and swap transactions, when applicable. The extent of the Fund's exposure to counterparty credit risk in respect to these financial assets approximates their carrying value as recorded on the Statement of Assets and Liabilities. Futures contracts, when applicable, expose the Fund to minimal counterparty credit risk as they are exchange traded and the exchange's clearinghouse, which is counterparty to all exchange traded futures, guarantees the futures contracts against default.

The Fund helps manage counterparty credit risk by entering into agreements only with counterparties the Adviser believes have the financial resources to honor their obligations and by having the Adviser monitor the financial stability of the counterparties. Additionally, counterparties may be required to pledge collateral daily (based on the daily valuation of the financial asset) on behalf of the Fund with a value approximately equal to the amount of any unrealized gain above a pre-determined threshold. Reciprocally, when the Fund has an unrealized loss, the Fund has instructed the custodian to pledge assets of the Fund as collateral with a value approximately equal to the amount of the unrealized loss above a pre-determined threshold. Collateral pledges are monitored and subsequently adjusted if and when the valuations fluctuate, either up

or down, by at least the predetermined threshold amount.

Repurchase Agreements

In connection with transactions in repurchase agreements, it is the Fund's policy that its custodian take possession of the underlying collateral securities, the fair value of which exceeds the principal amount of the repurchase transaction, including accrued interest, at all times. If the counterparty defaults, and the fair value of the collateral declines, realization of the collateral may be delayed or limited.

Zero Coupon Securities

The Fund is authorized to invest in zero coupon securities. A zero coupon security does not pay a regular interest coupon to its holders during the life of the security. Tax-exempt income to the holder of the security comes from accretion of the difference between the original purchase price of the security at issuance and the par value of the security at maturity and is effectively paid at maturity. The market prices of zero coupon securities generally are more volatile than the market prices of securities that pay interest periodically.

Custodian Fee Credit

The Fund has an arrangement with the custodian bank whereby certain custodian fees and expenses are reduced by net credits earned on the Fund's cash on deposit with the bank. Such deposit arrangements are an alternative to overnight investments. Credits for cash balances may be offset by charges for any days on which the Fund overdraws its account at the custodian bank.

Indemnifications

Under the Fund's organizational documents, its officers and trustees are indemnified against certain liabilities arising out of the performance of their duties to the Fund. In addition, in the normal course of business, the Fund enters into contracts that provide general indemnifications to other parties. The Fund's maximum exposure under these arrangements is unknown as this would

Notes to

FINANCIAL STATEMENTS (continued)

involve future claims that may be made against the Fund that have not yet occurred. However, the Fund has not had prior claims or losses pursuant to these contracts and expects the risk of loss to be remote.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of increases and decreases in net assets from operations during the reporting period. Actual results may differ from those estimates.

2. Fair Value Measurements

Fair value is defined as the price that the Fund would receive upon selling an investment or transferring a liability in an orderly transaction to an independent buyer in the principal or most advantageous market for the investment. A three-tier hierarchy is used to maximize the use of observable market data and minimize the use of unobservable inputs and to establish classification of fair value measurements for disclosure purposes. Observable inputs reflect the assumptions market participants would use in pricing the asset or liability. Observable inputs are based on market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the reporting entity's own assumptions about the assumptions market participants would use in pricing the asset or liability. Unobservable inputs are based on the best information available in the circumstances. The three-tier hierarchy of inputs is summarized in the three broad levels listed below:

Level 1 Quoted prices in active markets for identical securities.

Level 2 Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).

Level 3 Significant unobservable inputs (including management's assumptions in determining the fair value of investments).

The inputs or methodologies used for valuing securities are not an indication of the risk associated with investing in those securities. The following is a summary of the Fund's fair value measurements as of December 31, 2011:

	Level 1	Level 2	Level 3	Total
Investments:				
Common				
Stocks	\$ 219,604,323	\$	\$ 765	\$ 219,605,088
Preferred				
Stocks			765	765
Short-Term				
Investments		5,331,872		5,331,872
Derivatives:				
		(853,743)		(853,743)

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

Call Options

Written

Futures

Contracts*

146,188

146,188

Total

\$ 219,750,511

\$ 4,478,129

\$ 1,530

\$ 224,230,170

* Represents net unrealized appreciation (depreciation) as reported in the Fund's Portfolio of Investments.

Nuveen Investments

32

The following is a reconciliation of the Fund's Level 3 investments held at the beginning and end of the measurement period:

	Level 3 Common Stocks	Level 3 Preferred Stocks	Level 3 Total
Balance at the beginning of year	\$	\$	\$
Gains (losses):			
Net realized gains (losses)			
Net change in unrealized appreciation (depreciation)	(906)	(906)	(1,812)
Purchases at cost	1,671	1,671	3,342
Sales at proceeds			
Net discounts (premiums)			
Transfers in to			
Transfers out of			
Balance at the end of year	\$ 765	\$ 765	\$ 1,530
Change in net unrealized appreciation (depreciation) during the year of Level 3 securities held as of December 31, 2011	\$ (906)	\$ (906)	\$ (1,812)

During the fiscal year ended December 31, 2011, the Fund recognized no significant transfers to or from Level 1 or Level 2. Transfers in and/or out of Level 3 are shown using end of period values.

3. Derivative Instruments and Hedging Activities

The Fund records derivative instruments at fair value, with changes in fair value recognized on the Statement of Operations, when applicable. Even though the Fund's investments in derivatives may represent economic hedges, they are not considered to be hedge transactions for financial reporting purposes. For additional information on the derivative instruments in which the Fund was invested during and at the end of the reporting period, refer to the Portfolio of Investments, Financial Statements and Footnote 1 General Information and Significant Accounting Policies.

The following table presents the fair value of all derivative instruments held by the Fund as of December 31, 2011, the location of these instruments on the Statement of Assets and Liabilities, and the primary underlying risk exposure.

Underlying Risk Exposure	Derivative Instrument	Location on the Statement of Assets and Liabilities		Value
		Asset Derivatives	Liability Derivatives	
		Location	Location	Value
Equity Price	Futures contracts	Variation margin on futures contracts*		\$ 146,188
	Options			853,743

Equity Price		Call options written, at value
Total	\$ 146,188	\$ 853,743

* Value represents cumulative gross unrealized appreciation (depreciation) of futures contracts as reported in the Portfolio of Investments and not the deposits with brokers, if any, or the receivable or payable for variation margin presented on the Statement of Assets and Liabilities.

The following tables present the amount of net realized gain (loss) and change in net unrealized appreciation (depreciation) recognized for the fiscal year ended December 31, 2011, on derivative instruments, as well as the primary risk exposure associated with each.

Net Realized Gain (Loss) from Call Options Written

Risk Exposure

Equity Price \$ 3,471,517

Net Realized Gain (Loss) from Futures Contracts

Risk Exposure

Equity Price \$ 97,313

Change in Net Unrealized Appreciation (Depreciation) of Call Options Written

Risk Exposure

Equity Price \$ 303,752

Change in Net Unrealized Appreciation (Depreciation) of Futures Contracts

Risk Exposure

Equity Price \$ 40,000

Nuveen Investments

Notes to

FINANCIAL STATEMENTS (continued)

4. Fund Shares

Transactions in shares were as follows:

	Year Ended 12/31/11	Year Ended 12/31/10
Shares repurchased and retired	(5,000)	(7,100)
Weighted average:		
Price per share repurchased and retired	\$ 11.29	\$ 10.36
Discount per share repurchased and retired	15.92%	23.38%

5. Investment Transactions

Purchases and sales (excluding short-term investments and derivative transactions) during the fiscal year ended December 31, 2011, aggregated \$153,386,417 and \$162,502,887, respectively.

Transactions in call options written during the fiscal year ended December 31, 2011, were as follows:

	Number of Contracts	Premiums Received
Outstanding, beginning of year	1,004,739	\$ 788,274
Call options written	6,987,883	5,391,580
Call options terminated in closing purchase transactions	(2,023,113)	(1,570,631)
Call options expired	(5,174,174)	(3,644,083)
Outstanding, end of year	795,335	\$ 965,140

6. Income Tax Information

The following information is presented on an income tax basis. Differences between amounts for financial statement and federal income tax purposes are primarily due to timing differences in recognizing certain gains and losses on investment transactions and the recognition of unrealized gain or loss for tax (mark-to-market) on futures contracts. To the extent that differences arise that are permanent in nature, such amounts are reclassified within the capital accounts as detailed below. Temporary differences do not require reclassification. Temporary and permanent differences do not impact the net asset value of the Fund.

At December 31, 2011, the cost and unrealized appreciation (depreciation) of investments (excluding investments in derivatives), as determined on a federal income tax basis, were as follows:

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

Cost of investments	\$ 192,960,439
Gross unrealized:	
Appreciation	\$ 38,897,531
Depreciation	(6,920,245)
Net unrealized appreciation (depreciation) of investments	\$ 31,977,286

Permanent differences, primarily due to Real Estate Investment Trust (REIT) adjustments and tax basis earnings and profit adjustments, resulted in reclassifications among the Fund's components of net assets at December 31, 2011, the Fund's tax year-end, as follows:

Paid-in surplus	\$ (15,793,406)
Undistributed (Over-distribution) of net investment income	15,737,622
Accumulated net realized gain (loss)	55,784

Nuveen Investments
34

The tax components of undistributed net ordinary income and net long-term capital gains at December 31, 2011, the Fund's tax year end, were as follows:

Undistributed net ordinary income	\$
Undistributed net long-term capital gains	

The tax character of distributions paid during the Fund's tax years ended December 31, 2011 and December 2010, was designated for purposes of the dividends paid deduction as follows:

2011

Distributions from net ordinary income *	\$ 17,306,121
Distributions from net long-term capital gains	
Return of capital	

2010

Distributions from net ordinary income *	\$ 14,715,856
Distributions from net long-term capital gains	
Return of capital	2,915,487

* Net ordinary income consists of net taxable income derived from dividends and interest, and current year earnings and profits attributable to realized gains.

At December 31, 2011, the Fund's tax year end, the Fund had an unused capital loss carryforward available for federal income tax purposes to be applied against future capital gains, if any. If not applied, the carryforwards will expire as follows:

Expiration:	
December 31, 2017	\$ 30,094,692

During the tax year ended December 31, 2011, the Fund utilized \$20,757,172 of its capital loss carryforwards.

On December 22, 2010, the Regulated Investment Company Modernization Act of 2010 (the "Act") was enacted, which changed various technical rules governing the tax treatment of RICs. The changes are generally effective for taxable years beginning after the date of enactment. One of the more prominent changes addresses capital loss carryforwards. Under the Act, the Fund will be permitted to carry forward capital losses incurred in taxable years beginning after the date of enactment for an unlimited period. However, any losses incurred during those future taxable years will be required to be utilized prior to the losses incurred in pre-enactment taxable years, which carry an expiration date. As a result of this ordering rule, pre-enactment capital loss carryforwards may be more likely to expire unused. Additionally, post-enactment capital loss carryforwards will retain their character as either short-term or long-term capital losses rather than being considered all short-term as permitted under previous regulation.

The Act also contains several provisions aimed at preserving the character of distributions made by fiscal year RICs during the portion of its taxable year ending after October 31 or December 31, reducing the circumstances under which RICs might be required to file amended Forms 1099 to restate previously reported distributions.

During the Fund's tax year ended December 31, 2011, there were no post-enactment capital losses generated.

The Fund has elected to defer losses incurred from November 1, 2011 through December 31, 2011, the Fund's tax year end, in accordance with federal income tax rules. These losses are treated as having arisen on the first day of the following fiscal year. The Fund has elected to defer losses as follows:

Post-October capital losses	\$ 836,982
Late-year ordinary losses	

7. Management Fees and Other Transactions with Affiliates

The Fund's management fee consists of two components a fund-level fee, based only on the amount of assets within the Fund, and a complex-level fee, based on the aggregate amount of all eligible fund assets managed by the Adviser. This pricing structure enables Fund shareholders to benefit from growth in the assets within the Fund as well as from growth in the amount of complex-wide assets managed by the Adviser.

The annual fund-level fee, payable monthly, is calculated according to the following schedule:

Average Daily Managed Assets*	Fund-Level Fee Rate
For the first \$500 million	.7500%
For the next \$500 million	.7250
For the next \$500 million	.7000
For the next \$500 million	.6750
For managed assets over \$2 billion	.6500

Nuveen Investments

35

Notes to

FINANCIAL STATEMENTS (continued)

The annual complex-level fee, payable monthly, is calculated according to the following schedule:

Complex-Level Managed Asset Breakpoint Level*	Effective Rate at Breakpoint Level
\$55 billion	.2000%
\$56 billion	.1996
\$57 billion	.1989
\$60 billion	.1961
\$63 billion	.1931
\$66 billion	.1900
\$71 billion	.1851
\$76 billion	.1806
\$80 billion	.1773
\$91 billion	.1691
\$125 billion	.1599
\$200 billion	.1505
\$250 billion	.1469
\$300 billion	.1445

* For the fund-level and complex-level fees, managed assets include closed-end fund assets managed by the Adviser that are attributable to financial leverage. For these purposes, financial leverage includes the funds' use of preferred stock and borrowings and certain investments in the residual interest certificates (also called inverse floating rate securities) in tender option bond (TOB) trusts, including the portion of assets held by a TOB trust that has been effectively financed by the trust's issuance of floating rate securities, subject to an agreement by the Adviser as to certain funds to limit the amount of such assets for determining managed assets in certain circumstances. The complex-level fee is calculated based upon the aggregate daily managed assets of all Nuveen Funds that constitute "eligible assets." Eligible assets do not include assets attributable to investments in other Nuveen Funds and assets in excess of \$2 billion added to the Nuveen Fund complex in connection with the Adviser's assumption of the management of the former First American Funds effective January 1, 2011. As of December 31, 2011, the complex-level fee rate for the Fund was .1767%.

The management fee compensates the Adviser for overall investment advisory and administrative services and general office facilities. The Adviser is responsible for the Fund's overall strategy and asset allocation decisions. The Adviser has entered into sub-advisory agreements with INTECH and Nuveen Asset Management, LLC. INTECH and Nuveen Asset Management, LLC are compensated for their services to the Fund from the management fees paid to the Adviser.

The Fund pays no compensation directly to those of its trustees who are affiliated with the Adviser or to its officers, all of whom receive remuneration for their services to the Fund from the Adviser or its affiliates. The Board of Trustees has adopted a deferred compensation plan for independent trustees that enables trustees to elect to defer receipt of all or a portion of the annual compensation they are entitled to receive from certain Nuveen advised funds. Under the plan, deferred amounts are treated as though equal dollar amounts had been invested in shares of select Nuveen advised funds.

8. New Accounting Pronouncements

Financial Accounting Standards Board ("FASB") Transfers and Servicing (Topic 860): Reconsideration of Effective Control for Repurchase Agreements

On April 15, 2011, the FASB issued Accounting Standards Update ("ASU") No. 2011-03 ("ASU No. 2011-03"). The guidance in ASU No. 2011-03 is intended to improve the accounting for repurchase agreements and other similar agreements. Specifically, ASU No. 2011-03 modifies the criteria for determining when these transactions would be accounted for as financings transactions (secured borrowings/lending agreements) as opposed to sales (purchases) transactions with commitments to repurchase (resell). The effective date of ASU No. 2011-03 is for interim and annual periods beginning on or after December 15, 2011. At this time, management is evaluating the implications of this guidance and the impact it will have to the financial statement amounts and footnote disclosures, if any.

Fair Value Measurements and Disclosures

On May 12, 2011, the FASB issued ASU No. 2011-04 modifying Topic 820, *Fair Value Measurements and Disclosures*. At the same time, the International Accounting Standards Board ("IASB") issued International Financial Reporting Standard ("IFRS") 13, Fair Value Measurement. The objective of the FASB and IASB is convergence of their guidance on fair value measurements and disclosures.

Nuveen Investments

36

Specifically, ASU No. 2011-04 requires reporting entities to disclose i) the amounts of any transfers between Level 1 and Level 2 and the reasons for the transfers and ii) for Level 3 fair value measurements, a) quantitative information about significant unobservable inputs used, b) a description of the valuation processes used by the reporting entity and c) a narrative description of the sensitivity of the fair value measurement to changes in unobservable inputs if a change in those inputs might result in a significantly higher or lower fair value measurement. The effective date of ASU No. 2011-04 is for interim and annual periods beginning after December 15, 2011. At this time, management is evaluating the implications of this guidance and the impact it will have to the financial statement amounts and footnote disclosures, if any.

Nuveen Investments

37

Board Members & Officers (Unaudited)

The management of the Funds, including general supervision of the duties performed for the Funds by the Adviser, is the responsibility of the Board Members of the Funds. The number of board members of the Fund is currently set at ten. None of the board members who are not "interested" persons of the Funds (referred to herein as "independent board members") has ever been a director or employee of, or consultant to, Nuveen or its affiliates. The names and business addresses of the board members and officers of the Funds, their principal occupations and other affiliations during the past five years, the number of portfolios each oversees and other directorships they hold are set forth below.

Name, Birthdate and Address	Position(s) Held with the Funds	Year First Elected or Appointed and Term⁽¹⁾	Principal Occupation(s) Including other Directorships During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member
Independent Board Members:				
g ROBERT P. BREMNER⁽²⁾				
8/22/40 333 W. Wacker Drive Chicago, IL 60606	Chairman of the Board and Board Member	1996 Class III	Private Investor and Management Consultant; Treasurer and Director, Humanities Council of Washington, D.C.; Board Member, Independent Directors Council (affiliated with the Investment Company Institute.)	238
g JACK B. EVANS				
10/22/48 333 W. Wacker Drive Chicago, IL 60606	Board Member	1999 Class III	President, The Hall-Perrine Foundation, a private philanthropic corporation (since 1996); Director and Chairman, United Fire Group, a publicly held company; member of the Board of Regents for the State of Iowa University System; Director, Source Media Group; Life Trustee of Coe College and the Iowa College Foundation; formerly, Director, Alliant Energy; formerly, Director, Federal Reserve Bank of Chicago; formerly, President and Chief Operating Officer, SCI Financial Group, Inc., a regional financial services firm.	238
g WILLIAM C. HUNTER				
3/6/48 333 W. Wacker Drive Chicago, IL 60606	Board Member	2004 Class I	Dean, Tippie College of Business, University of Iowa (since 2006); Director (since 2004) of Xerox Corporation; Director (since 2005), Beta Gamma Sigma International Honor Society; Director of Wellmark, Inc. (since 2009); formerly, Dean and Distinguished Professor of Finance, School of	238

Business at the University of Connecticut (2003-2006); previously, Senior Vice President and Director of Research at the Federal Reserve Bank of Chicago (1995-2003); formerly, Director (1997-2007), Credit Research Center at Georgetown University.

Nuveen Investments

38

Name, Birthdate and Address	Position(s) Held with the Funds	Year First Elected or Appointed and Term⁽¹⁾	Principal Occupation(s) Including other Directorships During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member
Independent Board Members (continued):				
g DAVID J. KUNDERT⁽²⁾				
10/28/42 333 W. Wacker Drive Chicago, IL 60606	Board Member	2005 Class II	Director, Northwestern Mutual Wealth Management Company; retired (since 2004) as Chairman, JPMorgan Fleming Asset Management, President and CEO, Banc One Investment Advisors Corporation, and President, One Group Mutual Funds; prior thereto, Executive Vice President, Banc One Corporation and Chairman and CEO, Banc One Investment Management Group; Member, Board of Regents, Luther College; member of the Wisconsin Bar Association; member of Board of Directors, Friends of Boerner Botanical Gardens; member of Board of Directors and Chair of Investment Committee, Greater Milwaukee Foundation.	238
g WILLIAM J. SCHNEIDER⁽²⁾				
9/24/44 333 W. Wacker Drive Chicago, IL 60606	Board Member	1997 Class III	Chairman of Miller-Valentine Partners Ltd., a real estate investment company; formerly, Senior Partner and Chief Operating Officer (retired 2004) of Miller- Valentine Group; member, University of Dayton Business School Advisory Council; member, Mid-America Health System Board; formerly, member and chair, Dayton Philharmonic Orchestra Association; formerly, member, Business Advisory Council, Cleveland Federal Reserve Bank.	238
g JUDITH M. STOCKDALE				
12/29/47 333 W. Wacker Drive Chicago, IL 60606	Board Member	1997 Class I	Executive Director, Gaylord and Dorothy Donnelley Foundation (since 1994); prior thereto, Executive Director, Great Lakes Protection Fund (1990-1994).	238
g CAROLE E. STONE⁽²⁾				
6/28/47 333 W. Wacker	Board Member	2007 Class I	Director, Chicago Board Options Exchange (since 2006); Director, C2 Options Exchange, Incorporated (since 2009); formerly,	238

Drive
Chicago,
IL 60606

Commissioner, New York State Commission on
Public Authority Reform (2005-2010); formerly,
Chair, New York Racing Association Oversight
Board (2005-2007).

g VIRGINIA L. STRINGER

8/16/44
333 W.
Wacker
Drive
Chicago,
IL 60606

Board
Member **2011**

Board Member, Mutual Fund Directors Forum;
Member, Governing Board, Investment Company
Institute's Independent Directors Council;
governance consultant and non-profit board
member; former Owner and President, Strategic
Management Resources, Inc. a management
consulting firm; previously, held several executive
positions in general management, marketing and
human resources at IBM and The Pillsbury
Company; Independent Director, First American
Fund Complex (1987-2010) and Chair
(1997-2010).

238

Board Members & Officers (Unaudited) (continued)

Name, Birthdate and Address	Position(s) Held with the Funds	Year First Elected or Appointed and Term ⁽¹⁾	Principal Occupation(s) Including other Directorships During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member
--------------------------------------	--	---	---	--

Independent Board Members (continued):g **TERENCE J. TOTH⁽²⁾**

9/29/59 333 W. Wacker Drive Chicago, IL 60606	Board Member	2008 Class II	Director, Legal & General Investment Management America, Inc. (since 2008); Managing Partner, Promus Capital (since 2008); formerly, CEO and President, Northern Trust Global Investments (2004-2007); Executive Vice President, Quantitative Management & Securities Lending (2000-2004); prior thereto, various positions with Northern Trust Company (since 1994); member: Goodman Theatre Board (since 2004), Chicago Fellowship Board (since 2005) and Catalyst Schools of Chicago Board (since 2008); formerly, member: Northern Trust Mutual Funds Board (2005-2007), Northern Trust Global Investments Board (2004-2007), Northern Trust Japan Board (2004-2007), Northern Trust Securities Inc. Board (2003-2007) and Northern Trust Hong Kong Board (1997-2004).	238
--	-----------------	--------------------------------	--	------------

Interested Board Member:g **JOHN P. AMBOIAN⁽³⁾**

6/14/61 333 W. Wacker Drive Chicago, IL 60606	Board Member	2008 Class II	Chief Executive Officer and Chairman (since 2007) and Director (since 1999) of Nuveen Investments, Inc., formerly, President (1999-2007); Chief Executive Officer (since 2007) of Nuveen Investments Advisers, Inc.; Director (since 1998) formerly, Chief Executive Officer (2007-2010) of Nuveen Fund Advisors, Inc.	238
--	-----------------	--------------------------------	--	------------

Name, Birthdate and Address	Position(s) Held with the Funds	Year First Elected or Appointed ⁽⁴⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Officer
--------------------------------------	--	--	--	--

Officers of the Funds:

g GIFFORD R. ZIMMERMAN

9/9/56
333 W.
Wacker
Drive
Chicago,
IL 60606

Chief
Administrative
Officer

Managing Director (since 2002), Assistant Secretary and Associate General Counsel of Nuveen Securities, LLC; Managing Director (since 2004) and Assistant Secretary (since 1994) of Nuveen Investments, Inc.; Managing Director (since 2002), Assistant Secretary (since 1997) and Co-General Counsel (since 2011) of Nuveen Fund Advisors, Inc.; Managing Director, Assistant Secretary and Associate General Counsel of Nuveen Asset Management, LLC (since 2011); Managing Director, Associate General Counsel and Assistant Secretary, of Symphony Asset Management LLC (since 2003); Vice President and Assistant Secretary of NWQ Investment Management Company, LLC (since 2002), Nuveen Investments Advisers Inc. (since 2002), Tradewinds Global Investors LLC, and Santa Barbara Asset Management, LLC (since 2006), Nuveen HydePark Group LLC and Nuveen Investment Solutions, Inc. (since 2007) and of Winslow Capital Management Inc. (since 2010); Chief Administrative Officer and Chief Compliance Officer (since 2006) of Nuveen Commodities Asset Management, LLC; Chartered Financial Analyst.

238

Nuveen Investments

40

Name, Birthdate and Address	Position(s) Held with the Funds	Year First Elected or Appointed⁽⁴⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Officer
Officers of the Funds (continued):				
g WILLIAM ADAMS IV				
6/9/55 333 W. Wacker Drive Chicago, IL 60606	Vice President	2007	Senior Executive Vice President, Global Structured Products (since 2010), formerly, Executive Vice President (1999-2010) of Nuveen Securities, LLC; Co-President of Nuveen Fund Advisors, Inc. (since 2011); President (since August 2011), formerly, Managing Director (2010-2011) of Nuveen Commodities Asset Management, LLC.	133
g CEDRIC H. ANTOSIEWICZ				
1/11/62 333 W. Wacker Drive Chicago, IL 60606	Vice President	2007	Managing Director of Nuveen Securities, LLC.	133
g MARGO L. COOK				
4/11/64 333 W. Wacker Drive Chicago, IL 60606	Vice President	2009	Executive Vice President (since 2008) of Nuveen Investments, Inc. and of Nuveen Fund Advisors, Inc. (since 2011); Managing Director-Investment Services of Nuveen Commodities Asset Management, LLC (since August 2011), previously, Head of Institutional Asset Management (2007-2008) of Bear Stearns Asset Management; Head of Institutional Asset Management (1986-2007) of Bank of NY Mellon; Chartered Financial Analyst.	238
g LORNA C. FERGUSON				
10/24/45 333 W. Wacker Drive Chicago, IL 60606	Vice President	1998	Managing Director (since 2005) of Nuveen Fund Advisors, Inc. and Nuveen Securities, LLC (since 2004).	238
g STEPHEN D. FOY				
5/31/54 333 W.	Vice President	1998	Senior Vice President (since 2010), formerly, Vice President (2005-2010) and Funds Controller of	238

Wacker and
Drive Controller
Chicago,
IL 60606

Nuveen Securities, LLC; Vice President of Nuveen Fund Advisors, Inc.; Chief Financial Officer of Nuveen Commodities Asset Management, LLC; (since 2010) Certified Public Accountant.

g **SCOTT S. GRACE**

8/20/70 Vice
333 W. President **2009**
Wacker and
Drive Treasurer
Chicago,
IL 60606

Managing Director, Corporate Finance & Development, Treasurer (since 2009) of Nuveen Securities, LLC; Managing Director and Treasurer (since 2009) of Nuveen Fund Advisors, Inc., Nuveen Investment Solutions, Inc., Nuveen Investments Advisers, Inc., Nuveen Investments Holdings Inc. and (since 2011) Nuveen Asset Management, LLC; Vice President and Treasurer of NWQ Investment Management Company, LLC, Tradewinds Global Investors, LLC, Symphony Asset Management LLC and Winslow Capital Management, Inc.; Vice President of Santa Barbara Asset Management, LLC; formerly, Treasurer (2006-2009), Senior Vice President (2008-2009), previously, Vice President (2006-2008) of Janus Capital Group, Inc.; formerly, Senior Associate in Morgan Stanley's Global Financial Services Group (2000-2003); Chartered Accountant Designation.

238

Board Members & Officers (Unaudited) (continued)

Name, Birthdate and Address	Position(s) Held with the Funds	Year First Elected or Appointed⁽⁴⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Officer
Officers of the Funds (continued):				
g WALTER M. KELLY				
2/24/70 333 W. Wacker Drive Chicago, IL 60606	Chief Compliance Officer and Vice President	2003	Senior Vice President (since 2008) and Assistant Secretary (since 2003) of Nuveen Fund Advisors, Inc.	238
g TINA M. LAZAR				
8/27/61 333 W. Wacker Drive Chicago, IL 60606	Vice President	2002	Senior Vice President (since 2010), formerly, Vice President (2005-2010) of Nuveen Fund Advisors, Inc.	238
g KEVIN J. MCCARTHY				
3/26/66 333 W. Wacker Drive Chicago, IL 60606	Vice President and Secretary	2007	Managing Director (since 2008), formerly, Vice President (2007-2008), Nuveen Securities, LLC; Managing Director (since 2008), Assistant Secretary (since 2007) and Co-General Counsel (since 2011) of Nuveen Fund Advisors, Inc.; Managing Director, Assistant Secretary and Associate General Counsel (since 2011) of Nuveen Asset Management, LLC; Managing Director (since 2008), and Assistant Secretary, Nuveen Investment Holdings, Inc.; Vice President (since 2007) and Assistant Secretary of Nuveen Investments Advisers Inc., NWQ Investment Management Company, LLC, Tradewinds Global Investors LLC, NWQ Holdings, LLC, Symphony Asset Management LLC, Santa Barbara Asset Management, LLC, Nuveen HydePark Group, LLC, Nuveen Investment Solutions, Inc. (since 2007) and of Winslow Capital Management, Inc. (since 2010); Vice President and Secretary (since 2010) of Nuveen Commodities Asset Management, LLC; prior thereto, Partner, Bell,	238

Boyd & Lloyd LLP (1997-2007).

g KATHLEEN L. PRUDHOMME

<p>3/30/53 901 Marquette Avenue Minneapolis, MN 55402</p>	<p>Vice President and Assistant Secretary</p>	<p>2011</p>	<p>Managing Director, Assistant Secretary and Co-General Counsel (since 2011) of Nuveen Fund Advisors, Inc.; Managing Director, Assistant Secretary and Associate General Counsel (since 2011) of Nuveen Asset Management, LLC; Managing Director and Assistant Secretary (since 2011) of Nuveen Securities, LLC; formerly, Deputy General Counsel, FAF Advisors, Inc. (2004-2010).</p>	<p>238</p>
---	---	--------------------	---	-------------------

(1) The Board Members serve three year terms. The Board of Trustees is divided into three classes. Class I, Class II, and Class III, with each being elected to serve until the third succeeding annual shareholders' meeting subsequent to its election or thereafter in each case when its respective successors are duly elected or appointed. The first year elected or appointed represents the year in which the board member was first elected or appointed to any fund in the Nuveen Complex.

(2) Also serves as a trustee of the Nuveen Diversified Commodity Fund, an exchange-traded commodity pool managed by Nuveen Commodities Asset Management, LLC, an affiliate of the Adviser.

(3) Mr. Amboian is an interested Trustee because of his position with Nuveen Investments, Inc. and certain of its subsidiaries, which are affiliates of the Nuveen Funds.

(4) Officers serve one year terms through August of each year. The year first elected or appointed represents the year in which the Officer was first elected or appointed to any fund in the Nuveen Complex.

Reinvest Automatically
Easily and Conveniently

Nuveen makes reinvesting easy. A phone call is all it takes to set up your reinvestment account.

Nuveen Closed-End Funds Automatic Reinvestment Plan

Your Nuveen Closed-End Fund allows you to conveniently reinvest distributions in additional Fund shares.

By choosing to reinvest, you'll be able to invest money regularly and automatically, and watch your investment grow through the power of compounding. Just like distributions in cash, there may be times when income or capital gains taxes may be payable on distributions that are reinvested.

It is important to note that an automatic reinvestment plan does not ensure a profit, nor does it protect you against loss in a declining market.

Easy and convenient

To make recordkeeping easy and convenient, each quarter you'll receive a statement showing your total distributions, the date of investment, the shares acquired and the price per share, and the total number of shares you own.

How shares are purchased

The shares you acquire by reinvesting will either be purchased on the open market or newly issued by the Fund. If the shares are trading at or above net asset value at the time of valuation, the Fund will issue new shares at the greater of the net asset value or 95% of the then-current market price. If the shares are trading at less than net asset value, shares for your account will be purchased on the open market. If the Plan Agent begins purchasing Fund shares on the open market while shares are trading below net asset value, but the Fund's shares subsequently trade at or above their net asset value before the Plan Agent is able to complete its purchases, the Plan Agent may cease open-market purchases and may invest the uninvested portion of the distribution in newly-issued Fund shares at a price equal to the greater of the shares' net asset value or 95% of the shares' market value on the last business day immediately prior to the purchase date. Distributions received to purchase shares in the open market will normally be invested shortly after the distribution payment date. No interest will be paid on distributions awaiting reinvestment. Because the market price of the shares may increase before purchases are completed, the average purchase price per share may exceed the market price at the time of valuation, resulting in the acquisition of fewer shares than if the distribution had been paid in shares issued by the Fund. A pro rata portion of any applicable brokerage commissions on open market purchases will be paid

Reinvest Automatically
Easily and Conveniently (continued)

by Plan participants. These commissions usually will be lower than those charged on individual transactions.

Flexible

You may change your distribution option or withdraw from the Plan at any time, should your needs or situation change.

You can reinvest whether your shares are registered in your name, or in the name of a brokerage firm, bank, or other nominee. Ask your financial advisor if his or her firm will participate on your behalf. Participants whose shares are registered in the name of one firm may not be able to transfer the shares to another firm and continue to participate in the Plan.

The Fund reserves the right to amend or terminate the Plan at any time. Although the Fund reserves the right to amend the Plan to include a service charge payable by the participants, there is no direct service charge to participants in the Plan at this time.

Call today to start reinvesting distributions

For more information on the Nuveen Automatic Reinvestment Plan or to enroll in or withdraw from the Plan, speak with your financial advisor or call us at (800) 257-8787.

Nuveen Investments
44

Glossary of Terms
Used in this Report

- **Average Annual Total Return:** This is a commonly used method to express an investment's performance over a particular, usually multi-year time period. It expresses the return that would have been necessary each year to equal the investment's actual cumulative performance (including change in NAV or market price and reinvested dividends and capital gains distributions, if any) over the time period being considered.
- **Comparative Benchmark:** A blend of returns consisting of 1) 50% of the S&P 500 Index and 2) 50% of the CBOE S&P 500 Buy/Write Index (BXM), which is a passive total return index based on selling the near-term, at-the-money S&P 500 Index (SPX) call option against the S&P 500 Index portfolio each month, on the day the current contract expires. Index returns assume reinvestment of distributions, but do not include the effects of any applicable sales charges or management fees. It is not possible to invest directly in an index.
- **Current Distribution Rate:** Market yield is based on the Fund's current annualized quarterly distribution divided by the Fund's current market price. The Fund's quarterly distributions to its shareholders may be comprised of ordinary income, net realized capital gains and, if at the end of the calendar year the Fund's cumulative net ordinary income and net realized gains are less than the amount of the Fund's distributions, a tax return of capital.
- **Inverse Floating Rate Securities:** Inverse floating rate securities, also known as inverse floaters or tender option bonds (TOBs), are created by depositing a municipal bond, typically with a fixed interest rate, into a special purpose trust created by a broker-dealer. This trust, in turn, (a) issues floating rate certificates typically paying short-term tax-exempt interest rates to third parties in amounts equal to some fraction of the deposited bond's par amount or market value, and (b) issues an inverse floating rate certificate (sometimes referred to as an "inverse floater") to an investor (such as a Fund) interested in gaining investment exposure to a long-term municipal bond. The income received by the holder of the inverse floater varies inversely with the short-term rate paid to the floating rate certificates' holders, and in most circumstances the holder of the inverse floater bears substantially all of the underlying bond's downside investment risk. The holder of the inverse floater typically also benefits disproportionately from any potential appreciation of the underlying bond's value. Hence, an inverse floater essentially represents an investment in the underlying bond on a leveraged basis.
- **Net Asset Value (NAV):** The net market value of all securities held in a portfolio.
- **Net Asset Value (NAV) Per Share:** The market value of one share of a mutual fund or closed-end fund. For a Fund, the NAV is calculated daily by taking the Fund's total

Glossary of Terms

Used in this Report (continued)

assets (securities, cash, and accrued earnings), subtracting the Fund's liabilities, and dividing by the number of shares outstanding.

- **S&P 500 Index:** An unmanaged index generally considered representative of the U.S. stock market. Index returns assume reinvestment of distributions, but do not include the effects of any applicable sales charges or management fees. It is not possible to invest directly in an index.

Nuveen Investments

46

Additional Fund Information

Board of Trustees

John P. Amboian
Robert P. Bremner
Jack B. Evans
William C. Hunter
David J. Kundert
William J. Schneider
Judith M. Stockdale
Carole E. Stone
Virginia L. Stringer
Terence J. Toth

Fund Manager

Nuveen Fund Advisors, Inc.
333 West Wacker Drive
Chicago, IL 60606

Custodian

State Street Bank & Trust Company
Boston, MA

**Transfer Agent and
Shareholder Services**

State Street Bank & Trust Company
Nuveen Funds
P.O. Box 43071
Providence, RI 02940-3071
(800) 257-8787

Legal Counsel

Chapman and Cutler LLP
Chicago, IL

**Independent Registered
Public Accounting Firm**

PricewaterhouseCoopers LLP
Chicago, IL

Quarterly Portfolio of Investments and Proxy Voting Information

You may obtain (i) the Fund's quarterly portfolio of investments, (ii) information regarding how the Fund voted proxies relating to portfolio securities held during the most recent twelve-month period ended June 30, and (iii) a description of the policies and procedures that the Fund used to determine how to vote proxies relating to portfolio securities without charge, upon request, by calling Nuveen Investments toll-free at (800) 257-8787 or on Nuveen's website at www.nuveen.com.

You may also obtain this and other Fund information directly from the Securities and Exchange Commission (SEC). The SEC may charge a copying fee for this information. Visit the SEC on-line at <http://www.sec.gov> or in person at the SEC's Public Reference Room in Washington, D.C. Call the SEC at (202) 942-8090 for room hours and operation. You may also request Fund information by sending an e-mail request to publicinfo@sec.gov or by writing to the SEC's Public Reference Section at 100 F Street NE, Washington, D.C. 20549.

CEO Certification Disclosure

The Fund's Chief Executive Officer has submitted to the New York Stock Exchange (NYSE) the annual CEO certification as required by Section 303A.12(a) of the NYSE Listed Company Manual.

The Fund has filed with the SEC the certification of its Chief Executive Officer and Chief Financial Officer required by Section 302 of the Sarbanes-Oxley Act.

Distribution Information

The Fund hereby designates its percentages of dividends paid from net ordinary income as dividends qualifying for the 70% dividends received deduction (DRD) for corporations and their percentages as qualified dividend income (QDI) for individuals under Section 1(h)(11) of the Internal Revenue Code as shown in the accompanying table. The actual qualified dividend income distributions will be reported to shareholders on Form 1099-DIV which will be sent to shareholders shortly after calendar year end.

	% of DRD	% of QDI
JCE	21.89%	22.04%

Share Information

The Fund intends to repurchase shares of its own common stock in the future at such times and in such amounts as is deemed advisable. During the period covered by this report, the Fund repurchased shares of its common stock as shown in the accompanying table.

	Common Shares Repurchased
JCE	5,000

Any future repurchases will be reported to shareholders in the next annual or semi-annual report.

Nuveen Investments:
Serving Investors for Generations

Since 1898, financial advisors and their clients have relied on Nuveen Investments to provide dependable investment solutions through continued adherence to proven, long-term investing principles. Today, we offer a range of high quality equity and fixed-income solutions designed to be integral components of a well-diversified core portfolio.

Focused on meeting investor needs.

Nuveen Investments provides high-quality investment services designed to help secure the long-term goals of institutional and individual investors as well as the consultants and financial advisors who serve them. Nuveen Investments markets a wide range of specialized investment solutions which provide investors access to capabilities of its high-quality boutique investment affiliates Nuveen Asset Management, Symphony Asset Management, NWQ Investment Management Company, Santa Barbara Asset Management, Tradewinds Global Investors, Winslow Capital Management and Gresham Investment Management. In total, Nuveen Investments managed \$220 billion as of December 31, 2011.

Find out how we can help you.

To learn more about how the products and services of Nuveen Investments may be able to help you meet your financial goals, talk to your financial advisor, or call us at **(800) 257-8787**. Please read the information provided carefully before you invest. Investors should consider the investment objective and policies, risk considerations, charges and expenses of any investment carefully. Where applicable, be sure to obtain a prospectus, which contains this and other relevant information. To obtain a prospectus, please contact your securities representative or **Nuveen Investments, 333 W. Wacker Dr., Chicago, IL 60606**. Please read the prospectus carefully before you invest or send money.

Learn more about Nuveen Funds at: www.nuveen.com/cef

Distributed by
Nuveen Securities, LLC
333 West Wacker Drive
Chicago, IL 60606
www.nuveen.com/cef

EAN-I-1211D

ITEM 2. CODE OF ETHICS.

As of the end of the period covered by this report, the registrant has adopted a code of ethics that applies to the registrant's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. There were no amendments to or waivers from the Code during the period covered by this report. The registrant has posted the code of ethics on its website at www.nuveen.com/CEF/Info/Shareholder/. (To view the code, click on Fund Governance and then click on Code of Conduct.)

ITEM 3. AUDIT COMMITTEE FINANCIAL EXPERT.

The registrant's Board of Directors or Trustees (Board) determined that the registrant has at least one audit committee financial expert (as defined in Item 3 of Form N-CSR) serving on its Audit Committee. The registrant's audit committee financial expert is Carole E. Stone, who is independent for purposes of Item 3 of Form N-CSR.

Ms. Stone served for five years as Director of the New York State Division of the Budget. As part of her role as Director, Ms. Stone was actively involved in overseeing the development of the State's operating, local assistance and capital budgets, its financial plan and related documents; overseeing the development of the State's bond-related disclosure documents and certifying that they fairly presented the State's financial position; reviewing audits of various State and local agencies and programs; and coordinating the State's system of internal audit and control. Prior to serving as Director, Ms Stone worked as a budget analyst/examiner with increasing levels of responsibility over a 30 year period, including approximately five years as Deputy Budget Director. Ms. Stone has also served as Chair of the New York State Racing Association Oversight Board, as Chair of the Public Authorities Control Board, as a Commissioner on the New York State Commission on Public Authority Reform and as a member of the Boards of Directors of several New York State public authorities. These positions have involved overseeing operations and finances of certain entities and assessing the adequacy of project/entity financing and financial reporting. Currently, Ms. Stone is on the Board of Directors of CBOE Holdings, Inc., of the Chicago Board Options Exchange, and of C2 Options Exchange. Ms. Stone's position on the boards of these entities and as a member of both CBOE Holdings' Audit Committee and its Finance Committee has involved, among other things, the oversight of audits, audit plans and preparation of financial statements.

ITEM 4. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

NUVEEN CORE EQUITY ALPHA FUND

The following tables show the amount of fees that PricewaterhouseCoopers LLP, the Fund's auditor, billed to the Fund during the Fund's last two full fiscal years. For engagements with PricewaterhouseCoopers LLP the Audit Committee approved in advance all audit services and non-audit services that PricewaterhouseCoopers LLP provided to the Fund, except for those non-audit services that were subject to the pre-approval exception under Rule 2-01 of Regulation S-X (the pre-approval exception). The pre-approval exception for services provided directly to the Fund waives the pre-approval requirement for services other than audit, review or attest services if: (A) the aggregate amount of all such services provided constitutes no more than 5% of the total amount of revenues paid by the Fund to its accountant during the fiscal year in which the services are provided; (B) the Fund did not recognize the services as non-audit services at the time of the engagement; and (C) the services are promptly brought to the Audit Committee's attention, and the Committee (or its delegate) approves the services before the audit is completed.

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

The Audit Committee has delegated certain pre-approval responsibilities to its Chairman (or, in his absence, any other member of the Audit Committee).

SERVICES THAT THE FUND'S AUDITOR BILLED TO THE FUND

Fiscal Year Ended	Audit Fees Billed to Fund (1)	Audit-Related Fees Billed to Fund (2)	Tax Fees Billed to Fund (3)	All Other Fees Billed to Fund (4)
December 31, 2011	\$ 26,097	\$ 0	\$ 0	\$ 0
Percentage approved pursuant to pre-approval exception	0%	0%	0%	0%
December 31, 2010	\$ 25,823	\$ 0	\$ 2,840	\$ 0
Percentage approved pursuant to pre-approval exception	0%	0%	0%	0%

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

- (1) **Audit Fees** are the aggregate fees billed for professional services for the audit of the Fund's annual financial statements and services provided in connection with statutory and regulatory filings or engagements.
- (2) **Audit Related Fees** are the aggregate fees billed for assurance and related services reasonably related to the performance of the audit or review of financial statements and are not reported under **Audit Fees**.
- (3) **Tax Fees** are the aggregate fees billed for professional services for tax advice, tax compliance, and tax planning.
- (4) **All Other Fees** are the aggregate fees billed for products and services for agreed upon procedures engagements performed for leveraged funds.

SERVICES THAT THE FUND'S AUDITOR BILLED TO THE ADVISER AND AFFILIATED FUND SERVICE PROVIDERS

The following tables show the amount of fees billed by PricewaterhouseCoopers LLP to Nuveen Fund Advisors, Inc. (formerly Nuveen Asset Management) (the **Adviser**), and any entity controlling, controlled by or under common control with the Adviser that provides ongoing services to the Fund (**Affiliated Fund Service Provider**), for engagements directly related to the Fund's operations and financial reporting, during the Fund's last two full fiscal years.

The tables also show the percentage of fees subject to the pre-approval exception. The pre-approval exception for services provided to the Adviser and any Affiliated Fund Service Provider (other than audit, review or attest services) waives the pre-approval requirement if: (A) the aggregate amount of all such services provided constitutes no more than 5% of the total amount of revenues paid to PricewaterhouseCoopers LLP by the Fund, the Adviser and Affiliated Fund Service Providers during the fiscal year in which the services are provided that would have to be pre-approved by the Audit Committee; (B) the Fund did not recognize the services as non-audit services at the time of the engagement; and (C) the services are promptly brought to the Audit Committee's attention, and the Committee (or its delegate) approves the services before the Fund's audit is completed.

Fiscal Year Ended	Audit-Related Fees Billed to Adviser and Affiliated Fund Service Providers	Tax Fees Billed to Adviser and Affiliated Fund Service Providers	All Other Fees Billed to Adviser and Affiliated Fund Service Providers
December 31, 2011	\$ 0	\$ 0	\$ 0
Percentage approved pursuant to pre-approval exception	0%	0%	0%
December 31, 2010	\$ 0	\$ 0	\$ 0
Percentage approved pursuant to pre-approval exception	0%	0%	0%

NON-AUDIT SERVICES

The following table shows the amount of fees that PricewaterhouseCoopers LLP billed during the Fund's last two full fiscal years for non-audit services. The Audit Committee is required to pre-approve non-audit services that PricewaterhouseCoopers LLP provides to the Adviser and any Affiliated Fund Services Provider, if the engagement related directly to the Fund's operations and financial reporting (except for those subject to the pre-approval exception described above). The Audit Committee requested and received information from PricewaterhouseCoopers LLP about any non-audit services that PricewaterhouseCoopers LLP rendered during the Fund's last fiscal year to the Adviser and any Affiliated Fund Service Provider. The Committee considered this information in evaluating PricewaterhouseCoopers LLP's independence.

Fiscal Year Ended	Total Non-Audit Fees Billed to Fund	Total Non-Audit Fees billed to Adviser and Affiliated Fund Service Providers (engagements related directly to the operations and financial reporting of the Fund)	Total Non-Audit Fees billed to Adviser and Affiliated Fund Service Providers (all other engagements)	Total
December 31, 2011	\$ 0	\$ 0	\$ 0	0
December 31, 2010	\$ 2,840	\$ 0	\$ 0	2,840

Non-Audit Fees billed to Fund for both fiscal year ends represent Tax Fees and All Other Fees billed to Fund in their respective amounts from the previous table.

Audit Committee Pre-Approval Policies and Procedures. Generally, the Audit Committee must approve (i) all non-audit services to be performed for the Fund by the Fund's independent accountants and (ii) all audit and non-audit services to be performed by the Fund's independent accountants for the Affiliated Fund Service Providers with respect to operations and financial reporting of the Fund. Regarding tax and research projects conducted by the independent accountants for the Fund and Affiliated Fund Service Providers (with respect to operations and financial reports of the Fund) such engagements will be (i) pre-approved by the Audit Committee if they are expected to be for amounts greater than \$10,000; (ii) reported to the Audit Committee chairman for his verbal approval prior to engagement if they are expected to be for amounts under \$10,000 but greater than \$5,000; and (iii) reported to the Audit Committee at the next Audit Committee meeting if they are expected to be for an amount under \$5,000.

ITEM 5. AUDIT COMMITTEE OF LISTED REGISTRANTS.

The registrant's Board has a separately designated Audit Committee established in accordance with Section 3(a)(58)(A) of the Securities Exchange Act of 1934, as amended (15 U.S.C. 78c(a)(58)(A)). The members of the audit committee are Robert P. Bremner, David J. Kundert, William J. Schneider, Carole E. Stone and Terence J. Toth.

ITEM 6. SCHEDULE OF INVESTMENTS.

(a) See Portfolio of Investments in Item 1.

(b) Not applicable.

ITEM 7. DISCLOSURE OF PROXY VOTING POLICIES AND PROCEDURES FOR CLOSED-END MANAGEMENT INVESTMENT COMPANIES.

The Adviser, Nuveen Fund Advisors, Inc., has engaged INTECH Investment Management LLC (INTECH) and Nuveen Asset Management, LLC (Nuveen Asset Management) (INTECH and Nuveen Asset Management are collectively referred to herein as Sub-Advisers) to provide discretionary investment advisory services to the Fund. As part of these services, the Adviser has also delegated to INTECH and Nuveen Asset Management the full responsibility for proxy voting and related duties in accordance with the Sub-Adviser s policy and procedures. The Adviser periodically will monitor each Sub-Adviser s voting to ensure that they are carrying out their duties. The Sub-Advisers proxy voting policies and procedures are summarized as follows:

INTECH

The Fund is responsible for voting proxies on securities held in its portfolio. When the Fund receives a proxy, the decision regarding how to vote such proxy will be made by INTECH in accordance with its proxy voting procedures.

INTECH has engaged Institutional Shareholder Services, ISS Governance Services (ISS) to vote all Fund proxies in accordance with ISS Benchmark Proxy Voting Guidelines (ISS Recommendations). Concurrent with the adoption of these procedures, INTECH will not accept direction in the voting of proxies for which it has voting responsibility from any person or organization other than the ISS Recommendations. INTECH has engaged the services of the Janus Investment Accounting Operations Group to provide the administration for its proxy voting. INTECH has adopted procedures and controls to avoid conflicts of interest that may arise in connection with proxy voting.

In light of INTECH's policies, it is not expected that any conflicts will arise in the proxy voting process. In the unusual circumstance that ISS seeks direction on any matter or INTECH is otherwise in a position of evaluating a proposal on a case-by-case basis, the matter shall be referred to the INTECH Chief Compliance Officer to determine whether a material conflict exists. The matter will be reviewed by INTECH's General Counsel, Chief Financial Officer and Chief Compliance Officer (Proxy Review Group). To the extent that a conflict of interest is identified, INTECH will vote the proxy according to the ISS recommendation unless otherwise determined by the Proxy Review Group and INTECH will report the resolution of the vote to the Fund's Proxy Voting Committee.

NUVEEN ASSET MANAGEMENT

Nuveen Asset Management's proxy voting policies and procedures are attached to this filing as an exhibit and incorporated herein by reference.

ITEM 8. PORTFOLIO MANAGERS OF CLOSED-END MANAGEMENT INVESTMENT COMPANIES.

Nuveen Fund Advisors, Inc. (NFA) is the registrant's investment adviser (NFA is also referred to as the Adviser). NFA is responsible for the selection and on-going monitoring of the Fund's investment portfolio, managing the Fund's business affairs and providing certain clerical, bookkeeping and administrative services. The Adviser has engaged INTECH Investment Management LLC (INTECH) and Nuveen Asset Management, LLC (Nuveen Asset Management) (INTECH and Nuveen Asset Management are also collectively referred to as Sub-Advisers), as Sub-Advisers to provide discretionary investment advisory services. The following section provides information on the portfolio managers at each Sub-Adviser:

NUVEEN ASSET MANAGEMENT

Item 8(a)(1). PORTFOLIO MANAGER BIOGRAPHIES

Messrs. Keith B. Hembre, CFA, David A. Friar and James Colon, CFA are primarily responsible for the day-to-day management of the portion of the registrant's portfolio managed by Nuveen Asset Management.

Mr. Hembre, Managing Director of Nuveen Asset Management, entered the financial services industry in 1992. He joined Nuveen Asset Management, LLC in January 2011 following the firm's acquisition of a portion of the asset management business of FAF Advisors, Inc. (FAF Advisors) and currently serves as Nuveen Asset Management's Chief Economist & Chief Investment Strategist. Mr. Hembre previously served in various positions with FAF Advisors since 1997 where he headed the team that managed the firm's asset allocation, international equity, quantitative equity, and index products and most recently also served as Chief Economist and Chief Investment Strategist.

Mr. Friar, Senior Vice President and Portfolio Manager of Nuveen Asset Management since January 2011, entered the financial services industry in 1998. He joined Nuveen Asset Management in January 2011 following the firm's acquisition of a portion of the asset management business of FAF Advisors. Mr. Friar previously served in various positions with FAF Advisors since 1999 where he served as a member of

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

FAF's Performance Measurement group.

Mr. Colon is a portfolio manager and senior quantitative analyst for Nuveen Asset Management. His responsibilities include portfolio management, risk management and research, with a specific focus on asset allocation strategies. Prior to Nuveen Asset Management, he was a Vice President and Portfolio Manager at HydePark and at an affiliate, Nuveen Investment Solutions (NIS), where he managed the quantitative analysis underlying NIS's asset allocation, alternative investment research, and risk management methods. He is a member of the CFA Institute, the CFA Society of Chicago, and the International Association of Financial Engineers.

Item 8(a)(2). OTHER ACCOUNTS MANAGED BY PORTFOLIO MANAGERS

In addition to the Fund, as of December 31, 2011, the portfolio managers are also primarily responsible for the day-to-day portfolio management of the following accounts:

(i) Name of Portfolio Manager	(ii) Number of Other Accounts Managed and Assets by Account Type							(iii) Number of Other Accounts and Assets for Which Advisory Fee is Performance-Based		
	Other Registered Investment Companies	Other Pooled Investment Vehicles	Other Accounts	Other Registered Investment Companies	Other Pooled Investment Vehicles	Other Accounts	Other Registered Investment Companies	Other Pooled Investment Vehicles	Other Accounts	
Keith Hembre	8	\$ 2.040 billion	0	\$ 0	4	\$ 19,032,156	NA	NA	NA	
David Friar	11	\$ 2.824 billion	0	\$ 0	26	\$ 621,846,629	NA	NA	NA	
James Colon	9	\$ 1.875 billion	0	\$ 0	5	\$ 1,544,710	NA	NA	NA	

POTENTIAL MATERIAL CONFLICTS OF INTEREST

Actual or apparent conflicts of interest may arise when a portfolio manager has day-to-day management responsibilities with respect to more than one account. More specifically, portfolio managers who manage multiple accounts are presented a number of potential conflicts, including, among others, those discussed below.

The management of multiple accounts may result in a portfolio manager devoting unequal time and attention to the management of each account. Nuveen Asset Management seeks to manage such competing interests for the time and attention of portfolio managers by having portfolio managers focus on a particular investment discipline. Most accounts managed by a portfolio manager in a particular investment strategy are managed using the same investment models.

If a portfolio manager identifies a limited investment opportunity which may be suitable for more than one account, an account may not be able to take full advantage of that opportunity due to an allocation of filled purchase or sale orders across all eligible accounts. To deal with these situations, Nuveen Asset Management has adopted procedures for allocating limited opportunities across multiple accounts.

With respect to many of its clients' accounts, Nuveen Asset Management determines which broker to use to execute transaction orders, consistent with its duty to seek best execution of the transaction. However, with respect to certain other accounts, Nuveen Asset Management may be limited by the client with respect to the selection of brokers or may be instructed to direct trades through a particular broker. In these cases, Nuveen Asset Management may place separate, non-simultaneous, transactions for a Fund and other accounts which may temporarily affect the market price of the security or the execution of the transaction, or both, to the detriment of the Fund or the other accounts.

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

Some clients are subject to different regulations. As a consequence of this difference in regulatory requirements, some clients may not be permitted to engage in all the investment techniques or transactions or to engage in these transactions to the same extent as the other accounts managed by the portfolio manager. Finally, the appearance of a conflict of interest may arise where Nuveen Asset Management has an incentive, such as a performance-based management fee, which relates to the management of some accounts, with respect to which a portfolio manager has day-to-day management responsibilities.

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

Nuveen Asset Management has adopted certain compliance procedures which are designed to address these types of conflicts common among investment managers. However, there is no guarantee that such procedures will detect each and every situation in which a conflict arises.

Item 8(a)(3). FUND MANAGER COMPENSATION

Portfolio manager compensation consists primarily of base pay, an annual cash bonus and long term incentive payments.

Base pay. Base pay is determined based upon an analysis of the portfolio manager's general performance, experience, and market levels of base pay for such position.

Annual cash bonus. The Fund's portfolio managers are eligible for an annual cash bonus based on investment performance, qualitative evaluation and financial performance of Nuveen Asset Management.

A portion of each portfolio manager's annual cash bonus is based on the Fund's investment performance, generally measured over the past one- and three or five-year periods unless the portfolio manager's tenure is shorter. Investment performance for the Fund generally is determined by evaluating the Fund's performance relative to its benchmark(s) and/or Lipper industry peer group.

A portion of the cash bonus is based on a qualitative evaluation made by each portfolio manager's supervisor taking into consideration a number of factors, including the portfolio manager's team collaboration, expense management, support of personnel responsible for asset growth, and his or her compliance with Nuveen Asset Management's policies and procedures.

The final factor influencing a portfolio manager's cash bonus is the financial performance of Nuveen Asset Management based on its operating earnings.

Long-term incentive compensation. Certain key employees of Nuveen Investments and its affiliates, including certain portfolio managers, have received equity interests in the parent company of Nuveen Investments. In addition, certain key employees of Nuveen Asset Management, including certain portfolio managers, have received profits interests in Nuveen Asset Management which entitle their holders to participate in the firm's growth over time.

There are generally no differences between the methods used to determine compensation with respect to the Fund and the Other Accounts shown in the table above.

Item 8(a)(4). OWNERSHIP OF JCE SECURITIES AS OF DECEMBER 31, 2011

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

Name of Portfolio Manager	None	\$1 - \$10,000	\$10,001- \$50,000	\$50,001- \$100,000	\$100,001- \$500,000	\$500,001- \$1,000,000	Over \$1,000,000
Keith Hembre	X						
David Friar	X						
James Colon	X						

INTECH

Item 8(a)(1). PORTFOLIO MANAGER BIOGRAPHIES

No one person of the investment team is primarily responsible for implementing the investment strategies of the Fund. A team of investment professionals consisting of Dr. Robert Fernholz, Dr. Adrian Banner, and Joseph Runnels works together to implement the mathematical portfolio management process.

E. Robert Fernholz has been Chief Investment Officer (CIO) of INTECH since January 1991. Dr. Fernholz joined INTECH in June 1987. He received his A.B. in Mathematics from Princeton University and his Ph.D. in Mathematics from Columbia University. As CIO, Dr. Fernholz sets policy for the investment strategy, reviews proposed changes, and assures adherence to policy. Dr. Fernholz implements and supervises the optimization process.

Adrian Banner has been Co-Chief Investment Officer (Co-CIO) of INTECH since January 2009. Dr. Banner, previously Senior Investment Officer since September 2007 and Director of Research from August 2002 to August 2007, joined INTECH in 2002. He received his Ph.D. in Mathematics from Princeton University and holds a M.Sc. and B.Sc. in Mathematics from the University of New South Wales, Australia. Dr. Banner has delivered lectures on the stability of market capitalization at a number of academic and professional conferences. Dr. Banner continues to teach at Princeton University, where he is also a part-time Lecturer in the Department of Mathematics. Dr. Banner implements the optimization process and supervises implementation of the portfolio management and trading process. He conducts mathematical research on the investment process and reviews and recommends improvements.

Joseph W. Runnels, CFA, has been Vice President of Portfolio Management at INTECH since March 2003. Mr. Runnels, previously Director of Trading and Operations from January 1999 to March 2003, joined INTECH in June 1998. Mr. Runnels holds a B.S. in Business Administration from Murray State University. Mr. Runnels implements the day-to-day portfolio management and trading process for client portfolios. He also handles brokerage relationships and supervises the daily execution of trading for client accounts. Mr. Runnels holds the Chartered Financial Analyst designation.

Item 8(a)(2). OTHER ACCOUNTS MANAGED BY PORTFOLIO MANAGERS

In addition to managing the Equity Portfolio, Dr. Fernholz is also primarily responsible for the day-to-day portfolio management of the following accounts. Information is provided as of December 31, 2011 unless otherwise indicated:

Type of Account Managed	Number of Accounts		Assets
Registered Investment Company*	15	\$	4,058,753,613
Other Pooled Investment**	32	\$	7,232,804,743
Other Accounts***	212	\$	28,604,314,255

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

In addition to managing the Equity Portfolio, Dr. Banner is also primarily responsible for the day-to-day portfolio management of the following accounts. Information is provided as of December 31, 2011 unless otherwise indicated:

Type of Account Managed	Number of Accounts		Assets
Registered Investment Company*	15	\$	4,058,753,613
Other Pooled Investment**	32	\$	7,232,804,743
Other Accounts***	212	\$	28,604,314,255

In addition to managing the Equity Portfolio, Mr. Runnels is also primarily responsible for the day-to-day portfolio management of the following accounts. Information is provided as of December 31, 2011 unless otherwise indicated:

Type of Account Managed	Number of Accounts		Assets
Registered Investment Company*	15	\$	4,058,753,613
Other Pooled Investment**	32	\$	7,232,804,743
Other Accounts***	212	\$	28,604,314,255

* 1 of the accounts included in the total, consisting of \$314,808,602 of the total assets in the category, has performance-based advisory fees.

** 1 of the accounts included in the total, consisting of \$1,313,710,211 of the total assets in the category, has performance-based advisory fees.

*** 31 of the accounts included in the total, consisting of \$6,182,861,127 of the total assets in the category, have performance-based advisory fees.

Material Conflicts of Interest. Actual or apparent conflicts of interest may arise when a portfolio manager has day-to-day management responsibilities with respect to more than one account. More specifically, a portfolio manager who manages multiple accounts is presented with the following potential conflicts:

- The management of multiple accounts may result in a portfolio manager devoting unequal time and attention to the management of each account. INTECH believes its mathematical investment process and the procedures it has in place are reasonably designed to mitigate these potential conflicts and risks. Specifically, INTECH's mathematical investment process significantly removes investment discretion.
- If a portfolio manager identifies a limited investment opportunity that may be suitable for more than one account, an account may not be able to take full advantage of that opportunity due to an allocation of filled purchase or sale orders across all eligible accounts. For INTECH, all allocations are based on computer-generated target weightings and trades occur simultaneously for all accounts on a rotating basis. Before submission for execution, trades are reviewed by the trader for errors or discrepancies. Trades are submitted to designated brokers in a single electronic file at one time during the day, pre-allocated to individual clients. In the event that an aggregated order is not completely filled, executed shares are allocated to participating client accounts in proportion to the order.
- INTECH has an established procedure for the selection, approval, management and annual review of broker relationships. INTECH gives primary consideration to obtaining the most favorable price and efficient execution. INTECH may, however, pay a higher

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

commission than would otherwise be necessary for a particular transaction when, in INTECH's opinion, to do so would further the goal of obtaining the best available execution. INTECH does not participate in soft dollar or directed brokerage commission arrangements and will not accept directed brokerage instructions. INTECH has a policy of paying commissions for execution services only and does not purchase research or other services from or through brokers using commissions.

- The Fund is subject to different regulation than the other pooled investment vehicles and other accounts managed by the portfolio manager. As a consequence of this difference in regulatory requirements, the Fund may not be permitted to engage in all the investment techniques or transactions or to engage in these transactions to the same extent as the other accounts managed by the portfolio manager. INTECH's mathematical investment process may result in situations in which some of its clients may sell or sell short securities when other clients purchase the same securities at or about the same time. In an attempt to reduce the likelihood of the orders matching up in the market and in an effort to maintain the confidentiality of INTECH's trading activities for purposes of improved execution, INTECH will direct purchase orders to different brokers than sell and/or sell short orders.

INTECH has adopted certain compliance procedures that are designed to address these types of conflicts common among investment managers. However, there is no guarantee that such procedures will detect each and every situation in which a conflict arises.

Item 8(a)(3). FUND MANAGER COMPENSATION

Salary and Cash Bonus. With respect to INTECH, the compensation structure of the investment personnel is determined by INTECH and is summarized by INTECH below. The following describes the structure and method of calculating INTECH's investment personnel's compensation as of December 31, 2011.

For managing the Fund and all other accounts, the investment personnel receive base pay in the form of a fixed annual salary paid by INTECH, and which is not based on performance or assets of the Fund or other accounts. The investment personnel are also eligible for a cash bonus as determined by INTECH, and which is not based on performance or assets of the Fund or other accounts.

Long-Term Incentive Compensation. The investment personnel, as part owners of INTECH, also receive compensation by virtue of their ownership interest in INTECH. The investment personnel may elect to defer payment of a designated percentage of their fixed compensation and/or up to all of their variable compensation in accordance with Janus Capital Group Inc.'s Executive Income Deferral Program.

Item 8(a)(4). OWNERSHIP OF JCE SECURITIES AS OF DECEMBER 31, 2011

Name of Portfolio Manager	None	\$1 - \$10,000	\$10,001- \$50,000	\$50,001- \$100,000	\$100,001- \$500,000	\$500,001- \$1,000,000	Over \$1,000,000
Fernholz	X						
Banner	X						
Runnels	X						

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

ITEM 9. PURCHASES OF EQUITY SECURITIES BY CLOSED-END MANAGEMENT INVESTMENT COMPANY AND AFFILIATED PURCHASERS.

Period*	(a) TOTAL NUMBER OF SHARES (OR UNITS) PURCHASED	(b) AVERAGE PRICE PAID PER SHARE (OR UNIT)	(c) TOTAL NUMBER OF SHARES (OR UNITS) PURCHASED AS PART OF PUBLICLY ANNOUNCED PLANS OR PROGRAMS	(d)* MAXIMUM NUMBER (OR APPROXIMATE DOLLAR VALUE) OF SHARES (OR UNITS) THAT MAY YET BE PURCHASED UNDER THE PLANS OR PROGRAMS
JANUARY 1-31, 2011	0		0	1,605,000
FEBRUARY 1-28, 2011	0		0	1,605,000
MARCH 1-31, 2011	0		0	1,605,000
APRIL 1-30, 2011	0		0	1,605,000
MAY 1-31, 2011	0		0	1,605,000
JUNE 1-30, 2011	0		0	1,605,000
JULY 1-31, 2011	0		0	1,605,000
AUGUST 1-31, 2011	5,000	\$ 11.29	5,000	1,600,000
SEPTEMBER 1-30, 2011	0		0	1,600,000
OCTOBER 1-31, 2011	0		0	1,600,000
NOVEMBER 1-30, 2011	0		0	1,600,000
DECEMBER 1-31, 2011	0		0	1,600,000
TOTAL	5,000			

* The registrant's repurchase program, for the repurchase of 1,605,000 shares, was authorized November 16, 2010. The program was reauthorized for a maximum repurchase amount of 1,600,000 shares on November 16, 2011. Any repurchases made by the registrant pursuant to the program were made through open-market transactions.

ITEM 10. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS.

There have been no material changes to the procedures by which shareholders may recommend nominees to the registrant's Board implemented after the registrant last provided disclosure in response to this Item.

ITEM 11. CONTROLS AND PROCEDURES.

Edgar Filing: Nuveen Core Equity Alpha Fund - Form N-CSR

(a) The registrant's principal executive and principal financial officers, or persons performing similar functions, have concluded that the registrant's disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940, as amended (the "1940 Act") (17 CFR 270.30a-3(c))) are effective, as of a date within 90 days of the filing date of this report that includes the disclosure required by this paragraph, based on their evaluation of the controls and procedures required by Rule 30a-3(b) under the 1940 Act (17 CFR 270.30a-3(b)) and Rules 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934, as amended (the "Exchange Act") (17 CFR 240.13a-15(b) or 240.15d-15(b)).

(b) There were no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the 1940 Act (17 CFR 270.30a-3(d)) that occurred during the second fiscal quarter of the period covered by this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.

ITEM 12. EXHIBITS.

File the exhibits listed below as part of this Form. Letter or number the exhibits in the sequence indicated.

(a)(1) Any code of ethics, or amendment thereto, that is the subject of the disclosure required by Item 2, to the extent that the registrant intends to satisfy the Item 2 requirements through filing of an exhibit: Not applicable because the code is posted on registrant's website at www.nuveen.com/CEF/Info/Shareholder/ and there were no amendments during the period covered by this report. (To view the code, click on Fund Governance and then Code of Conduct.)

(a)(2) A separate certification for each principal executive officer and principal financial officer of the registrant as required by Rule 30a-2(a) under the 1940 Act (17 CFR 270.30a-2(a)) in the exact form set forth below: Ex-99.CERT Attached hereto.

(a)(3) Any written solicitation to purchase securities under Rule 23c-1 under the 1940 Act (17 CFR 270.23c-1) sent or given during the period covered by the report by or on behalf of the registrant to 10 or more persons. Not applicable.

(b) If the report is filed under Section 13(a) or 15(d) of the Exchange Act, provide the certifications required by Rule 30a-2(b) under the 1940 Act (17 CFR 270.30a-2(b)); Rule 13a-14(b) or Rule 15d-14(b) under the Exchange Act (17 CFR 240.13a-14(b) or 240.15d-14(b)), and Section 1350 of Chapter 63 of Title 18 of the United States Code (18 U.S.C. 1350) as an exhibit. A certification furnished pursuant to this paragraph will not be deemed filed for purposes of Section 18 of the Exchange Act (15 U.S.C. 78r), or otherwise subject to the liability of that section. Such certification will not be deemed to be incorporated by reference into any filing under the Securities Act of 1933 or the Exchange Act, except to the extent that the registrant specifically incorporates it by reference. Ex-99.906 CERT attached hereto.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

(Registrant) Nuveen Core Equity Alpha Fund

By (Signature and Title) /s/ Kevin J. McCarthy
Kevin J. McCarthy
Vice President and Secretary

Date: March 9, 2012

Pursuant to the requirements of the Securities Exchange Act of 1934 and the Investment Company Act of 1940, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

By (Signature and Title) /s/ Gifford R. Zimmerman
Gifford R. Zimmerman
Chief Administrative Officer
(principal executive officer)

Date: March 9, 2012

By (Signature and Title) /s/ Stephen D. Foy
Stephen D. Foy
Vice President and Controller
(principal financial officer)

Date: March 9, 2012