

Nuveen Core Equity Alpha Fund
Form N-CSR
March 09, 2017

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)

Gifford R. Zimmerman

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, 2016

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

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.

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 STOCKHOLDERS.

Closed-End Funds

Nuveen
Closed-End Funds

Annual Report December 31, 2016

JCE
Nuveen Core Equity Alpha Fund

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

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.

Chairman's Letter

to Shareholders

Dear Shareholders,

The past year saw a striking shift in the markets' tone. The start of 2016 was beset by China's economic woes, growing recession fears in the U.S. and oil prices sinking to lows not seen in more than a decade. World stock markets plunged, while bonds and other safe-haven assets rallied. But, by the end of the year, optimism had taken root. Economic outlooks were more upbeat, commodity prices stabilized, equity markets rebounded and bonds retreated. Despite the initial shocks of the Brexit referendum in the U.K. and Donald Trump's win in the U.S. presidential election, and the uncertainties posed by the implications of these votes, sentiment continued to swing toward the positive as 2016 ended.

In between the year's turbulent start and exuberant end, markets were soothed by improving economic data out of China, as the government's stimulus measures appeared to be working, and a recovery in the energy and commodity-related sectors. The U.S. Federal Reserve backed off its more aggressive projections from the beginning of the year, only raising the fed funds rate once during the year, in December. The central banks in Europe and Japan maintained their accommodative stances. Global economic growth remained lackluster overall, as the pace of U.S. growth remained consistently mediocre. China appeared to moderate its slowdown and low growth in Europe and Japan persisted.

Will 2017 be the year of accelerating global growth and rising inflation that the markets are expecting? President Trump's business-friendly, pro-growth agenda has been well received by the markets, but the policy details and the timeline have yet to take shape. Furthermore, there could be potential downside risks if "Trumponomics" were to trigger a steeper rise in inflation or a trade war. Outside the U.S., political dynamics in Europe are also in flux this year, with Brexit negotiations ongoing and elections in Germany, France and the Netherlands, and possibly a snap election in Italy.

Given the slate of policy unknowns and the range of possible outcomes, we believe volatility will remain a fixture this year. In this environment, Nuveen remains committed to both managing downside risks and seeking upside potential. If you're concerned about how resilient your investment portfolio might be, we encourage you to talk to your financial advisor. On behalf of the other members of the Nuveen Fund Board, we look forward to continuing to earn your trust in the months and years ahead.

Sincerely,

William J. Schneider

Chairman of the Board

February 23, 2017

4 NUVEEN

Portfolio Managers

Comments

Nuveen Core Equity Alpha Fund (JCE)

The equity portion of the Fund is managed by INTECH Investment Management LLC (INTECH), an independently managed subsidiary of Janus Capital Group Inc. The portfolio management team is led by Dr. Adrian Banner, CEO/CIO, Joseph W. Runnels, CFA, Vassilios Papathanakos, PhD, and Phillip Whitman, PhD.

The Fund also employs a call option strategy managed by Nuveen Asset Management, LLC (NAM), an affiliate of Nuveen, LLC. Keith B. Hembre, CFA, and David A. Friar oversee this program.

Here the INTECH team members, along with the NAM team, discuss economic and market conditions, their management strategies and the performance of the Fund for the twelve-month reporting period ended December 31, 2016.

On October 3, 2016, Janus Capital Group Inc., the parent company of INTECH, a sub-adviser to the Nuveen Core Equity Alpha Fund (the Fund), publically announced a proposal to merge with Henderson Group plc.. The proposed merger is expected to close on or about the second quarter of 2017, subject to requisite shareholder and regulatory approvals. The closing of the merger will result in the automatic termination of the investment sub-advisory agreement between Nuveen Fund Advisors, LLC, the Fund's investment advisor, and INTECH. On February 23, 2017 the Board of Trustees of the Fund approved a new sub-advisory agreement with INTECH in accordance with the Investment Company Act of 1940 and approved the submission of the new sub-advisory agreement for shareholder approval at the Fund's next annual meeting.

Your fund investment will not change as a result of the proposed merger. You will still own the same Fund shares and the underlying value of those shares will not change as a result of the merger. The merger is not expected to result in any change in the portfolio management of the Fund or in the Fund's investment objectives or policies.

What factors affected the U.S. economy and financial markets during the twelve-month reporting period ended December 31, 2016?

The restrained pace of growth that has defined the U.S. economic recovery since 2009 continued in the twelve-month reporting period. In the four calendar quarters of 2016, growth averaged below 2% (annualized), as measured by real gross domestic product (GDP), which is the value of goods and services produced by the nation's economy less the value of the goods and services used up in production, adjusted for price changes. Weakness was more pronounced in the first half of the reporting period, as GDP growth averaged below 1.5% in the first two quarters. Although a short-term jump in exports contributed to a more robust gain of 3.5% in the third quarter, the drop in exports that followed widened the trade deficit, which dampened economic activity to a 1.9% annualized rate in the last three months of 2016, as reported by the advance estimate of the Bureau of Economic Analysis.

Consumers, whose purchases comprise the largest component of the U.S. economy, benefited from employment growth and firming wages over the twelve-month reporting period. As reported by the Bureau of Labor Statistics, the unemployment rate fell to 4.7% in December 2016 from 5.0% in December 2015 and job gains averaged slightly above

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.

Refer to the Glossary of Terms Used in this report for further definition of the terms used within this section.

Portfolio Managers Comments (continued)

200,000 per month for the past twelve months. Consumer spending surged in the second quarter of 2016, then decelerated somewhat in the second half of the reporting period. Moreover, as the cost of gasoline and rents climbed over 2016, inflation ticked higher. The Consumer Price Index (CPI) rose 2.1% over the twelve-month reporting period ended December 2016 on a seasonally adjusted basis, as reported by the U.S. Bureau of Labor Statistics. The core CPI (which excludes food and energy) increased 2.2% during the same period, slightly above the Federal Reserve (Fed) unofficial longer term inflation objective of 2.0%.

The housing market was another bright spot in the economy. The S&P CoreLogic Case-Shiller U.S. National Home Price Index, which covers all nine U.S. census divisions, recorded a 5.6% annual gain in November 2016 (most recent data available at the time this report was prepared) (effective July 26, 2016, the S&P/Case-Shiller U.S. National Home Price Index was renamed the S&P CoreLogic Case-Shiller U.S. National Home Price Index). The 10-City and 20-City Composites reported year-over-year increases of 4.5% and 5.3%, respectively.

Business spending weakened in the first half of 2016 but modestly improved over the remainder of the year. Early in the reporting period, the energy sector's slump, financial market turbulence and a murky outlook on U.S. and global growth weighed on business sentiment and dampened spending. However, business confidence improved in the second half of the year, as oil prices stabilized, recession fears diminished and the election of Donald Trump stoked expectations for new pro-growth fiscal policy.

Given the economy's consistent expansion and the uptick in the inflation rate, the Fed raised one of its main interest rates in December for the second time in a year, to a range of 0.50% to 0.75%. Additionally at its December 2016 meeting, the Fed revised its forecast from two to three increases in 2017, signaling greater confidence in the economy and rising inflation expectations.

Other market-moving events during the reporting period included a spike in volatility in January and February 2016 triggered by deteriorating sentiment about China's economy, another sharp downturn in oil prices and concerns about central bank policy both in the U.S. and around the world. The Brexit referendum in June 2016 also caught investors off guard. In response, U.K. sterling fell to 30-year lows and global equities tumbled while perceived safe-haven assets such as gold, the U.S. dollar and government bonds saw large inflows. However, the markets stabilized fairly quickly post-Brexit vote, buoyed by reassurances from global central banks and a perception that the temporary price rout presented an attractive buying opportunity. Following a relatively calm July and August 2016, volatility resumed in the final months of the reporting period. Investors worried whether central banks were reaching the limits of their effectiveness as global growth continues to stagnate. The health of the European banking sector came into question, renewing concerns about the potential to trigger a wider crisis. Political uncertainty increased leading up to the November U.S. presidential election, and Trump's unexpected win contributed to an initial sell-off across global markets. However, after digesting the shock, U.S. equities rallied strongly and global developed market stocks pared their losses, while emerging markets, fixed income and gold remained lower through the end of the reporting period.

The U.S. stock market extended its recovery as major market indexes such as the S&P 500® Index, the Dow Jones Industrials Average and the NASDAQ Composite Index reached record highs during the fourth quarter and posted double-digit gains for the reporting period, fueled by the election and improving economic conditions. The larger-cap focused S&P 500® finished the reporting period up 11.96%.

What key strategies were used to manage the Fund during this twelve-month reporting period ended December 31, 2016?

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

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 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.

6 NUVEEN

The Fund also employs an option strategy that seeks to enhance the Fund's risk-adjusted performance over time by means of attempting to reduce volatility of the Fund's returns relative to the returns of the S&P 500® Index. The Fund expects to write (sell) call options on a custom basket of equities with a notional value of up to 50% of the value of the equity portfolio. 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 reporting period reconfirmed the importance of disciplined risk management like 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 in relation to 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 increase the potential for trading profits at the time of rebalancing. 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 underweight positions is a function of the stocks' relative volatility and correlation characteristics in aggregate.

Because INTECH's process does not forecast the direction of stock prices, we anticipate equity holdings that are overweight or underweight relative to the index that may potentially beat the benchmark in approximately equal proportions over time.

How did the Fund perform during this twelve-month reporting period ended December 31, 2016?

The table in the Performance Overview and Holding Summaries section of this report provides total returns for the one-year, five-year and since inception periods ended December 31, 2016. The Fund's total returns at net asset value (NAV) are compared with the performance of a corresponding market index. For the twelve-month reporting period ended December 31, 2016 the Fund underperformed the S&P 500® Index and its Blended Index.

Since INTECH uses a purely portfolio-theoretic methodology, we do not specifically select stocks or overweight sectors in response to market conditions or expectations. Instead, we modify the Fund's equity holdings in an attempt to construct a portfolio that is slightly more efficient than the S&P 500® Index, by using an optimization program that analyzes a stock's relative volatility and its return correlation with other equities. Effectively, the investment process tends to favor stocks with higher relative volatility and lower correlation as they offer more potential to capture volatility through regular rebalancing.

The equity portion of the Fund underperformed the S&P 500® Index. Led by riskier segments of the market during the second half of the reporting period, U.S. equity markets posted double-digit returns in 2016. After being highly in favor by investors seeking an alternative to bonds in a low yielding government bond environment, consumer staples, utilities and real estate names underperformed significantly in the second half of the reporting period. INTECH's investment process led the Fund to overweight utilities and real estate, which was a detractor to performance during the reporting period.

The financial services sector, especially larger bank stocks, benefited from the expected rate increase as well as potential deregulation in the second half of the reporting period and was the strongest performing sector after lagging significantly in the first half of the reporting period. The Fund's underweight to mega cap financials was a significant detractor from relative performance during the reporting period.

Market diversity measured on the S&P 500[®] Index increased during the reporting period, reflecting a change in the distribution of capital in which the smaller cap stocks outperformed the larger cap stocks within the index. While the equity

Portfolio Managers Comments (continued)

portion of the Fund, which tends to favor smaller cap stocks within the index as they provide more volatility capture potential, was positively impacted by this increase in diversity, adverse sector positioning and security selection more than offset the positive contribution from the smaller size positioning of the strategy during the reporting period.

As mentioned previously, the Fund also wrote call options with average expirations between 30 and 90 days. This was done in an effort to enhance returns, although it meant the Fund did relinquish some of the upside potential of its equity portfolio. During the reporting period, when we expected equity markets to increase we reduced the overwrite percentage to approximately 20%. At other times, we increased the overwrite percentage to approximately 50% when we anticipated the equity markets to be flat or decline. Earlier in the reporting period and in the days leading up to the Brexit vote, we were able to take advantage of the higher stock market volatility which increased the Fund's net call option premiums received. During the second half of the reporting period, in particular the fourth quarter, we had a lower overwrite percentage. When the markets appreciated, we were positioned to capture most of the upside potential; however, since the S&P 500® Index did not rise dramatically during the reporting period, overall the strategy detracted from the Fund's performance. Also detracting were our call options on the Russell 2000® Index. The Russell 2000® Index ended the reporting period up 21.31%, which made selling call options on the index less attractive. Overall, the Fund's option writing activities were a meaningful detractor from performance during the reporting period. The Fund also continued to purchase equity index futures contracts to gain equity market exposure where the portfolio held cash. During the reporting period, this had a positive impact on performance.

Share

Information

DISTRIBUTION INFORMATION

The following information regarding the Fund's distributions is current as of December 31, 2016, the Fund's fiscal and tax year end, and may differ from previously issued distribution notifications. The Fund's distribution levels may vary over time based on the Fund's investment activities and portfolio investment value changes.

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

Important points to understand about Nuveen fund managed distributions are:

The Fund seeks to establish a relatively stable common share 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 common share 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 period's distributions are expected to be paid from some or all of the following sources:

net investment income consisting of regular interest and dividends,

net realized gains from portfolio investments, 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, it 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 throughout the current fiscal year based on the Fund's performance, these estimates may differ from both the tax information reported to you in the Fund's 1099 statement, as well as the ultimate economic sources of distributions over the life of your investment.

The following table provides information regarding the Fund's distributions and total return performance over various time periods. This information is intended to help you better understand whether the Fund's returns for the specified time periods were sufficient to meet its distributions.

NUVEEN 9

Share Information (continued)

Data as of December 31, 2016

| Inception Date | Per Share | | | | | Annualized Total | | Return on | | |
|----------------|-----------------------|--------------|------------|--------------|-----------|------------------|--------------|-----------|--------|--------|
| | Regular Distributions | | | | | NAV | | NAV | | |
| | Latest | Current Year | Total | Current Year | Total | Actual Full-Year | Distribution | Rate on | 1-Year | 5-Year |
| | | | | | | | | | | |
| Quarter | Net Investment | Realized | Unrealized | Net | Current | Rate on | | | | |
| 3/2007 | \$ 0.2775 | \$ 1.1350 | \$ 0.1262 | \$ (0.0491) | \$ 2.0020 | 7.78% | 7.95% | 3.25% | 12.14% | |

¹ Current distribution per share, annualized, divided by the NAV per share on the stated date.

² Actual total per share distributions made during the full fiscal year, divided by the NAV per share on the stated date.

³ Each distribution rate represents a managed distribution rate. For this Fund, at least in the just completed fiscal year, distributions were predominately comprised of sources other than net investment income, as shown in the table immediately below.

The following table provides the Fund's distribution sources as of December 31, 2016.

The amounts and sources of distributions reported in this notice are for financial reporting purposes and are not being provided for tax reporting purposes. The actual amounts and character of the distributions for tax reporting purposes will be reported to shareholders on Form 1099-DIV which will be sent to shareholders shortly after calendar year-end. More details about the Fund's distributions and the basis for these estimates are available on www.nuveen.com/cef.

Data as of December 31, 2016

| Net | Fiscal Year | | | Net | Fiscal Year | | |
|------------|------------------------|----------------------|---------------|------------|-------------------|----------------------|--|
| | Source of Distribution | | | | Per Share Amounts | | |
| Investment | Realized | Return of | Distributions | Investment | Realized | Return of | |
| Income | Gains | Capital ¹ | | Income | Gains | Capital ¹ | |
| 11.13% | 39.00% | 49.87% | \$1.1350 | \$0.1263 | \$0.4427 | \$0.5660 | |

¹ Return of capital may represent unrealized gains, return of shareholder's principal, or both. In certain circumstances, all or a portion of the return of capital may be characterized as ordinary income under federal tax law. The actual tax characterization will be provided to shareholders on Form 1099-DIV shortly after calendar year-end.

SHARE REPURCHASES

During August 2016, the Fund's Board of Trustees reauthorized an open-market share repurchase program, allowing the Fund to repurchase an aggregate of up to approximately 10% of its outstanding shares.

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

As of December 31, 2016, 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.

| | JCE |
|---|------------|
| Shares cumulatively repurchased and retired | 449,800 |
| Shares authorized for repurchase | 1,600,000 |

During the current reporting period, the Fund did not repurchase any of its outstanding shares.

OTHER SHARE INFORMATION

As of December 31, 2016, and during the current reporting period, the Fund's share price was trading at a premium/(discount) to its NAV as shown in the accompanying table.

| | JCE |
|--|------------|
| NAV | \$14.27 |
| Share price | \$13.08 |
| Premium/(Discount) to NAV | (8.34)% |
| 12-month average premium/(discount) to NAV | (6.16)% |

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.

Nuveen Core Equity Alpha Fund (JCE)

Investing in closed-end funds involves risk; principal loss is possible. There is no guarantee the Fund's investment objectives will be achieved. Closed-end fund shares may frequently trade at a discount or premium to their net asset value. **Common stock** returns often have experienced significant volatility. 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. Because **index options** are settled in cash, sellers of index call options, such as the Fund, cannot provide in advance for their potential settlement obligations by acquiring and holding the underlying securities. For these and other risks, including **tax risk**, please see the Fund's web page at www.nuveen.com/JCE.

JCE**Nuveen Core Equity Alpha Fund****Performance Overview and Holding Summaries as of December 31, 2016**

Refer to Glossary of Terms Used in this Report for further definition of terms used within this section.

Average Annual Total Returns as of December 31, 2016

| | Average Annual | | |
|--------------------|----------------|--------|-----------------|
| | 1-Year | 5-Year | Since Inception |
| JCE at NAV | 3.25% | 12.14% | 7.12% |
| JCE at Share Price | (0.41)% | 13.29% | 6.48% |
| Blended Index | 9.54% | 10.93% | 5.77% |
| S&P 500® Index | 11.96% | 14.66% | 6.99% |

Since inception returns are from 3/27/07. 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. Returns at NAV are net of Fund expenses, and assume reinvestment of distributions. Comparative index return information is provided for the Fund's shares at NAV only. Indexes are not available for direct investment.

Share Price Performance Weekly Closing Price

This data relates to the securities held in the Fund's portfolio of investments as of the end of the reporting period. It should not be construed as a measure of performance for the Fund itself. Holdings are subject to change.

Fund Allocation

(% of net assets)

| | |
|--|-------------|
| Common Stocks | 98.1% |
| Repurchase Agreements | 0.9% |
| U.S. Government and Agency Obligations | 1.1% |
| Other Assets Less Liabilities | (0.1)% |
| Net Assets | 100% |

Portfolio Composition

(% of total investments)¹

| | |
|--|-------------|
| Semiconductors & Semiconductor Equipment | 12.3% |
| Oil, Gas & Consumable Fuels | 9.5% |
| Equity Real Estate Investment Trusts | 6.4% |
| Aerospace & Defense | 5.2% |
| Health Care Equipment & Supplies | 5.1% |
| Insurance | 4.9% |
| Software | 4.3% |
| Multi-Utilities | 3.7% |
| Health Care Providers & Services | 3.6% |
| Electric Utilities | 2.9% |
| Technology Hardware, Storage & Peripherals | 2.3% |
| IT Services | 2.3% |
| Specialty Retail | 2.3% |
| Food Products | 2.2% |
| Beverages | 2.0% |
| Containers & Packaging | 2.0% |
| Life Sciences Tools & Services | 2.0% |
| Capital Markets | 2.0% |
| Internet Software & Services | 1.8% |
| Machinery | 1.7% |
| Repurchase Agreements | 0.9% |
| U.S. Government and Agency Obligations | 1.1% |
| Other | 19.5% |
| Total | 100% |

Top Five Issuers

(% of total investments)¹

| | |
|-----------------------------|------|
| NVIDIA Corporation | 3.2% |
| Lockheed Martin Corporation | 2.1% |
| Spectra Energy Corporation | 1.8% |
| Equinix Inc. | 1.6% |
| Applied Materials, Inc. | 1.6% |

1 Excluding investments in derivatives.

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 (the Fund) as of December 31, 2016, the results of its operations for the year then ended, the changes in its net assets for each of the two years in the period then ended and the financial highlights for each of the five years in the period then ended, 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 as of December 31, 2016 by correspondence with the custodian and brokers, provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP

Chicago, IL

February 27, 2017

JCE

Nuveen Core Equity Alpha Fund
Portfolio of Investments

December 31, 2016

| Shares | Description (1) | Value |
|--------|--|-------------------|
| | LONG-TERM INVESTMENTS 98.1% | |
| | COMMON STOCKS 98.1% | |
| | Aerospace & Defense 5.2% | |
| 2,500 | General Dynamics Corporation | \$ 431,650 |
| 9,300 | L3 Technologies, Inc. | 1,414,623 |
| 19,100 | Lockheed Martin Corporation, (2) | 4,773,854 |
| 7,000 | Northrop Grumman Corporation | 1,628,060 |
| 18,300 | Raytheon Company | 2,598,600 |
| 3,800 | TransDigm Group Inc., (3) | 946,048 |
| | Total Aerospace & Defense | 11,792,835 |
| | Air Freight & Logistics 0.2% | |
| 2,000 | C.H. Robinson Worldwide, Inc. | 146,520 |
| 4,100 | Expeditors International of Washington, Inc. | 217,136 |
| | Total Air Freight & Logistics | 363,656 |
| | Banks 0.1% | |
| 12,600 | Fifth Third Bancorp. | 339,822 |
| | Beverages 2.0% | |
| 22,300 | Constellation Brands, Inc., Class A | 3,418,813 |
| 13,800 | Dr. Pepper Snapple Group, (2) | 1,251,246 |
| | Total Beverages | 4,670,059 |
| | Building Products 0.0% | |
| 365 | Johnson Controls International PLC | 15,034 |
| | Capital Markets 2.0% | |
| 12,700 | CME Group, Inc., (2) | 1,464,945 |
| 8,600 | E*Trade Group Inc., (3) | 297,990 |
| 1,000 | Intercontinental Exchange Group, Inc. | 56,420 |
| 2,700 | Moody's Corporation | 254,529 |
| 10,500 | Morgan Stanley | 443,625 |
| 12,700 | NASDAQ Stock Market, Inc. | 852,424 |
| 9,000 | S&P Global, Inc. | 967,860 |
| 1,600 | State Street Corporation | 124,352 |
| | Total Capital Markets | 4,462,145 |
| | Chemicals 1.4% | |
| 15,300 | Albemarle Corporation | 1,317,024 |
| 17,700 | FMC Corporation | 1,001,112 |
| 7,900 | International Flavors & Fragrances Inc. | 930,857 |

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

| | | |
|---|--------------------------------------|-----------|
| Total Chemicals | | 3,248,993 |
| Commercial Services & Supplies | 1.4% | |
| 9,500 | Cintas Corporation | 1,097,820 |
| 25,900 | Republic Services, Inc. | 1,477,595 |
| 10,200 | Waste Management, Inc. | 723,282 |
| | Total Commercial Services & Supplies | 3,298,697 |
| Communications Equipment | 0.4% | |
| 8,400 | Harris Corporation | 860,748 |
| Construction & Engineering | 0.7% | |
| 23,200 | Jacobs Engineering Group, Inc., (3) | 1,322,400 |

NUVEEN 15

JCE Nuveen Core Equity Alpha Fund
Portfolio of Investments (continued)

December 31, 2016

| Shares | Description (1) | Value |
|--|-----------------------------------|------------|
| Construction & Engineering (continued) | | |
| 4,900 | Quanta Services Incorporated, (3) | \$ 170,765 |
| | Total Construction & Engineering | 1,493,165 |
| Construction Materials 0.8% | | |
| 4,800 | Martin Marietta Materials | 1,063,344 |
| 6,700 | Vulcan Materials Company | 838,505 |
| | Total Construction Materials | 1,901,849 |
| Containers & Packaging 2.0% | | |
| 15,200 | Avery Dennison Corporation | 1,067,344 |
| 30,400 | International Paper Company | 1,613,024 |
| 37,700 | WestRock Company | 1,914,029 |
| | Total Containers & Packaging | 4,594,397 |
| Distributors 0.3% | | |
| 7,000 | Genuine Parts Company | 668,780 |
| 1,600 | LKQ Corporation, (3) | 49,040 |
| | Total Distributors | 717,820 |
| Diversified Consumer Services 0.1% | | |
| 8,200 | H & R Block Inc. | 188,518 |
| Diversified Financial Services 0.2% | | |
| 19,800 | Leucadia National Corporation | 460,350 |
| Electric Utilities 2.9% | | |
| 8,000 | Alliant Energy Corporation | 303,120 |
| 7,700 | Edison International | 554,323 |
| 10,000 | Entergy Corporation | 734,700 |
| 22,800 | Exelon Corporation | 809,172 |
| 6,400 | NextEra Energy Inc. | 764,544 |
| 7,000 | PG&E Corporation | 425,390 |
| 7,200 | Pinnacle West Capital Corporation | 561,816 |
| 19,900 | PPL Corporation | 677,595 |
| 20,500 | Southern Company | 1,008,395 |
| 18,100 | Xcel Energy, Inc. | 736,670 |
| | Total Electric Utilities | 6,575,725 |
| Electrical Equipment 0.2% | | |
| 3,300 | Rockwell Automation, Inc. | 443,520 |
| Electronic Equipment, Instruments & Components 1.2% | | |
| 33,300 | Amphenol Corporation, Class A | 2,237,760 |
| 19,800 | Corning Incorporated | 480,546 |
| | | 2,718,306 |

Total Electronic Equipment, Instruments & Components

Energy Equipment & Services 1.0%

| | | |
|--------|--|------------------|
| 4,000 | FMC Technologies Inc., (3) | 142,120 |
| 40,400 | Halliburton Company | 2,185,236 |
| | Total Energy Equipment & Services | 2,327,356 |

Equity Real Estate Investment Trusts 6.4%

| | | |
|--------|--|-----------|
| 6,700 | American Tower Corporation, REIT | 708,056 |
| 800 | Apartment Investment & Management Company, Class A | 36,360 |
| 12,700 | Digital Realty Trust Inc. | 1,247,902 |
| 10,543 | Equinix Inc. | 3,768,174 |
| 2,900 | Federal Realty Investment Trust | 412,119 |
| 11,500 | Health Care Property Investors Inc. | 341,780 |
| 42,800 | Iron Mountain Inc. | 1,390,144 |
| 51,900 | Kimco Realty Corporation | 1,305,804 |

| Shares | Description (1) | Value |
|---|---|--------------|
| Equity Real Estate Investment Trusts (continued) | | |
| 58,900 | Prologis Inc. | \$ 3,109,331 |
| 5,100 | Realty Income Corporation | 293,148 |
| 2,500 | SL Green Realty Corporation | 268,875 |
| 28,800 | Ventas Inc. | 1,800,576 |
| 500 | Vornado Realty Trust | 52,185 |
| | Total Equity Real Estate Investment Trusts | 14,734,454 |
| Food & Staples Retailing 0.4% | | |
| 16,300 | Sysco Corporation | 902,531 |
| Food Products 2.2% | | |
| 14,500 | Archer-Daniels-Midland Company | 661,925 |
| 34,800 | ConAgra Foods, Inc. | 1,376,340 |
| 10,300 | Kellogg Company | 759,213 |
| 4,300 | Kraft Heinz Company | 375,476 |
| 30,300 | Tyson Foods, Inc., Class A | 1,868,904 |
| | Total Food Products | 5,041,858 |
| Health Care Equipment & Supplies 5.1% | | |
| 16,700 | Baxter International, Inc. | 740,478 |
| 4,300 | Becton, Dickinson and Company | 711,865 |
| 46,300 | Boston Scientific Corporation, (3) | 1,001,469 |
| 3,200 | C. R. Bard, Inc. | 718,912 |
| 8,000 | Cooper Companies, Inc. | 1,399,440 |
| 12,200 | Edwards Lifesciences Corporation, (3) | 1,143,140 |
| 19,500 | Hologic Inc., (3) | 782,340 |
| 1,800 | Intuitive Surgical, Inc., (3) | 1,141,506 |
| 600 | Medtronic, PLC | 42,738 |
| 11,000 | Saint Jude Medical Inc. | 882,090 |
| 7,600 | Stryker Corporation | 910,556 |
| 14,700 | Varian Medical Systems, Inc., (3) | 1,319,766 |
| 7,600 | Zimmer Biomet Holdings, Inc. | 784,320 |
| | Total Health Care Equipment & Supplies | 11,578,620 |
| Health Care Providers & Services 3.6% | | |
| 3,600 | Aetna Inc. | 446,436 |
| 1,300 | Anthem Inc. | 186,901 |
| 3,000 | Cardinal Health, Inc. | 215,910 |
| 7,900 | Centene Corporation, (3) | 446,429 |
| 8,200 | Henry Schein Inc., (3) | 1,244,022 |
| 4,100 | Laboratory Corporation of America Holdings, (3) | 526,358 |
| 24,700 | Quest Diagnostics Incorporated | 2,269,930 |
| 18,200 | UnitedHealth Group Incorporated | 2,912,728 |
| | Total Health Care Providers & Services | 8,248,714 |
| Hotels, Restaurants & Leisure 0.7% | | |
| 900 | McDonald's Corporation | 109,548 |
| 10,500 | Wynn Resorts Ltd | 908,355 |
| 10,500 | YUM! Brands, Inc. | 664,965 |

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

Total Hotels, Restaurants & Leisure 1,682,868

Household Durables 0.4%

| | | |
|--------|--------------------------|---------|
| 1,900 | Garmin Limited | 92,131 |
| 10,700 | Leggett and Platt Inc. | 523,016 |
| 7,400 | Newell Brands Inc. | 330,410 |
| | Total Household Durables | 945,557 |

Household Products 0.4%

| | | |
|-------|------------------------------|---------|
| 2,200 | Church & Dwight Company Inc. | 97,218 |
| 7,800 | Kimberly-Clark Corporation | 890,136 |
| | Total Household Products | 987,354 |

NUVEEN 17

JCE Nuveen Core Equity Alpha Fund
Portfolio of Investments (continued)

December 31, 2016

| Shares | Description (1) | Value |
|--------|---|-------------------|
| | Independent Power & Renewable Electricity Producers 0.4% | |
| 82,500 | AES Corporation | \$ 958,650 |
| | Industrial Conglomerates 0.2% | |
| 500 | Honeywell International Inc. | 57,925 |
| 2,600 | Roper Technologies, Inc. | 476,008 |
| | Total Industrial Conglomerates | 533,933 |
| | Insurance 4.9% | |
| 4,200 | Ace Limited | 554,904 |
| 27,400 | AFLAC Incorporated | 1,907,040 |
| 1,700 | Allstate Corporation | 126,004 |
| 3,100 | AON PLC | 345,743 |
| 27,600 | Arthur J. Gallagher & Co. | 1,434,096 |
| 5,600 | Assurant Inc. | 520,016 |
| 29,000 | Cincinnati Financial Corporation | 2,196,750 |
| 4,000 | Loews Corporation | 187,320 |
| 10,200 | Marsh & McLennan Companies, Inc. | 689,418 |
| 15,200 | Principal Financial Group, Inc. | 879,472 |
| 16,600 | Torchmark Corporation | 1,224,416 |
| 5,900 | Travelers Companies, Inc. | 722,278 |
| 10,100 | Unum Group | 443,693 |
| | Total Insurance | 11,231,150 |
| | Internet and Direct Marketing Retail 1.2% | |
| 1,400 | Amazon.com, Inc., (3) | 1,049,818 |
| 4,300 | Expedia, Inc. | 487,104 |
| 2,400 | NetFlix.com Inc., (3) | 297,120 |
| 600 | priceline.com Incorporated, (3) | 879,636 |
| | Total Internet and Direct Marketing Retail | 2,713,678 |
| | Internet Software & Services 1.8% | |
| 6,900 | Akamai Technologies, Inc., (3) | 460,092 |
| 16,500 | eBay Inc., (3) | 489,885 |
| 17,400 | Facebook Inc., Class A Shares, (3) | 2,001,870 |
| 32,000 | Yahoo! Inc., (3) | 1,237,440 |
| | Total Internet Software & Services | 4,189,287 |
| | IT Services 2.3% | |
| 10,300 | Automatic Data Processing, Inc. | 1,058,634 |
| 16,700 | Fiserv, Inc., (3) | 1,774,876 |
| 1,900 | MasterCard, Inc. | 196,175 |
| 31,000 | Paychex, Inc. | 1,887,280 |
| 7,300 | Total System Services Inc. | 357,919 |
| | Total IT Services | 5,274,884 |

Leisure Products 0.1%

| | | |
|-------|-------------------------------|----------------|
| 200 | Hasbro, Inc. | 15,558 |
| 6,500 | Mattel, Inc. | 179,075 |
| | Total Leisure Products | 194,633 |

Life Sciences Tools & Services 2.0%

| | | |
|--------|---|------------------|
| 11,800 | Agilent Technologies, Inc. | 537,608 |
| 11,700 | Illumina Inc., (3) | 1,498,068 |
| 1,800 | Mettler-Toledo International Inc., (3) | 753,408 |
| 7,500 | Thermo Fisher Scientific, Inc. | 1,058,250 |
| 4,900 | Waters Corporation, (3) | 658,511 |
| | Total Life Sciences Tools & Services | 4,505,845 |

Machinery 1.7%

| | | |
|-------|------------------|---------|
| 2,600 | Caterpillar Inc. | 241,124 |
|-------|------------------|---------|

| Shares | Description (1) | Value |
|---------|---|------------------|
| | Machinery (continued) | |
| 3,300 | Cummins Inc. | \$ 451,011 |
| 4,300 | Illinois Tool Works, Inc. | 526,578 |
| 3,700 | Ingersoll Rand Company Limited, Class A | 277,648 |
| 4,600 | Parker Hannifin Corporation | 644,000 |
| 8,800 | Stanley Black & Decker Inc. | 1,009,272 |
| 16,500 | Xylem Inc. | 817,080 |
| | Total Machinery | 3,966,713 |
| | Media 0.9% | |
| 5,200 | CBS Corporation, Class B | 330,824 |
| 67,800 | Interpublic Group of Companies, Inc. | 1,587,198 |
| 1,400 | Omnicom Group, Inc. | 119,154 |
| | Total Media | 2,037,176 |
| | Metals & Mining 1.4% | |
| 90,900 | Newmont Mining Corporation, (2) | 3,096,963 |
| | Multiline Retail 0.1% | |
| 4,500 | Nordstrom, Inc. | 215,685 |
| | Multi-Utilities 3.7% | |
| 21,600 | Ameren Corporation | 1,133,136 |
| 57,900 | CenterPoint Energy, Inc. | 1,426,656 |
| 13,200 | CMS Energy Corporation | 549,384 |
| 4,700 | Consolidated Edison, Inc. | 346,296 |
| 4,000 | DTE Energy Company | 394,040 |
| 74,000 | NiSource Inc., (2) | 1,638,360 |
| 23,400 | Scana Corporation | 1,714,752 |
| 2,800 | Sempra Energy | 281,792 |
| 15,600 | WEC Energy Group, Inc. | 914,940 |
| | Total Multi-Utilities | 8,399,356 |
| | Oil, Gas & Consumable Fuels 9.5% | |
| 9,900 | Anadarko Petroleum Corporation | 690,327 |
| 24,500 | Apache Corporation | 1,555,015 |
| 46,700 | Cabot Oil & Gas Corporation | 1,090,912 |
| 101,800 | Chesapeake Energy Corporation | 714,636 |
| 8,400 | Cimarex Energy Company | 1,141,560 |
| 8,600 | Concho Resources Inc., (3) | 1,140,360 |
| 17,200 | Devon Energy Corporation | 785,524 |
| 5,200 | EOG Resources, Inc. | 525,720 |
| 18,900 | EQT Corporation | 1,236,060 |
| 25,900 | Kinder Morgan, Inc. | 536,389 |
| 25,200 | Newfield Exploration Company, (3) | 1,020,600 |
| 28,600 | ONEOK, Inc. | 1,641,926 |
| 3,400 | Phillips 66 | 293,794 |
| 7,400 | Pioneer Natural Resources Company | 1,332,518 |
| 3,000 | Range Resources Corporation | 103,080 |
| 63,800 | Southwestern Energy Company, (3) | 690,316 |

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

| | | |
|---------|---|-------------------|
| 101,100 | Spectra Energy Corporation | 4,154,199 |
| 101,000 | Williams Companies, Inc., (2) | 3,145,140 |
| | Total Oil, Gas, & Consumable Fuels | 21,798,076 |
| | Pharmaceuticals 0.7% | |
| 28,300 | Zoetis Incorporated, (2) | 1,514,899 |
| | Professional Services 1.6% | |
| 4,900 | Dun and Bradstreet Inc. | 594,468 |
| 23,400 | Equifax Inc. | 2,766,582 |
| 2,900 | Verisk Analytics Inc, Class A Shares, (3) | 235,393 |
| | Total Professional Services | 3,596,443 |

NUVEEN 19

JCE Nuveen Core Equity Alpha Fund
Portfolio of Investments (continued)

December 31, 2016

| Shares | Description (1) | Value |
|--|--|------------|
| Road & Rail 0.7% | | |
| 16,900 | CSX Corporation | \$ 607,217 |
| 1,700 | J.B. Hunt Transports Serives Inc. | 165,019 |
| 8,900 | Kansas City Southern Industries | 755,165 |
| | Total Road & Rail | 1,527,401 |
| Semiconductors & Semiconductor Equipment 12.3% | | |
| 114,200 | Applied Materials, Inc., (2) | 3,685,234 |
| 15,544 | Broadcom Limited | 2,747,713 |
| 18,100 | Intel Corporation | 656,487 |
| 13,700 | KLA-Tencor Corporation | 1,077,916 |
| 23,400 | Lam Research Corporation | 2,474,082 |
| 2,000 | Linear Technology Corporation | 124,700 |
| 30,200 | Microchip Technology Incorporated | 1,937,330 |
| 165,600 | Micron Technology, Inc., (3), (2) | 3,629,952 |
| 69,500 | NVIDIA Corporation, (2) | 7,418,430 |
| 7,900 | Qorvo Inc., (3) | 416,567 |
| 19,800 | QUALCOMM, Inc. | 1,290,960 |
| 7,200 | Skyworks Solutions Inc. | 537,552 |
| 11,000 | Texas Instruments Incorporated | 802,670 |
| 21,700 | Xilinx, Inc. | 1,310,029 |
| | Total Semiconductors & Semiconductor Equipment | 28,109,622 |
| Software 4.3% | | |
| 38,800 | Activision Blizzard Inc. | 1,401,068 |
| 33,000 | Adobe Systems Incorporated, (3), (2) | 3,397,350 |
| 5,900 | Autodesk, Inc., (3) | 436,659 |
| 16,600 | Electronic Arts Inc., (3), (2) | 1,307,416 |
| 5,400 | Intuit, Inc. | 618,894 |
| 108,800 | Symantec Corporation | 2,599,232 |
| | Total Software | 9,760,619 |
| Specialty Retail 2.3% | | |
| 16,800 | Best Buy Co., Inc. | 716,856 |
| 9,200 | Gap, Inc. | 206,448 |
| 11,200 | Home Depot, Inc. | 1,501,696 |
| 16,800 | Lowe s Companies, Inc., (2) | 1,194,816 |
| 17,800 | Ross Stores, Inc. | 1,167,680 |
| 1,400 | Ulta Salon, Cosmetics & Fragrance, Inc., (3) | 356,916 |
| 3,400 | Urban Outfitters, Inc., (3) | 96,832 |
| | Total Specialty Retail | 5,241,244 |
| Technology Hardware, Storage & Peripherals 2.3% | | |

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

| | | |
|--------|--|-----------|
| 53,600 | Hewlett Packard Enterprise Co | 1,240,304 |
| 18,000 | HP Inc. | 267,120 |
| 45,200 | NetApp, Inc. | 1,594,204 |
| 44,100 | Seagate Technology | 1,683,297 |
| 8,400 | Western Digital Corporation | 570,780 |
| | Total Technology Hardware, Storage & Peripherals | 5,355,705 |
| | Textiles, Apparel & Luxury Goods 0.4% | |
| 9,500 | PVH Corporation | 857,280 |
| | Tobacco 1.0% | |
| 33,100 | Altria Group, Inc. | 2,238,222 |
| 378 | Reynolds American Inc., (2) | 21,183 |
| | Total Tobacco | 2,259,405 |
| | Trading Companies & Distributors 0.1% | |
| 3,200 | United Rentals Inc., (3) | 337,856 |

20 NUVEEN

| Shares | Description (1) | Value |
|--------|---|--------------------|
| | Water Utilities 0.9% | |
| 27,700 | American Water Works Company | \$ 2,004,372 |
| | Total Long-Term Investments (cost \$192,719,922) | 224,275,826 |

| Principal Amount (000) | Description | Coupon | Maturity | Ratings (4) | Value |
|------------------------|---|--------|----------|-------------|-----------------------|
| | SHORT-TERM INVESTMENTS 2.0% | | | | |
| | REPURCHASE AGREEMENTS 0.9% | | | | |
| \$ 1,976 | Repurchase Agreement with Fixed Income Clearing Corporation, dated 12/30/16, repurchase price \$1,976,102, collateralized by \$1,355,000 U.S. Treasury Notes, 2.125%, due 6/30/22, value \$1,371,057; \$695,000 U.S. Treasury Notes, 1.625%, due 2/15/26, value \$650,927 | 0.030% | 1/03/17 | N/A | \$ 1,976,095 |
| | U.S. GOVERNMENT AND AGENCY OBLIGATIONS 1.1% | | | | |
| 2,500 | U.S. Treasury Bills, (2) | 0.000% | 2/02/17 | AAA | 2,499,120 |
| \$ 4,476 | Total Short-Term Investments (cost \$4,475,177) | | | | 4,475,215 |
| | Total Investments (cost \$197,195,099) 100.1% | | | | 228,751,041 |
| | Other Assets Less Liabilities (0.1)%, (5) | | | | (150,602) |
| | Net Assets 100% | | | | \$ 228,600,439 |

Investments in Derivatives as of December 31, 2016

Options Written

| Number of Contracts | Description | Notional Amount (6) | Expiration Date | Strike Price | Value |
|---------------------|---|---------------------|-----------------|--------------|--------------|
| (100) | RUSSELL 2000® Index | \$ (14,000,000) | 1/20/17 | \$ 1,400 | \$ (49,500) |
| (200) | RUSSELL 2000® Index | (28,200,000) | 1/20/17 | 1,410 | (63,000) |
| (215) | RUSSELL 2000® Index | (30,530,000) | 1/20/17 | 1,420 | (43,000) |
| (515) | Total Options Written (premiums received \$738,527) | \$ (72,730,000) | | | \$ (155,500) |

Futures Contracts

| Description | Contract Position | Number of Contracts | Contract Expiration | Notional Amount at Value | Variation Margin Receivable/ (Payable) | Unrealized Appreciation (Depreciation) |
|--------------------|--------------------------|----------------------------|----------------------------|---------------------------------|---|---|
| S&P 500 E-Mini | Long | 40 | 3/17 | \$ 4,472,400 | \$ (17,800) | \$ (63,987) |

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) Investment, or portion of investment, has been pledged to collateralize the net payment obligations for investments in derivatives.
- (3) Non-income producing; issuer has not declared a dividend within the past twelve months.
- (4) For financial reporting purposes, the ratings disclosed are the highest of Standard & Poor's Group (Standard & Poor's), Moody's Investors Service, Inc. (Moody's) or Fitch, Inc. (Fitch) rating. This treatment of split-rated securities may differ from that used for other purposes, such as for Fund investment policies. 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. Rating are not covered by the report of independent registered public accounting firm.
- (5) Other assets less liabilities includes the unrealized appreciation (depreciation) of certain over-the-counter (OTC) derivatives as presented on the Statement of Assets and Liabilities, when applicable. The unrealized appreciation (depreciation) of OTC-cleared and exchange-traded derivatives is recognized as part of the cash collateral at brokers and/or the receivable or payable for variation margin as presented on the Statement of Assets and Liabilities, when applicable. Other assets less liabilities also includes the value of options as presented on Statement of Assets and Liabilities.
- (6) For disclosure purposes, Notional Amount is calculated by multiplying the Number of Contracts by the Strike Price by 100.

N/A Not Applicable

REIT Real Estate Investment Trust

See accompanying notes to financial statements.

Statement of**Assets and Liabilities****December 31, 2016**

| | |
|--|--------------------|
| Assets | |
| Long-term investments, at value (cost \$192,719,922) | \$ 224,275,826 |
| Short-term investments, at value (cost \$4,475,177) | 4,475,215 |
| Cash | 6,020 |
| Receivable for dividends | 300,517 |
| Other assets | 23,462 |
| Total assets | 229,081,040 |
| Liabilities | |
| Options written, at value (premiums received \$738,527) | 155,500 |
| Payable for variation margin on futures contracts | 17,800 |
| Accrued expenses: | |
| Custodian fees | 28,243 |
| Management fees | 178,177 |
| Professional fees | 32,720 |
| Proxy fees | 9,090 |
| Shareholder reporting expenses | 19,008 |
| Trustees fees | 23,496 |
| Other | 16,567 |
| Total liabilities | 480,601 |
| Net assets | \$ 228,600,439 |
| Shares outstanding | 16,021,686 |
| Net asset value (NAV) per share outstanding | \$ 14.27 |
| Net assets consist of: | |
| Shares, \$0.01 par value per share | \$ 160,217 |
| Paid-in surplus | 197,492,312 |
| Undistributed (Over-distribution of) net investment income | (22,115) |
| Accumulated net realized gain (loss) | (1,104,957) |
| Net unrealized appreciation (depreciation) | 32,074,982 |
| Net assets | \$ 228,600,439 |
| Authorized shares | Unlimited |

See accompanying notes to financial statements.

Statement of**Operations****Year Ended December 31, 2016****Investment Income**

| | |
|-------------------------|--------------|
| Dividends | \$ 4,408,648 |
| Interest | 7,478 |
| Total investment income | 4,416,126 |

Expenses

| | |
|----------------------------------|-----------|
| Management fees | 2,114,930 |
| Custodian fees | 71,622 |
| Trustees fees | 6,718 |
| Professional fees | 50,790 |
| Shareholder reporting expenses | 52,885 |
| Shareholder servicing agent fees | 277 |
| Stock exchange listing fees | 7,832 |
| Investor relations expense | 38,747 |
| Other | 49,774 |
| Total expenses | 2,393,575 |
| Net investment income (loss) | 2,022,551 |

Realized and Unrealized Gain (Loss)

| | |
|--|--------------|
| Net realized gain (loss) from: | |
| Investments | 8,769,501 |
| Future contracts | 690,577 |
| Options written | (10,247,285) |
| Change in net unrealized appreciation (depreciation) of: | |
| Investments | 6,016,187 |
| Futures contracts | (157,212) |
| Options written | 410,331 |
| Net realized and unrealized gain (loss) | 5,482,099 |
| Net increase (decrease) in net assets from operations | \$ 7,504,650 |

See accompanying notes to financial statements.

Statement of**Changes in Net Assets**

| | Year Ended 12/31/16 | Year Ended 12/31/15 |
|---|------------------------------------|------------------------------------|
| Operations | | |
| Net investment income (loss) | \$ 2,022,551 | \$ 1,455,202 |
| Net realized gain (loss) from: | | |
| Investments | 8,769,501 | 7,908,917 |
| Futures contracts | 690,577 | 47,693 |
| Options written | (10,247,285) | 2,651,235 |
| Change in net unrealized appreciation (depreciation) of: | | |
| Investments | 6,016,187 | (9,009,745) |
| Futures contracts | (157,212) | 8,504 |
| Options written | 410,331 | 13,656 |
| Net increase (decrease) in net assets from operations | 7,504,650 | 3,075,462 |
| Distributions to Shareholders | | |
| From net investment income | (2,023,624) | (1,549,211) |
| From accumulated net realized gains | (7,093,400) | (42,507,221) |
| Return of capital | (9,067,590) | |
| Decrease in net assets from distributions to shareholders | (18,184,614) | (44,056,432) |
| Net increase (decrease) in net assets | (10,679,964) | (40,980,970) |
| Net assets at the beginning of period | 239,280,403 | 280,261,373 |
| Net assets at the end of period | \$ 228,600,439 | \$ 239,280,403 |
| Undistributed (Over-distribution of) net investment income at the end of period | \$ (22,115) | \$ (21,042) |

See accompanying notes to financial statements.

THIS PAGE INTENTIONALLY LEFT BLANK

NUVEEN 25

Financial**Highlights**

Selected data for a share outstanding throughout each period:

| | Investment Operations | | | Less Distributions From Accumulated Net Realized Gains | | | Return of Capital | Discount From Shares Repurchased Total Retired | Ending NAV | Ending Share Price | |
|-------------------|-----------------------|------------------------------|-------------------------------------|--|--------------------|--------------------|-------------------|--|------------|--------------------|----------|
| | Beginning NAV | Net Investment Income (Loss) | Net Realized/Unrealized Gain (Loss) | Investment Total Income | Realized Net Gains | Net Realized Gains | | | | | |
| Year Ended 12/31: | | | | | | | | | | | |
| 2016 | \$ 14.93 | \$ 0.13 | \$ 0.35 | \$ 0.48 | \$(0.13) | \$(0.44) | \$(0.57) | \$(1.14) | \$ | \$ 14.27 | \$ 13.08 |
| 2015 | 17.49 | 0.09 | 0.10 | 0.19 | (0.10) | (2.65) | | (2.75) | | 14.93 | 14.27 |
| 2014 | 17.91 | 0.16 | 1.93 | 2.09 | (0.16) | (2.35) | | (2.51) | | 17.49 | 17.47 |
| 2013 | 14.76 | 0.13 | 4.47 | 4.60 | (0.13) | (1.32) | | (1.45) | | 17.91 | 16.98 |
| 2012 | 13.88 | 0.17 | 1.79 | 1.96 | (1.08) | | | (1.08) | | 14.76 | 13.35 |

Ratios/Supplemental Data
Ratios to Average Net
Assets

| Total Returns | | | | | |
|------------------------|--------------------------------|--------------------------------|-----------------|-------------------------------------|-----------------------------------|
| Based on NAV(b) | Based on Share Price(b) | Ending Net Assets (000) | Expenses | Net Investment Income (Loss) | Portfolio Turnover Rate(c) |
| 3.25% | (0.41)% | \$ 228,600 | 1.03% | 0.87% | 110% |
| 1.64 | (1.70) | 239,280 | 1.03 | 0.54 | 93 |
| 12.08 | 18.31 | 280,261 | 1.03 | 0.87 | 111 |
| 31.97 | 39.08 | 286,972 | 1.04 | 0.77 | 65 |
| 14.28 | 15.81 | 236,438 | 1.05 | 1.14 | 77 |

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

(b) Total Return Based on NAV is the combination of changes in NAV, reinvested dividend income at NAV and reinvested capital gains distributions at NAV, 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 NAV. 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 NAV), and therefore may be different from the price used in the calculation. Total returns are not annualized.

Total Return Based on Share Price 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.

(c) Portfolio Turnover Rate is calculated based on the lesser of long-term purchases or sales (as disclosed in Note 5 Investment Transactions) divided by the average long-term market value during the period.

See accompanying notes to financial statements.

Notes to

Financial Statements

1. General Information and Significant Accounting Policies

General Information

Fund Information

Nuveen Core Equity Alpha Fund (the *Fund*) is registered under the Investment Company Act of 1940, as amended, as a diversified closed-end management investment company. 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.

The end of the reporting period for the *Fund* is December 31, 2016, and the period covered by these Notes to Financial Statements is the fiscal year ended December 31, 2016 (the *current fiscal period*).

Investment Adviser

The *Fund*'s investment adviser is Nuveen Fund Advisors, LLC (the *Adviser*), a subsidiary of Nuveen, LLC. (*Nuveen*). Nuveen is the investment management arm of Teachers Insurance and Annuity Association of America (TIAA). The *Adviser* has overall responsibility for management of the *Fund*, oversees the management of the *Fund*'s portfolios, manages the *Fund*'s business affairs and provides certain clerical bookkeeping and other administrative services and if necessary, asset allocation decisions. The *Adviser* has entered into sub-advisory agreements with INTECH Investment Management LLC (*INTECH*), an independently managed indirect subsidiary of Janus Capital Group Inc., and Nuveen Asset Management, LLC, (*NAM*), a subsidiary of the *Adviser*, (each a *Sub-Adviser* and collectively, the *Sub-Advisers*). *INTECH* manages the *Fund*'s investment portfolio, while *NAM* manages the *Fund*'s investments in option contracts.

On October 3, 2016, Janus Capital Group Inc., the parent company of *INTECH*, publically announced a proposal to merge with Henderson Group plc.. The proposed merger is expected to close on or about the second quarter of 2017, subject to requisite shareholder and regulatory approvals. The closing of the merger will result in the automatic termination of the investment sub-advisory agreement between the *Adviser* and *INTECH*. On February 23, 2017 (subsequent to the close of the current fiscal period), the Board of Trustees of the *Fund* (the *Board*) approved a new sub-advisory agreement with *INTECH* in accordance with the Investment Company Act of 1940 and approved the submission of the new sub-advisory agreement for shareholder approval at the *Fund*'s next annual meeting.

Shareholders' investment in the *Fund* will not change as a result of the proposed merger. Shareholders will still own the same *Fund* shares and the underlying value of those shares will not change as a result of the merger. The merger is not expected to result in any change in the portfolio management of the *Fund* or in the *Fund*'s investment objectives or policies.

Investment Objectives and Principal Investment Strategies

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 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 Option Strategy). The Fund expects to write (sell) call options primarily on custom baskets of stocks that seek to track the return of the S&P 500[®] Index within parameters determined by NAM. A custom basket call option is an option whose value is linked to the market value of a portfolio of underlying stocks. In designing the custom basket call options, NAM will seek to minimize the difference between the returns of the stocks underlying the custom basket versus the S&P 500[®] Index. The Fund may also write call options on stock indexes or exchange-traded funds (commonly referred to as ETFs), when NAM believes such techniques are likely to be more efficient or effective than writing custom basket call options. The Fund normally will hold a small number of written custom basket call option positions with expirations generally of 60 days or less. The Fund expects that most call options in the Option Strategy will be slightly out-of-the-money (i.e., the exercise price is above the current level of the cash value of the stocks underlying the custom basket call options) at the time they are written. By employing custom basket call options primarily (rather than options on indexes), NAM expects that it will be better able to limit the overlap between the underlying common stocks included in each custom basket and the Fund's portfolio of common stocks, which in turn helps enable the Fund to avoid tax straddles, which would potentially have negative tax implications and require the Fund to bear substantially greater accounting and administrative costs.

Significant Accounting Policies

The Fund is an investment company and follows accounting and reporting guidance under Financial Accounting Standards Board (FASB) Accounting Standards Codification (ASC) Topic 946 Financial Services Investment Companies. The following is a summary of significant accounting policies

followed by the Fund in the preparation of its financial statements in accordance with accounting principles generally accepted in the United States of America (U.S. GAAP).

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 purchased on a when-issued/delayed delivery basis may have extended settlement periods. Any investments so purchased are subject to market fluctuation during this period. The Fund has earmarked securities in its portfolio with a current value at least equal to the amount of the when-issued/delayed delivery purchase commitments.

As of the end of the reporting period, the Fund did not have any when issued/delayed purchase commitments.

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.

Professional Fees

Professional fees presented on the Statement of Operations consist of legal fees incurred in the normal course of operations, audit fees, tax consulting fees and, in some cases, workout expenditures. Workout expenditures are incurred in an attempt to protect or enhance an investment or to pursue other claims or legal actions on behalf of Fund shareholders. If a refund is received for workout expenditures paid in a prior reporting period, such amounts will be recognized as Legal fee refund on the Statement of Operations.

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 common shareholders of a stated dollar amount per share. Subject to approval and oversight by the Board, 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 nontaxable 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 (NAV), the difference will reduce NAV per share. If the Fund's total return on NAV exceeds total distributions during a calendar year, the excess will be reflected as an increase in NAV per share. The final determination of the source and character of all distributions paid by the Fund during the fiscal year is made after the end of the fiscal year and is reflected in the financial statements contained in the annual report as of December 31 each year.

The tax character of Fund distributions for a fiscal year is dependent upon the amount and tax character of distributions received from securities held in the Fund's portfolio. Distributions received from certain securities in which the Fund invests, most notably REIT securities, may be characterized for tax purposes as ordinary income, long-term capital gain and/or a return of capital. The issuer of a security reports the tax character of its distributions

only once per year, generally during the first two months of the calendar year. The distribution is included in the Fund's ordinary income until such time the Fund is notified by the issuer of the actual tax character. For the fiscal year just ended, dividend income, net realized gain (loss) and unrealized appreciation (depreciation) recognized on the Statement of Operations reflect the amounts of ordinary income, capital gain, and/or return of capital as reported by the issuers of such securities.

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 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.

Netting Agreements

In the ordinary course of business, the Fund may enter into transactions subject to enforceable master repurchase agreements, International Swaps and Derivative Association, Inc. (ISDA) master agreements or other similar arrangements (netting agreements). Generally, the right to offset in netting agreements allows the Fund to offset certain securities and derivatives with a specific counterparty, when applicable, as well as any collateral received or delivered to that counterparty based on the terms of the agreements. Generally, the Fund manages its cash collateral and securities collateral on a counterparty basis.

Notes to Financial Statements (continued)

The Fund's investments subject to netting agreements as of the end of the reporting period, if any, are further described in Note 3 – Portfolio Securities and Investments in Derivatives.

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 current fiscal period. Actual results may differ from those estimates.

2. Investment Valuation and Fair Value Measurements

The fair valuation input levels as described below are for fair value measurement purposes.

Fair value is defined as the price that would be received 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 following is a summary of the three-tiered hierarchy of valuation input levels.

- Level 1 Inputs are unadjusted and prices are determined using quoted prices in active markets for identical securities.
- Level 2 Prices are determined using other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).
- Level 3 Prices are determined using significant unobservable inputs (including management's assumptions in determining the fair value of investments).

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. Securities primarily traded on the NASDAQ National Market (NASDAQ) are valued 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 are generally classified as Level 2.

Prices of fixed-income securities are provided by an independent pricing service (pricing service) approved by the Board. 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. These securities are generally classified as Level 2. 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

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

Adviser. These securities are generally classified as Level 2 or Level 3 depending on the observability of the significant inputs.

Index options are valued at the 4:00 p.m. Eastern Time (ET) close price of the NYSE, and 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.

Futures contracts are valued using the closing settlement price or, in the absence of such a price, the last traded price, and are generally classified as

Level 1.

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 Board and/or its appointee 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 NAV (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 observability of the significant inputs. Regardless of the method employed to value a particular security, all valuations are subject to review by the Board and/or its appointee.

The inputs or methodologies used for valuing securities are not an indication of the risks associated with investing in those securities. The following is a summary of the Fund's fair value measurements as of the end of the reporting period:

| | Level 1 | Level 2 | Level 3 | Total |
|--|-----------------------|---------------------|-----------|-----------------------|
| Long-Term Investments*: | | | | |
| Common Stocks | \$ 224,275,826 | \$ | \$ | \$ 224,275,826 |
| Short-Term Investments: | | | | |
| Repurchase Agreements | | 1,976,095 | | 1,976,095 |
| U.S. Government and Agency Obligations | | 2,499,120 | | 2,499,120 |
| Investments in Derivatives: | | | | |
| Options Written | (155,500) | | | (155,500) |
| Futures Contracts** | (63,987) | | | (63,987) |
| Total | \$ 224,056,339 | \$ 4,475,215 | \$ | \$ 228,531,554 |

* Refer to the Fund's Portfolio of Investments for industry classifications.

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

The Board is responsible for the valuation process and has appointed the oversight of the daily valuation process to the Adviser's Valuation Committee. The Valuation Committee, pursuant to the valuation policies and procedures adopted by the Board, is responsible for making fair value determinations, evaluating the effectiveness of the Fund's pricing policies and reporting to the Board. The Valuation Committee is aided in its efforts by the Adviser's dedicated Securities Valuation Team, which is responsible for administering the daily valuation process and applying fair value methodologies as approved by the Valuation Committee. When determining the reliability of independent pricing services for investments owned by the Fund, the Valuation Committee, among other things, conducts due diligence reviews of the pricing services and monitors the quality of security prices received through various testing reports conducted by the Securities Valuation Team.

The Valuation Committee will consider pricing methodologies it deems relevant and appropriate when making a fair value determination, based on the facts and circumstances specific to the portfolio instrument. Fair value determinations generally will be derived as follows, using public or private market information:

- (i) If available, fair value determinations shall be derived by extrapolating from recent transactions or quoted prices for identical or comparable securities.
- (ii) If such information is not available, an analytical valuation methodology may be used based on other available information including, but not limited to: analyst appraisals, research reports, corporate action information, issuer financial statements and shelf registration statements. Such analytical valuation methodologies may include, but are not limited to: multiple of earnings, discount from market value of a similar freely-traded security, discounted cash flow analysis, book value or a multiple thereof, risk premium/yield analysis, yield to maturity and/or fundamental investment analysis.

The purchase price of a portfolio instrument will be used to fair value the instrument only if no other valuation methodology is available or deemed appropriate, and it is determined that the purchase price fairly reflects the instrument's current value.

For each portfolio security that has been fair valued pursuant to the policies adopted by the Board, the fair value price is compared against the last available and next available market quotations. The Valuation Committee reviews the results of such testing and fair valuation occurrences are reported to the Board.

3. Portfolio Securities and Investments in Derivatives

Portfolio Securities

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.

The following table presents the repurchase agreements for the Fund that are subject to netting agreements as of the end of the reporting period, and the collateral delivered related to those repurchase agreements.

| Counterparty | Short-Term Investments, at Value | Collateral Pledged (From) Counterparty* | Net Exposure |
|-----------------------------------|-------------------------------------|---|-----------------|
| Fixed Income Clearing Corporation | \$ 1,976,095 | \$ (1,976,095) | \$ |

* As of the end of the reporting period, the value of the collateral pledged from the counterparty exceeded the value of the repurchase agreements. Refer to the Fund's Portfolio of Investments for details on the repurchase agreements.

Notes to Financial Statements (continued)

Zero Coupon Securities

A zero coupon security does not pay a regular interest coupon to its holders during the life of the security. 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.

Investments in Derivatives

The Fund is authorized to invest in certain derivative instruments, such as futures, options and swap contracts. The Fund limits its investments in futures, options on futures and swap contracts to the extent necessary for the Adviser to claim the exclusion from registration by the Commodity Futures Trading Commission as a commodity pool operator with respect to the Fund. 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.

Futures Contracts

Upon execution of a futures contract, the Fund is obligated to deposit cash or eligible securities, also known as initial margin, into an account at its clearing broker equal to a specified percentage of the contract amount. Cash held by the broker to cover initial margin requirements on open futures contracts, if any, is recognized as Cash collateral at brokers on the Statement of Assets and Liabilities. Investments in futures contracts obligate the Fund and the clearing broker to settle monies on a daily basis representing changes in the prior days' mark-to-market of the open contracts. If the Fund has unrealized appreciation the clearing broker would credit the Fund's account with an amount equal to appreciation and conversely if the Fund has unrealized depreciation the clearing broker would debit the Fund's account with an amount equal to depreciation. These daily cash settlements are also known as variation margin. Variation margin is recognized as a receivable and/or payable for Variation margin on futures contracts on the Statement of Assets and Liabilities.

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, which 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, which 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 current fiscal period, the Fund continued to purchase equity index futures contracts to gain equity market exposure where the portfolio holds cash.

The average notional amount of futures contracts outstanding during the current fiscal period was as follows:

Average notional amount of futures contracts outstanding* \$5,028,954

* The average notional amount is calculated based on the absolute aggregate notional of contracts outstanding at the beginning of the fiscal period and at the end of each quarter within the current fiscal period.

The following table presents the fair value of all futures contracts held by the Fund as of the end of the reporting period, the location of these instruments on the Statement of Assets and Liabilities and the primary underlying risk exposure.

Location on the Statement of Assets and Liabilities

| Underlying Risk Exposure | Derivative Instrument | Asset Derivatives | | (Liability) Derivatives | Value |
|--------------------------|-----------------------|-------------------|-------|--|-----------|
| | | Location | Value | | |
| Equity price | Futures contracts | \$ | | Payable for variation margin on futures contracts* | \$ 63,987 |

* Value represents unrealized appreciation (depreciation) of futures contracts as reported in the Fund's Portfolio of Investments and not the asset and/or liability derivative location as described in the table above.

The following table presents the amount of net realized gain (loss) and change in net unrealized appreciation (depreciation) recognized on futures contracts on the Statement of Operations during the current fiscal period, and the primary underlying risk exposure.

| Underlying Risk Exposure | Derivative Instrument | Net Realized Gain (Loss) from Futures Contracts | | Change in Net Unrealized Appreciation (Depreciation) of Futures Contracts |
|--------------------------|-----------------------|---|----|---|
| | | | | |
| Equity price | Futures contracts | \$ 690,577 | \$ | (157,212) |

Options Transactions

When the Fund writes an option, an amount equal to the net premium received (the premium less commission) is recognized as a component of Options written, at value on the Statement of Assets and Liabilities and is subsequently adjusted to reflect the current value of the written option until the option is exercised or expires or the Fund enters into a closing purchase transaction. The changes in the value of options written during the fiscal period are recognized as a component of Change in net unrealized appreciation (depreciation) of options written on the Statement of Operations. When an option is exercised or expires or the Fund enters into a closing purchase transaction, the difference between the net premium received and any amount paid at expiration or on executing a closing purchase transaction, including commission, is recognized as a component of Net realized gain (loss) from options written on the Statement of Operations. The Fund, as a writer of an option has no control over whether the underlying instrument may be sold (called) or purchased (put) 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 the current fiscal period, the Fund continued to write call options on a basket of stocks and on stock indexes, while investing in a portfolio of equities, to enhance returns while foregoing some upside potential of its equity portfolio.

The average notional amount of outstanding options written during the current fiscal period was as follows:

| | |
|---|----------------|
| Average notional amount of outstanding options written* | \$(83,477,352) |
|---|----------------|

* The average notional amount is calculated based on the outstanding notional at the beginning of the fiscal period and at the end of each fiscal quarter within the current fiscal period.

The following table presents the fair value of all options held by the Fund as of the end of the reporting period, 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 | | | |
|--------------------------|-----------------------|---|---------------------------|-------------------------|--|
| | | Asset Derivatives | | (Liability) Derivatives | |
| | Location | Value | Location | Value | |
| Equity price | Options | \$ | Options written, at value | \$ (155,500) | |

The following table presents the amount of net realized gain (loss) and change in net unrealized appreciation (depreciation) recognized on options written on the Statement of Operations during the current fiscal period, and the primary underlying risk exposure.

| Underlying Risk Exposure | Derivative Instrument | Net Realized | Change in Net |
|--------------------------|-----------------------|----------------------------------|---|
| | | Gain (Loss) from Options Written | Unrealized Appreciation (Depreciation) of Options Written |
| Equity price | Options written | \$ (10,247,285) | \$ 410,331 |

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.

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 pre-determined threshold amount.

4. Fund Shares

Share Transactions

The Fund did not have any transactions in shares during the current and prior fiscal period.

5. Investment Transactions

Long-term purchases and sales (excluding derivative transactions) during the current fiscal period aggregated \$255,829,990 and \$273,588,406, respectively.

Notes to Financial Statements (continued)

Transactions in options written during the current fiscal period were as follows:

| | Number of Contracts | Premiums Received |
|---|--------------------------------|------------------------------|
| Options outstanding, beginning of period | 700 | \$ 271,571 |
| Options written | 259,516 | 13,721,150 |
| Options terminated in closing purchase transactions | (147,379) | (12,553,107) |
| Options expired | (112,322) | (701,087) |
| Options outstanding, end of period | 515 | \$ 738,527 |

6. Income Tax Information

The Fund intends to distribute substantially all of its net 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. 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.

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 and certain options 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 NAV of the Fund.

As of December 31, 2016, the cost and unrealized appreciation (depreciation) of investments (excluding investments in derivatives), as determined on a federal income tax basis, were as follows:

| | |
|---|----------------|
| Cost of investments | \$ 197,195,199 |
| Gross unrealized: | |
| Appreciation | \$ 35,010,510 |
| Depreciation | (3,454,668) |
| Net unrealized appreciation (depreciation) of investments | \$ 31,555,842 |

As of December 31, 2016, the Fund's tax year end, the Fund did not have any permanent differences.

The tax components of undistributed net ordinary income and net long-term capital gains as of December 31, 2016, the Fund's tax year end, were as follows:

| | |
|-----------------------------------|----|
| Undistributed net ordinary income | \$ |
|-----------------------------------|----|

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

Undistributed net long-term capital gains

The tax character of distributions paid during the Fund's tax years ended December 31, 2016 and December 31, 2015, was designated for purposes of the dividends paid deduction as follows:

2016

| | |
|---|--------------|
| Distributions from net ordinary income ¹ | \$ 2,023,624 |
| Distributions from net long-term capital gains ² | 7,093,400 |
| Return of capital | 9,067,590 |

2015

| | |
|---|--------------|
| Distributions from net ordinary income ¹ | \$ 1,549,211 |
| Distributions from net long-term capital gains | 42,507,221 |
| Return of capital | |

¹ Net ordinary income consists of net taxable income derived from dividends and interest, and net short-term capital gains, if any.

² The Fund hereby designates as long-term capital gain dividend, pursuant to Internal Revenue Code 852(b)(3), the amount necessary to reduce earnings and profits of the Fund related to net capital gain to zero for the tax year ended December 31, 2016.

As of December 31, 2016, the Fund's tax year end, the Fund has unused capital losses carrying forward available for federal income tax purposes to be

applied against future capital gains, if any. The capital losses are not subject to expiration.

| | |
|--|-----------|
| Capital losses to be carried forward – not subject to expiration | \$584,483 |
|--|-----------|

7. Management Fees and Other Transactions with Affiliates

Management Fees

The Fund's management fee compensates the Adviser for overall investment advisory and administrative services and general office facilities. The Sub-Advisers are compensated for their services to the Fund from the management fees paid to the Adviser.

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 |
|--------------------------------------|-----------------------|
| For the first \$500 million | 0.7500% |
| For the next \$500 million | 0.7250 |
| For the next \$500 million | 0.7000 |
| For the next \$500 million | 0.6750 |
| For managed assets over \$2 billion | 0.6500 |

The annual complex-level fee, payable monthly, is calculated by multiplying the current complex-wide fee rate, determined according to the following schedule by the Fund's daily managed assets:

| Complex-Level Managed Asset Breakpoint Level* | Effective Rate at Breakpoint Level |
|--|---|
| \$55 billion | 0.2000% |
| \$56 billion | 0.1996 |
| \$57 billion | 0.1989 |
| \$60 billion | 0.1961 |
| \$63 billion | 0.1931 |
| \$66 billion | 0.1900 |
| \$71 billion | 0.1851 |
| \$76 billion | 0.1806 |
| \$80 billion | 0.1773 |
| \$91 billion | 0.1691 |
| \$125 billion | 0.1599 |

| | |
|---------------|--------|
| \$200 billion | 0.1505 |
| \$250 billion | 0.1469 |
| \$300 billion | 0.1445 |

* For the complex-level fees, managed assets include closed-end fund assets managed by the Adviser that are attributable to certain types of leverage. For these purposes, 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 or assets in excess of a determined amount (originally \$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, 2016, the complex-level fee for the Fund was 0.1625%.

Other Transactions with Affiliates

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 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.

Additional**Fund Information** (Unaudited)**Board of Trustees**

| | | | | | |
|-------------------|----------------------|---------------------|-------------------|------------------|-------------------|
| | Margo Cook* | Jack B. Evans | William C. Hunter | David J. Kundert | Albin F. Moschner |
| William Adams IV* | | | | | |
| John K. Nelson | William J. Schneider | Judith M. Stockdale | Carole E. Stone | Terence J. Toth | Margaret L. Wolff |

*Interested Board Member.

| Fund Manager | Custodian | Legal Counsel | Independent Registered Public Accounting Firm | Transfer Agent and Shareholder Services |
|---|---|---|---|--|
| Nuveen Fund Advisors, LLC 333 West Wacker Drive Chicago, IL 60606 | State Street Bank & Trust Company One Lincoln Street Boston, MA 02111 | Chapman and Cutler LLP Chicago, IL 60603 | PricewaterhouseCoopers LLP One North Wacker Drive Chicago, IL 60606 | State Street Bank & Trust Company Nuveen Funds P.O. Box 43071 Providence, RI 02940-3071 (800) 257-8787 |

Distribution Information

The Fund hereby designates its percentage of dividends paid from net ordinary income as dividends qualifying for the 70% dividends received deduction (DRD) for corporations and its percentage 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.

| | |
|-------|--------------------|
| % QDI | JCE 100% |
| % DRD | 100% |

Quarterly Form N-Q Portfolio of Investments Information

The Fund is required to file its complete schedule of portfolio holdings with the Securities and Exchange Commission (SEC) for the first and third quarters of each fiscal year on Form N-Q. You may obtain this information directly from the SEC. 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 toll-free at (800) SEC-0330 for room hours and operation.

Nuveen Funds Proxy Voting Information

You may obtain (i) information regarding how each fund voted proxies relating to portfolio securities held during the most recent twelve-month period ended June 30, without charge, upon request, by calling Nuveen toll-free at (800) 257-8787 or on Nuveen's website at www.nuveen.com and (ii) a description of the policies and procedures that each fund used to determine how to vote proxies relating to portfolio securities without charge, upon request, by calling Nuveen toll free at (800) 257-8787. You may also obtain this information directly from the SEC. Visit the SEC on-line at <http://www.sec.gov>.

CEO Certification Disclosure

The Fund's Chief Executive Officer (CEO) 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 CEO and Chief Financial Officer required by Section 302 of the Sarbanes-Oxley Act.

Share Repurchases

The Fund intends to repurchase, through its open-market share repurchase program, shares of its own common stock 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. Any future repurchases will be reported to shareholders in the next annual or semi-annual report.

JCE

Shares repurchased

FINRA BrokerCheck

The Financial Industry Regulatory Authority (FINRA) provides information regarding the disciplinary history of FINRA member firms and associated investment professionals. This information as well as an investor brochure describing FINRA BrokerCheck is available to the public by calling the FINRA BrokerCheck Hotline number at (800) 289-9999 or by visiting www.FINRA.org.

Glossary of Terms

Used in this Report (Unaudited)

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.

Blended Index: 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.

Gross Domestic Product (GDP): The total market value of all final goods and services produced in a country/region in a given year, equal to total consumer, investment and government spending, plus the value of exports, minus the value of imports.

Net Asset Value (NAV) Per Share: A fund's Net Assets is equal to its total assets (securities, cash, accrued earnings and receivables) less its total liabilities. NAV per share is equal to the fund's Net Assets divided by its number of shares outstanding.

Russell 2000[®] Index: A market-weighted index published by the Frank Russell Company measuring the performance of the 2,000 smallest companies in the Russell 3000[®] Index. The Russell 3000[®] is made up of 3,000 of the largest U.S. stocks and represents approximately 98% of the U.S. equity market. The Russell 2000[®] serves as a benchmark for small-cap stocks in the U.S. Index returns assume reinvestment of distributions, but do not reflect any applicable sales charges or management fees.

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 reflect any applicable sales charges or management fees.

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 will 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 will 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 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 investment 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.

Board**Members & Officers** (Unaudited)

| Name, Year of Birth & 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:

| | | | | |
|--|------------------------------|---------------------------|--|------------|
| WILLIAM J. SCHNEIDER 1944 333 W. Wacker Drive Chicago, IL 60606 | Chairman and Board Member | 1996 Class III | Chairman of Miller-Valentine Partners, a real estate investment company; Board Member of WDPR Public Radio station; formerly, Senior Partner and Chief Operating Officer (retired (2004) of Miller-Valentine Group; formerly, Board member, Business Advisory Council of the Cleveland Federal Reserve Bank and University of Dayton Business School Advisory Council; past Chair and Director, Dayton Development Coalition. | 182 |
| JACK B. EVANS 1948 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; Director, The Gazette Company; Life Trustee of Coe College and the Iowa College Foundation; formerly, President Pro-Tem of the Board of Regents for the State of Iowa University System; 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. | 182 |
| WILLIAM C. HUNTER 1948 | Board Member | 2003 Class I | Dean Emeritus, formerly, Dean, Tippie College of Business, University of Iowa (2006-2012); Director (since 2004) of Xerox Corporation; past Director (2005-2015), and past President | 182 |

333 W. Wacker
Drive Chicago, IL
60606

(2010-2014) Beta Gamma Sigma, Inc.,
The International Business Honor
Society; Director of Wellmark, Inc.
(since 2009); formerly, Dean and
Distinguished Professor of Finance,
School of 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.

**DAVID J.
KUNDERT**
1942

Board Member

**2005
Class II**

Formerly, Director, Northwestern
Mutual Wealth Management Company
(2006-2013), 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; Regent
Emeritus, Member of Investment
Committee, Luther College; member of
the Wisconsin Bar Association; member
of Board of Directors and Chair of
Investment Committee, Greater
Milwaukee Foundation; member of the
Board of Directors (Milwaukee),
College Possible; Board member of
Milwaukee Repertory Theatre (since
2016).

182

333 W. Wacker
Drive Chicago, IL
60606

Board Members & Officers (Unaudited) (continued)

| Name, Year of Birth & 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):

| | | | | |
|---|--------------|---------------------------|--|------------|
| ALBIN F. MOSCHNER 1952 333 W. Wacker Drive Chicago, IL 60606 | Board Member | 2016 Class III | Founder and Chief Executive Officer, Northcroft Partners, LLC, a management consulting firm (since 2012); previously, held positions at Leap Wireless International, Inc., including Consultant (2011-2012), Chief Operating Officer (2008-2011), and Chief Marketing Officer (2004-2008); formerly, President, Verizon Card Services division of Verizon Communications, Inc. (2000-2003); formerly, President, One Point Services at One Point Communications (1999-2000); formerly, Vice Chairman of the Board, Diba, Incorporated (1996-1997); formerly, various executive positions with Zenith Electronics Corporation (1991-1996). Director, USA Technologies, Inc., a provider of solutions and services to facilitate electronic payment transactions (since 2012); formerly, Director, Wintrust Financial Corporation (1996-2016). | 182 |
| JOHN K. NELSON 1962 333 W. Wacker Drive Chicago, IL 60606 | Board Member | 2013 Class II | Member of Board of Directors of Core12 LLC (since 2008), a private firm which develops branding, marketing and communications strategies for clients; Director of The Curran Center for Catholic American Studies (since 2009) and The President's Council, Fordham University (since 2010); formerly, senior external advisor to the financial services practice of Deloitte Consulting LLP (2012-2014); formerly, Chairman of the Board of Trustees of Marian University | 182 |

(2010 as trustee, 2011-2014 as Chairman); formerly, Chief Executive Officer of ABN AMRO N.V. North America, and Global Head of its Financial Markets Division (2007-2008); prior senior positions held at ABN AMRO include Corporate Executive Vice President and Head of Global Markets-the Americas (2006-2007), CEO of Wholesale Banking North America and Global Head of Foreign Exchange and Futures Markets (2001-2006), and Regional Commercial Treasurer and Senior Vice President Trading-North America (1996-2001); formerly, Trustee at St. Edmund Preparatory School in New York City.

| | | | | |
|--|---------------------|-----------------------------|--|-------------------|
| <p>JUDITH M. STOCKDALE 1947 333 W. Wacker Drive Chicago, IL 60606</p> | <p>Board Member</p> | <p>1997 Class I</p> | <p>Board Member, Land Trust Alliance (since 2013) and U.S. Endowment for Forestry and Communities (since 2013); formerly, Executive Director (1994-2012), Gaylord and Dorothy Donnelley Foundation; prior thereto, Executive Director, Great Lakes Protection Fund (1990-1994).</p> | <p>182</p> |
| <p>CAROLE E. STONE 1947 333 W. Wacker Drive Chicago, IL 60606</p> | <p>Board Member</p> | <p>2007 Class I</p> | <p>Director, Chicago Board Options Exchange, Inc. (since 2006); Director, C2 Options Exchange, Incorporated (since 2009); Director, CBOE Holdings, Inc. (since 2010); formerly, Commissioner, New York State Commission on Public Authority Reform (2005-2010).</p> | <p>182</p> |
| <p>TERENCE J. TOTH 1959 333 W. Wacker Drive Chicago, IL 60606</p> | <p>Board Member</p> | <p>2008 Class II</p> | <p>Co-Founding Partner, Promus Capital (since 2008); Director, Fulcrum IT Service LLC (since 2010) and Quality Control Corporation (since 2012); member: Catalyst Schools of Chicago Board (since 2008) and Mather Foundation Board (since 2012), and chair of its Investment Committee; formerly, Director, Legal & General Investment Management America, Inc. (2008-2013); formerly, CEO and President, Northern Trust Global Investments (2004-2007); Executive Vice President, Quantitative Management & Securities Lending</p> | <p>182</p> |

(2000-2004); prior thereto, various positions with Northern Trust Company (since 1994); 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).

| Name, Year of Birth & 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):

| | | | | |
|--|--------------|---------------------|--|------------|
| <p>MARGARET L. WOLFF 1955 333 W. Wacker Drive Chicago, IL 60606</p> | Board Member | 2016 Class I | <p>Member of the Board of Directors (since 2013) of Travelers Insurance Company of Canada and The Dominion of Canada General Insurance Company (each, a part of Travelers Canada, the Canadian operation of The Travelers Companies, Inc.); formerly, Of Counsel, Skadden, Arps, Slate, Meagher & Flom LLP (Mergers & Acquisitions Group) (2005-2014); Member of the Board of Trustees of New York-Presbyterian Hospital (since 2005); Member (since 2004) and Chair (since 2015) of the Board of Trustees of The John A. Hartford Foundation (a philanthropy dedicated to improving the care of older adults); formerly, Member (2005-2015) and Vice Chair (2011-2015) of the Board of Trustees of Mt. Holyoke College.</p> | 182 |
|--|--------------|---------------------|--|------------|

Interested Board Members:

| | | | | |
|---|--------------|--------------------------|--|------------|
| <p>WILLIAM ADAMS IV⁽³⁾ 1955 333 W. Wacker Drive Chicago, IL 60606</p> | Board Member | 2013 Class II | <p>Co-Chief Executive Officer and Co-President (since March 2016), formerly, Senior Executive Vice President, Global Structured Products (2010-2016) of Nuveen Investments, Inc.; Executive Vice President (since February 2017) of Nuveen, LLC; Co-President of Nuveen Fund Advisors, LLC (since 2011); Co- Co-President, Global Products and Solutions (since January 2017), formerly, Chief Executive Officer (2016-2017), formerly, Senior Executive Vice President of Nuveen Securities, LLC; President (since 2011), of Nuveen</p> | 182 |
|---|--------------|--------------------------|--|------------|

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

Commodities Asset Management, LLC;
Board Member of the Chicago
Symphony Orchestra and of Gilda's Club
Chicago; formerly, Executive Vice
President, U.S. Structured Products, of
Nuveen Investments, Inc. (1999-2010).

**MARGO L.
COOK**⁽²⁾⁽³⁾

1964

Board Member

2016

Class III

Co-Chief Executive Officer and
Co-President (since March 2016),
formerly, Senior Executive Vice
President of Nuveen Investments, Inc.; **182**
Co-President, Global Products and
Solutions (since January 2017),
formerly, Co-Chief Executive Officer
(2015-2016), formerly, Executive Vice
President (2013-2015), of Nuveen
Securities, LLC; Executive Vice
President (since February 2017) of
Nuveen, LLC; Co-President (since
October 2016), formerly Senior
Executive Vice President of Nuveen
Fund Advisors, LLC (Executive Vice
President since 2011); formerly,
Managing Director of Nuveen
Commodities Asset Management, LLC
(2011-2016); Chartered Financial
Analyst.

333 W. Wacker
Drive Chicago, IL
60606

| Name, Year of Birth & 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:

CEDRIC H. ANTOSIEWICZ

1962

Chief

2007

Senior Managing Director (since
January 2017), formerly, Managing
Director (2004-2017) of Nuveen
Securities, LLC; Senior Managing
Director (since February 2017),
formerly, Managing Director
(2014-2017) of Nuveen Fund Advisors,
LLC.

75

333 W. Wacker
Drive Chicago, IL
60606

Administrative
Officer

LORNA C. FERGUSON

1945

Vice President

1998

Managing Director (since 2004) of
Nuveen.

183

333 W. Wacker
Drive

Chicago, IL 60606

NUVEEN 41

Board Members & Officers (Unaudited) (continued)

| Name, Year of Birth & 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):

| | | | | |
|--|---|-------------|--|------------|
| STEPHEN D. FOY 1954 333 W. Wacker Drive Chicago, IL 60606 | Vice President and Controller | 1998 | Managing Director (since 2014), formerly, Senior Vice President (2013-2014) and Vice President (2005-2013) of Nuveen Fund Advisors, LLC; Chief Financial Officer of Nuveen Commodities Asset Management, LLC (since 2010); Managing Director (since 2016) of Nuveen Securities, LLC; Certified Public Accountant. | 183 |
| NATHANIEL T. JONES 1979 333 W. Wacker Drive Chicago, IL 60606 | Vice President and Treasurer | 2016 | Managing Director (since January 2017), formerly, Senior Vice President (2016-2017), formerly, Vice President (2011-2016) of Nuveen.; Chartered Financial Analyst. | 183 |
| WALTER M. KELLY 1970 333 W. Wacker Drive Chicago, IL 60606 | Chief Compliance Officer and Vice President | 2003 | Managing Director (since January 2017), formerly, Senior Vice President (2008-2017) of Nuveen. | 183 |
| DAVID J. LAMB 1963 333 W. Wacker Drive Chicago, IL 60606 | Vice President | 2015 | Managing Director (since January 2017), formerly, Senior Vice President of Nuveen Investments Holdings, Inc. (since 2006), Vice President prior to 2006. | 75 |
| TINA M. LAZAR 1961 333 W. Wacker Drive Chicago, IL 60606 | Vice President | 2002 | Managing Director (since January 2017), formerly, Senior Vice President (2014-2017) of Nuveen Securities, LLC. | 183 |

| | | | | |
|--|---|--------------------|---|-------------------|
| <p>KEVIN J. MCCARTHY 1966 333 W. Wacker Drive Chicago, IL 60606</p> | <p>Vice President and Assistant Secretary</p> | <p>2007</p> | <p>Senior Managing Director (since February 2017), formerly, Executive Vice President (2016-2017), Secretary (since 2016) and General Counsel (since 2016), formerly, Managing Director and Assistant Secretary of Nuveen Investments, Inc.; Senior Managing Director (since January 2017), formerly, Executive Vice President (2016-2017), formerly, Managing Director (2008-2016), and Assistant Secretary (since 2008) of Nuveen Securities, LLC; Senior Managing Director (since February 2017), formerly, Executive Vice President (2016-2017), and Secretary (since 2016), formerly, Managing Director (2008-2016) and Assistant Secretary (2007-2016), and Co-General Counsel (since 2011) of Nuveen Fund Advisors, LLC; Senior Managing Director (since February 2017), formerly, Executive Vice President (2016-2017) and Secretary (since 2016), formerly, Managing Director, Assistant Secretary (2011-2016), and Associate General Counsel (since 2011) of Nuveen Asset Management, LLC; Senior Managing Director (since February 2017), formerly, Executive Vice President (2016-2017) and Secretary (since 2016) of Nuveen Investments Advisers, LLC; Vice President (since 2007) and Secretary (since 2016) of NWQ Investment Management Company, LLC, Symphony Asset Management LLC, Santa Barbara Asset Management, LLC and Winslow Capital Management, LLC (since 2010); Vice President (since 2010) and Secretary (since 2016), formerly, Assistant Secretary of Nuveen Commodities Asset Management, LLC.</p> | <p>183</p> |
| <p>KATHLEEN L. PRUDHOMME 1953 901 Marquette Avenue Minneapolis,</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, LLC; Managing Director, Assistant Secretary and Associate</p> | <p>183</p> |

MN 55402

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).

42 NUVEEN

| Name, Year of Birth & 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):

| | | | | |
|---|--|-------------|--|------------|
| CHRISTOPHER M. ROHRBACHER 1971 333 West Wacker Drive Chicago, IL 60606 | Vice President and Assistant Secretary | 2008 | Managing Director (since January 2017) of Nuveen Securities, LLC; Managing Director (since January 2017), formerly, Senior Vice President (2016-2017) and Assistant Secretary (since October 2016) of Nuveen Fund Advisors, LLC; Vice President and Assistant Secretary (since 2010) of Nuveen Commodities Asset Management, LLC. | 183 |
| JOEL T. SLAGER 1978 333 W. Wacker Drive Chicago, IL 60606 | Vice President and Assistant Secretary | 2013 | Fund Tax Director for Nuveen Funds (since 2013); previously, Vice President of Morgan Stanley Investment Management, Inc., Assistant Treasurer of the Morgan Stanley Funds (from 2010 to 2013). | 183 |
| GIFFORD R. ZIMMERMAN 1956 333 W. Wacker Drive Chicago, IL 60606 | Vice President and Secretary | 1988 | Managing Director (since 2002), and Assistant Secretary 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, LLC; Managing Director, Assistant Secretary and Associate General Counsel of Nuveen Asset Management, LLC (since 2011); Vice President (since February 2017), formerly, Managing Director (2003-2017) and Assistant Secretary (since 2003) of Symphony Asset Management LLC; Managing Director and Assistant Secretary (since 2002) of Nuveen Investments Advisers, LLC; Vice President and Assistant Secretary of NWQ Investment Management | 183 |

Company, LLC (since 2002), Santa Barbara Asset Management, LLC (since 2006), and of Winslow Capital Management, LLC, (since 2010); Chartered Financial Analyst.

- (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) On June 22, 2016, Ms. Cook and Mr. Moschner were appointed as Board members, effective July 1, 2016.
- (3) Interested person as defined in the 1940 Act, by reason 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.

Nuveen:

Serving Investors for Generations

Since 1898, financial advisors and their clients have relied on Nuveen 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 helps secure the long-term goals of individual investors and the advisors who serve them, providing access to investment expertise from leading asset managers and solutions across traditional and alternative asset classes. Built on more than a century of industry leadership, Nuveen's teams of experts align with clients' specific financial needs and goals, demonstrating commitment to advisors and investors through market perspectives and wealth management and portfolio advisory services. Nuveen manages \$236 billion in assets as of December 31, 2016.

Find out how we can help you.

To learn more about how the products and services of Nuveen 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

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

securities representative or Nuveen, **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

Securities offered through Nuveen Securities, LLC, Member FINRA and SIPC | 333 West Wacker Drive | Chicago, IL 60606 | www.nuveen.com/cef

EAN-F-1216D 23199-INV-Y-03/18

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/Shareholder/FundGovernance.aspx. (To view the code, 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 experts are Carole E. Stone and Jack B. Evans, who are 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.

Mr. Evans was formerly President and Chief Operating Officer of SCI Financial Group, Inc., a full service registered broker-dealer and registered investment adviser (SCI). As part of his role as President and Chief Operating Officer, Mr. Evans actively supervised the Chief Financial Officer (the CFO) and actively supervised the CFO's preparation of financial statements and other filings with various regulatory authorities. In such capacity, Mr. Evans was actively involved in the preparation of SCI's financial statements and the resolution of issues raised in connection therewith. Mr. Evans has also served on the audit committee of various reporting companies. At such companies, Mr. Evans was involved in the oversight of audits, audit plans, and the preparation of financial statements. Mr. Evans also formerly chaired the audit committee of the Federal Reserve Bank of Chicago.

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

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

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.

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-Related Fees | | | |
|--|--|-----------------------------|--------------------------------------|--|
| | Audit Fees Billed to Fund ¹ | Billed to Fund ² | Tax Fees Billed to Fund ³ | All Other Fees Billed to Fund ⁴ |
| December 31, 2016 | \$ 32,334 | \$ 0 | \$ 3,958 | \$ 0 |
| Percentage approved pursuant to pre-approval exception | 0% | 0% | 0% | 0% |
| December 31, 2015 | \$ 31,460 | \$ 687 | \$ 2,170 | \$ 0 |
| Percentage approved pursuant to pre-approval exception | 0% | 0% | 0% | 0% |

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 that are not reported under Audit Fees. These fees include offerings related to the Fund's common shares and leverage.

³ Tax Fees are the aggregate fees billed for professional services for tax advice, tax compliance, and tax planning. These fees include: all global withholding tax services; excise and state tax reviews; capital gain, tax equalization and taxable basis calculation performed by the principal accountant.

⁴ All Other Fees are the aggregate fees billed for products and services other than Audit Fees, Audit-Related Fees and Tax Fees. These fees represent all Agreed-Upon Procedures engagements pertaining to the Fund's use of leverage.

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, LLC (formerly Nuveen Fund Advisors, Inc.) (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, 2016 | \$ 0 | \$ 0 | \$ 0 |
| Percentage approved pursuant to pre-approval exception | 0% | 0% | 0% |
| December 31, 2015 | \$ 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 Adviser and Affiliated Fund Service Providers (engagements related directly to operations and financial reporting of the Fund) | | Total Non-Audit Fees billed to Adviser and Affiliated Fund Service Providers (all other engagements) | | Total |
|-------------------|---|----------------|--|----------------|----------|
| | Tax Fees | All Other Fees | Tax Fees | All Other Fees | |
| December 31, 2016 | \$ 3,958 | \$ 0 | \$ 0 | \$ 0 | \$ 3,958 |
| December 31, 2015 | \$ 2,170 | \$ 0 | \$ 0 | \$ 0 | \$ 2,170 |

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.

Less than 50 percent of the hours expended on the principal accountant's engagement to audit the registrant's financial statements for the most recent fiscal year were attributed to work performed by persons other than the principal accountant's full-time, permanent employees.

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 Jack B. Evans, David J. Kundert, John K. Nelson, 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.

Nuveen Fund Advisors, LLC, f/k/a Nuveen Fund Advisors, Inc. (NFALLC) is the registrant's investment adviser (NFALLC is also referred to as the Adviser). NFALLC 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. As part of these services, the Adviser has also delegated to the Sub-Adviser the full responsibility for proxy voting on securities held in its portfolio and related duties in accordance with the Sub-Adviser's policy and procedures. The Adviser periodically will monitor the Sub-Adviser's voting to ensure that it is carrying out its duties. The Adviser's and the Sub-Adviser's proxy voting policies and procedures are summarized as follows:

Nuveen Asset Management

The registrant invests its assets primarily in fixed income securities and cash management securities. In the rare event that a fixed income issuer were to issue a proxy or that the registrant were to receive a proxy issued by a cash management security, NAM would either engage an independent third party to determine how the proxy should be voted or vote the proxy with the consent, or based on the instructions, of the registrant's Board of Trustees or its representative. A member of NAM's legal department would oversee the administration of the voting, and ensure that records were maintained in accordance with Rule 206(4)-6, reports were filed with the SEC on Form N-PX, and the results provided to the registrant's Board of Trustees and made available to shareholders as required by applicable rules.

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 Inc. (ISS), to vote all Fund proxies in accordance with ISS Benchmark Proxy Voting Guidelines (ISS Recommendations). INTECH has engaged the services of the Janus Securities Operations Group to oversee ISS in the administration of 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 such procedures and controls, it is not expected that any conflicts will arise in the proxy voting process. In the unusual circumstance that a particular proxy vote may present a potential conflict, the matter shall be referred to INTECH's Proxy Review Group, which is composed of INTECH's Chief Operating Officer & General Counsel, Chief Financial Officer and Chief Compliance Officer. 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.

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

Nuveen Fund Advisors, LLC (NFALLC) is the registrant's investment adviser (NFALLC is also referred to as the Adviser). NFALLC 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

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 and 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 (since 2014) and Portfolio Manager (since 2011) of Nuveen Asset Management, 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 FAF's Performance Measurement group.

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

In addition to the Fund, as of December 31, 2016, 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 | | | | | | (iii) Number of Other Accounts and Assets for Which Advisory Fee is | | |
|-------------------------------|---------------------------------------|----------------------------------|---------------------------|---------------------------------------|----------------------------------|---------------------------|---|----------------------------------|---------------------------|
| | and Assets by Account Type | | | | | | Performance-Based | | |
| | Other Registered Investment Companies | Other Pooled Investment Vehicles | Other Investment Accounts | Other Registered Investment Companies | Other Pooled Investment Vehicles | Other Investment Accounts | Other Registered Investment Companies | Other Pooled Investment Vehicles | Other Investment Accounts |
| | | | | | | | | | |
| Keith Hembre | 10 | \$ 2.61 billion | 0 | \$ 0 | 5 | \$ 47.3 million | N/A | N/A | N/A |
| David Friar | 9 | \$ 3.46 billion | 0 | \$ 0 | 8 | \$ 471 million | N/A | N/A | N/A |

1* \$ 285 million

* Other Accounts-overlay strategies The portfolio manager is responsible for the management of overlay strategies employed by this account that use derivative instruments either to obtain, offset or substitute for certain portfolio exposures beyond those provided by the account's underlying portfolios.

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.

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.

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 pre-tax 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 participate in a Long-Term Performance Plan designed to provide compensation opportunities that links a portion of each participant's compensation to Nuveen Investments' financial and operational performance. 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, 2016

Name of Portfolio

| | \$1 - | \$10,001- | \$50,001- | \$100,001- | \$500,001- |
|----------------|--------------|------------------|------------------|-------------------|-------------------|
| Manager | None | \$10,000 | \$50,000 | \$100,000 | \$500,000 |
| Keith Hembre | X | | | | |
| David Friar | X | | | | |

INTECH

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

A team of investment professionals consisting of Dr. Adrian Banner, Dr. Vassilios Papathanakos, Dr. Phillip Whitman, and Joseph Runnels works together to implement the mathematical portfolio management process.

Adrian Banner, Ph.D., is chief executive officer and chief investment officer of INTECH. Dr. Banner was named chief executive officer in November 2012 and concurrently is the firm's chief investment officer, a position he has held since January 2012. Previously, Dr. Banner was co-chief investment officer beginning January 2009, senior investment officer from September 2007 to January 2009, and joined INTECH in August 2002 as director of research. Since that time, Dr. Banner has been an integral part of the firm's Princeton-based research team. Dr. Banner has extensive knowledge of INTECH's trading systems, optimization programs and research initiatives, both on an operational and theoretical basis. Dr. Banner supervises the implementation of the portfolio optimization, management, and trading processes. He conducts mathematical research on the investment process and reviews and recommends improvements. Dr. Banner earned his Ph.D. in mathematics from Princeton University and his M.Sc. and B.Sc., also in mathematics, from the University of New South Wales, Australia.

Vassilios Papathanakos, Ph.D., is executive vice president and deputy chief investment officer of INTECH. He was named executive vice president in January 2014 and deputy chief investment officer in November 2012. Prior to that, he was the firm's director of research since July 2007, and joined INTECH in October 2006 as associate director of research. Dr. Papathanakos is jointly responsible, with Dr. Banner, for the day-to-day implementation of INTECH's investment process and trading operations. Dr. Papathanakos received his Ph.D. in Physics from Princeton University in November 2006 and earned a B.S. in Physics from the University of Ioannina, Greece, in July 2001. Dr. Papathanakos has also accumulated a long teaching experience, instructing courses in all undergraduate and graduate levels, assisting in the development of new courses and coaching new teaching assistants.

Phillip Whitman, Ph.D., became portfolio manager in January 2015. Before that, he was Director of Research since November 2012 and previously Associate Director of Research since joining INTECH in November 2010. Prior to that, Dr. Whitman was enrolled in the Ph.D. program (mathematics) at Princeton University from 2005 through November 2010, where he also served as a Course Instructor and Assistant Instructor for Multivariable Calculus in 2008 and 2009, respectively.

Joseph W. Runnels, CFA, has been vice president of portfolio management at INTECH since March 2003 and joined the firm in 1998. Mr. Runnels holds a B.S. in Business Administration from Murray State University

No one person of the investment team is primarily responsible for implementing the investment strategy of the portion of the Nuveen Core Equity Alpha Fund allocated to INTECH.

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

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, 2016, unless otherwise indicated:

| Type of Account Managed | Number of Accounts | Assets |
|--------------------------------|--------------------|-------------------|
| Registered Investment Company* | 9 | \$ 3,550,815,303 |
| Other Pooled Investment** | 39 | \$ 8,317,221,793 |
| Other Accounts*** | 139 | \$ 34,841,036,815 |

In addition to managing the Equity Portfolio, Dr. Papathanakos is also primarily responsible for the day-to-day portfolio management of the following accounts. Information is provided as of December 31, 2016, unless otherwise indicated:

| Type of Account Managed | Number of Accounts | Assets |
|--------------------------------|--------------------|-------------------|
| Registered Investment Company* | 9 | \$ 3,550,815,303 |
| Other Pooled Investment** | 39 | \$ 8,317,221,793 |
| Other Accounts*** | 139 | \$ 34,841,036,815 |

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, 2016, unless otherwise indicated:

| Type of Account Managed | Number of Accounts | Assets |
|--------------------------------|--------------------|-------------------|
| Registered Investment Company* | 9 | \$ 3,550,815,303 |
| Other Pooled Investment** | 39 | \$ 8,317,221,793 |
| Other Accounts*** | 139 | \$ 34,841,036,815 |

In addition to managing the Equity Portfolio, Dr. Whitman is also primarily responsible for the day-to-day portfolio management of the following accounts. Information is provided as of December 31, 2016, unless otherwise indicated:

| Type of Account Managed | Number of Accounts | Assets |
|--------------------------------|--------------------|-------------------|
| Registered Investment Company* | 9 | \$ 3,550,815,303 |
| Other Pooled Investment** | 39 | \$ 8,317,221,793 |
| Other Accounts*** | 139 | \$ 34,841,036,815 |

* 1 of the accounts included in the total, consisting of \$597,076,043 of the total assets in the category, has performance-based advisory fees.

** 6 of the accounts included in the total, consisting of \$3,268,602,135 of the total assets in the category, have performance-based advisory fees.

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

39 of the accounts included in the total, consisting of \$15,105,030,950 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 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 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 isolates its sale orders from its purchase orders with different brokers handling each order.

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, as of December 31, 2016, the compensation structure of the investment personnel is determined by INTECH and is summarized below.

For managing the Fund and all other accounts, the investment personnel receive base pay in the form of a fixed annual salary paid and a cash bonus as determined by INTECH, which is based on overall corporate performance and each individual's contributions.

Long-Term Incentive Compensation. Investment personnel that are part owners of INTECH, also receive compensation by virtue of their ownership interest in INTECH. They 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, 2016

| Name of Portfolio Manager | \$1 - None \$10,000 | \$10,001- \$50,000 | \$50,001- \$100,000 | \$100,001- \$500,000 | \$500,001- \$1,000,000 or over \$1,000,000 |
|---------------------------|------------------------|-----------------------|------------------------|-------------------------|--|
| Dr. Banner | X | | | | |
| Dr. Papathanakos | X | | | | |
| Mr. Runnels | X | | | | |
| Dr. Whitman | X | | | | |

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

Not applicable.

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.

- (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.

(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/Shareholder/FundGovernance.aspx and there were no amendments during the period covered by this report. (To view the code, click on 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/ Gifford R. Zimmerman
Gifford R. Zimmerman
Vice President and Secretary

Date: March 9, 2017

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/ Cedric H. Antosiewicz
Cedric H. Antosiewicz
Chief Administrative Officer
(principal executive officer)

Date: March 9, 2017

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

Date: March 9, 2017