

Nuveen Core Equity Alpha Fund
Form N-CSRS
September 08, 2009

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
FORM N-CSR
CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT
COMPANIES
Investment Company Act file number 811-22003
Nuveen Core Equity Alpha Fund**

(Exact name of registrant as specified in charter)

Nuveen Investments
333 West Wacker Drive
Chicago, IL 60606

(Address of principal executive offices) (Zip code)

Kevin J. McCarthy
Nuveen Investments
333 West Wacker Drive
Chicago, IL 60606

(Name and address of agent for service)

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

Date of fiscal year end: December 31

Date of reporting period: June 30, 2009

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 SHAREHOLDERS

Closed-End Funds

Nuveen Investments

Closed-End Funds

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

Semi-Annual Report

June 30, 2009

Nuveen Core Equity

Alpha Fund

JCE

Chairman's
Letter to Shareholders

Dear Shareholder,

The problems in the U.S. financial system and the slowdown in global economic activity continue to create a very difficult environment for the U.S. economy. The administration, the Federal Reserve System and Congress have initiated a variety of programs directed at restoring liquidity to the financial markets, providing financial support for critical financial institutions and stimulating economic activity. There are encouraging signs that these initiatives are beginning to have a constructive impact. It is not possible to predict whether the actions taken to date will be sufficient to restore more normal conditions in the financial markets or enable the economy to stabilize and set a course toward recovery. However, the speed and scope of the government's actions are very encouraging and, more importantly, reflect a commitment to act decisively to meet the economic challenges we face.

The performance information in the attached report reflects the impact of many forces at work in the equity and fixed-income markets. The comments by the portfolio managers describe the strategies being used to pursue your Fund's long-term investment goals. Parts of the financial markets continue to experience serious dislocations and thorough research and strong investment disciplines have never been more important in identifying risks and opportunities. I hope you will read this information carefully.

Your Board is particularly sensitive to our shareholders' concerns in these uncertain times. We believe that frequent and thorough communication is essential in this regard and encourage you to visit the Nuveen website: www.nuveen.com, for recent developments in all Nuveen funds. We also encourage you to communicate with your financial consultant for answers to your questions and to seek advice on your long-term investment strategy in the current market environment.

On behalf of myself and the other members of your Fund's Board, we look forward to continuing to earn your trust in the months and years ahead.

Sincerely,
Robert P. Bremner
Chairman of the Nuveen Fund Board
August 24, 2009

Nuveen Investments 3

Portfolio Managers Comments

Nuveen Core Equity Alpha Fund (JCE)

The equity portion of JCE is managed by INTECH Investment Management LLC (INTECH), an independently managed subsidiary of Janus Capital Group Inc. INTECH's Chief Investment Officer Dr. Robert Fernholz, PhD, leads the portfolio management team.

The Fund also also employs a call option strategy managed by Nuveen Asset Management. Rob Guttschow, CFA, and John Gambla, CFA, oversee this program.

Here Dr. Fernholz and members of his team, along with Rob and John, talk about their management strategies and the performance of the Fund for the six-month period ended June 30, 2009.

Over this period, what key strategies were used to manage the Fund?

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.

Looking at the equity portfolio, the market turmoil that continued during this six-month reporting period reconfirmed the importance of disciplined risk management, which is a critical component of INTECH's portfolio construction and monitoring process. The Fund's equity portfolio goal is to produce long-term returns in excess of its benchmark, the S&P 500 Index, with an equal or lesser amount of risk. The practical risk controls embedded in the firm's investment process aid in minimizing tracking error vis-a-vis the S&P 500 Index during periods of short-term market instability.

INTECH's investment process requires some level of volatility be present in individual stocks that can then be captured in our portfolio optimization and rebalancing process. Typically, the Fund's equity portfolio will hold 250-450 stocks included in the S&P 500 Index. While we expect that there will be individual periods or years in which we exceed or underperform our targets, we seek over the long term to be able to provide returns in excess of the S&P 500 Index with equal or less risk.

While INTECH does not employ fundamental analysis in the management of the equity portfolio, fundamentals can have a significant impact on the general direction of the market in which we participate. As stock prices moved naturally throughout the period, we continued to implement our mathematical process in a disciplined and precise manner in an effort to maintain a more efficient portfolio than the S&P 500 Index, without increasing relative risk. While other factors may influence performance over the short term, we believe that the consistent application of our process will help long term performance.

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

The Fund also employs an option strategy that seeks to enhance its risk-adjusted returns over time through a meaningful reduction in the volatility of the Fund's returns relative to the returns of the S&P 500 Index. Under normal market circumstances, the Fund expects to write (sell) custom basket call options with a notional value of up to 50% of the value of the equity portfolio. During this period, the sale of equity call options was used to

4 Nuveen Investments

generate cash flow that could be used to partially offset equity portfolio losses in certain situations.

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

The performance of JCE, as well as a widely followed equity index and a customized benchmark, are presented in the accompanying table.

Average Annual Total Returns on Net Asset Value*

For periods ended 6/30/09

Past performance does not guarantee future results. Current performance may be higher or lower than the data shown.

Returns do not reflect the deduction of taxes that shareholders may have to pay on Fund distributions or upon the sale of Fund shares. For additional information, see the individual Performance Overview for the Fund in this report.

* Six-month returns are cumulative: one-year returns are annualized.

- 1 The S&P 500 Index is an unmanaged Index generally considered representative of the U.S. Stock Market.
- 2 JCE's Comparative Benchmark is a blend of returns consisting of 1) 50% of the S&P 500 Index and 2) 50% of the CBOE S&P 500 BuyWrite Index (BXW) 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 stock index portfolio each month, on the day the current contract expires.

	Six-Month	One-Year
JCE	1.82%	-22.81%
S&P 500 Index ¹	3.16%	-26.21%
Comparative Benchmark ²	5.52%	-22.26%

For the six-month period ended June 30, 2009, the Fund underperformed the S&P 500 Index and the customized benchmark. As can be seen from the returns shown here, the first six months of 2009 presented a different overall market environment than the last six months of 2008.

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 price correlation with other equities. Since the sector structure of the market is not taken into account in our methodology, any sector underweights or overweights are likely to be coincidental.

Over this six-month period, the Fund had relative underweight positions in the information technology and health care sectors, and relative overweight positions in industrials and consumer staples versus the S&P 500 Index. Top equity performers in the portfolio included Apple Inc., IBM, Wells Fargo, and Oracle. The weakest performers included AFLAC, General Electric, AT&T, Procter and Gamble, and Exxon Mobil.

While the cash flow generated by the sale of call options did help to mitigate some of the risk inherent in the Fund's portfolio, these inflows were not sufficient to offset the performance difference between the Fund's equity holdings

and the S&P 500 Index.

Distribution and Share Price Information

The following information regarding your Fund's distributions is current as of June 30, 2009, and likely will vary over time based on the Fund's investment activities and portfolio investment value changes.

The Fund reduced its quarterly distribution to shareholders once during the six-month reporting period. Some of the factors affecting the amount and composition of these distributions are summarized below.

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

Important points to understand about a managed distribution program are:

The Fund seeks to establish a relatively stable distribution rate that roughly corresponds to the projected total return from its investment strategy over an extended period of time. However, you should not draw any conclusions about the Fund's past or future investment performance from its current distribution rate.

Actual returns will differ from projected long-term returns (and therefore the Fund's distribution rate), at least over shorter time periods. Over a specific timeframe, the difference between actual returns and total distributions will be reflected in an increasing (returns exceed distributions) or a decreasing (distributions exceed returns) Fund net asset value.

Each distribution is expected to be paid from some or all of the following sources:

- net investment income (regular interest and dividends),
- realized capital gains, and
- unrealized gains, or, in certain cases, a return of principal (non-taxable distributions).

A non-taxable distribution is a payment of a portion of the Fund's capital. When the Fund's returns exceed distributions, it may represent portfolio gains generated, but not realized as a taxable capital gain. In periods when the Fund's returns fall short of distributions, the shortfall will represent a portion of your original principal, unless the shortfall is offset during other time periods over the life of your investment (previous or subsequent) when the Fund's total return exceeds distributions.

Because distribution source estimates are updated during the year based on the Fund's performance and forecast for its current fiscal year (which is the calendar year for the Fund), estimates on the nature of your distributions provided at the time the distributions are paid may differ from both the tax information reported to you in your Fund's

IRS Form 1099 statement provided at year end, as well as the ultimate economic sources of distributions over the life of your investment.

The following table provides estimated information regarding the Fund's distributions and total return performance for the fiscal year ended June 30, 2009. The distribution information is presented on a tax basis rather than on a generally accepted accounting principles (GAAP) basis. This information is intended to help you better understand whether the Fund's returns for the specified time period were sufficient to meet the Fund's distributions.

As of 6/30/09	JCE
Inception date	3/27/07
Six months ended June 30, 2009:	
Per share distribution:	
From net investment income	\$0.08
From realized capital gains	
Tax return of capital	\$0.46
Total per share distribution	\$0.54
Distribution rate on NAV	4.75%
Annualized total returns:	
Six month (Cumulative) on NAV	1.82%
1-Year on NAV	-22.81%
Since Inception on NAV	-12.54%

Common Share Repurchases and Share Price Information

The Fund's Board of Trustees approved an open-market share repurchase program on November 21, 2007, under which the Fund may repurchase an aggregate of up to 10% of its outstanding common shares. As of June 30, 2009, the Fund had cumulatively repurchased 251,300 common shares, representing approximately 1.6% of the Fund's total common shares outstanding. During the six month reporting period, June 30, 2009, common shares were repurchased at a weighted average discount per share of 17.87% and at a weighted average purchase price per share of \$8.91.

As of June 30, 2009, the Fund was trading at a -14.59% discount to its NAV, compared with an average discount of -16.58% for the six-month period.

JCE
Performance
OVERVIEW

Nuveen Core Equity Alpha Fund

June 30, 2009

Fund Snapshot

Share Price	\$9.72
Net Asset Value	\$11.38
Premium/(Discount) to NAV	-14.59%
Current Distribution Rate ¹	11.11%
Net Assets (\$000)	\$184,350

Average Annual Total Return
(Inception 3/27/07)

	On Share Price	On NAV
6-month (Cumulative)	7.19%	1.82%
1-Year	-24.03%	-22.81%
Since Inception	-18.99%	-12.54%

Industries

(as a % of total investments)²

Oil, Gas & Consumable Fuels	10.2%
Pharmaceuticals	7.0%
Food Products	5.0%
Diversified Telecommunication Services	4.7%
Computers & Peripherals	4.2%
Household Products	3.5%
Food & Staples Retailing	3.3%
Insurance	3.2%

Road & Rail	2.6%
Software	2.6%
Beverages	2.4%
Semiconductors & Equipment	2.4%
Media	2.3%
Industrial Conglomerates	2.3%
Health Care Providers & Services	2.3%
Communications Equipment	2.2%
Multi-Utilities	2.1%
Commercial Banks	2.0%
Diversified Financial Services	2.0%
Biotechnology	2.0%
IT Services	1.7%
Hotels, Restaurants & Leisure	1.7%
Specialty Retail	1.7%
Capital Markets	1.7%
Short-Term Investments	5.7%
Other	19.2%

Portfolio Allocation (as a % of total investments)²

2008-2009 Distributions Per Share

Share Price Performance Weekly Closing Price

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

2 Excluding call options written and investments in derivatives.

8 Nuveen Investments

Shareholder Meeting Report

The annual meeting of shareholders was held in the offices of Nuveen Investments on May 6, 2009; at this meeting the shareholders were asked to vote on the election of Board Members.

	JCE Common Shares
Approval of the Board Members was reached as follows:	
Robert P. Bremner	
For	11,956,545
Withhold	1,079,459
Total	13,036,004
Jack B. Evans	
For	11,954,219
Withhold	1,081,785
Total	13,036,004
William J. Schneider	
For	11,957,194
Withhold	1,078,810
Total	13,036,004

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

JCE Nuveen Core Equity Alpha Fund
Portfolio of INVESTMENTS

June 30, 2009 (Unaudited)

Shares	Description (1)	Value
	Common Stocks 96.5%	
	Aerospace & Defense 1.1%	
1,500	Boeing Company	\$ 63,750
1,700	General Dynamics Corporation	94,163
1,700	Goodrich Corporation	84,949
8,100	ITT Industries, Inc.	360,450
13,900	Lockheed Martin Corporation	1,121,035
200	Precision Castparts Corporation	14,606
5,300	United Technologies Corporation	275,388
	Total Aerospace & Defense	2,014,341
	Air Freight & Logistics 0.2%	
3,500	C.H. Robinson Worldwide, Inc.	182,525
1,100	Expeditors International of Washington, Inc.	36,674
1,100	FedEx Corporation	61,182
900	United Parcel Service, Inc., Class B	44,991
	Total Air Freight & Logistics	325,372
	Airlines 0.3%	
78,500	Southwest Airlines Co.	528,305
	Auto Components 0.1%	
4,800	Goodyear Tire & Rubber Company, (2)	54,048
4,300	Johnson Controls, Inc.	93,396
	Total Auto Components	147,444
	Automobiles 0.3%	
37,200	Ford Motor Company, (2)	225,804

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

15,400	Harley-Davidson, Inc.	249,634
	Total Automobiles	475,438
	Beverages 2.5%	
12,600	Brown-Forman Corporation	541,548
33,700	Coca-Cola Company	1,617,263
2,900	Coca-Cola Enterprises Inc.	48,285
25,300	Constellation Brands, Inc., Class A, (2)	320,804
4,100	Dr. Pepper Snapple Group, (2)	86,879
3,000	Pepsi Bottling Group, Inc.	101,520
33,100	PepsiCo, Inc.	1,819,176
	Total Beverages	4,535,475
	Biotechnology 2.0%	
36,700	Amgen Inc., (2)	1,942,898
20,200	Celgene Corporation, (2)	966,368
9,800	Cephalon, Inc., (2)	555,170
2,400	Genzyme Corporation, (2)	133,608
2,900	Gilead Sciences, Inc., (2)	135,836
	Total Biotechnology	3,733,880
	Building Products 0.0%	
8,400	Masco Corporation	80,472
	Capital Markets 1.7%	
7,500	Ameriprise Financial, Inc.	182,025
10,600	Bank of New York Company, Inc.	310,686
24,300	Charles Schwab Corporation	426,222
3,700	Federated Investors Inc.	89,133
3,800	Franklin Resources, Inc.	273,638
2,400	Goldman Sachs Group, Inc.	353,856
6,400	Invesco LTD	114,048
5,000	Legg Mason, Inc.	121,900
17,200	Morgan Stanley	490,372
6,500	Northern Trust Corporation	348,920

Shares	Description (1)	Value
Capital Markets (continued)		
4,300	State Street Corporation	\$ 202,960
5,900	T. Rowe Price Group Inc.	245,853
	Total Capital Markets	3,159,613
Chemicals 1.0%		
600	CF Industries Holdings, Inc.	44,484
6,300	E.I. Du Pont de Nemours and Company	161,406
7,700	Ecolab Inc.	300,223
3,800	International Flavors & Fragrances Inc.	124,336
900	Monsanto Company	66,906
22,000	PPG Industries, Inc.	965,800
1,500	Praxair, Inc.	106,605
800	Sigma-Aldrich Corporation	39,648
	Total Chemicals	1,809,408
Commercial Banks 2.1%		
28,300	BB&T Corporation	622,034
3,300	Comerica Incorporated	69,795
17,400	Fifth Third Bancorp.	123,540
12,096	First Horizon National Corporation, (2)	145,151
9,600	Huntington BancShares Inc.	40,128
24,700	KeyCorp.	129,428
5,000	M&T Bank Corporation	254,650
29,700	Marshall and Ilsley Corporation	142,560
12,600	PNC Financial Services Group, Inc.	489,006
2,200	SunTrust Banks, Inc.	36,190
22,100	U.S. Bancorp	396,032
51,350	Wells Fargo & Company	1,245,751
8,500	Zions Bancorporation	98,260
	Total Commercial Banks	3,792,525
Commercial Services & Supplies 1.4%		
14,200	Cintas Corporation	324,328
2,400	Iron Mountain Inc., (2)	69,000
8,600	Pitney Bowes Inc.	188,598
8,335	Republic Services, Inc.	203,457
3,900	Stericycle Inc., (2)	200,967

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

57,700	Waste Management, Inc.	1,624,832
	Total Commercial Services & Supplies	2,611,182
	Communications Equipment 2.2%	
8,700	Ciena Corporation, (2)	90,045
108,900	Cisco Systems, Inc., (2)	2,029,896
21,900	JDS Uniphase Corporation, (2)	125,268
6,300	Juniper Networks Inc., (2)	148,680
38,300	Motorola, Inc.	253,929
30,500	QUALCOMM, Inc.	1,378,600
12,000	Tellabs Inc., (2)	68,760
	Total Communications Equipment	4,095,178
	Computers & Peripherals 4.2%	
10,900	Apple, Inc., (2)	1,552,487
27,600	Dell Inc., (2)	378,948
11,300	EMC Corporation, (2)	148,030
60,000	Hewlett-Packard Company	2,319,000
27,700	International Business Machines Corporation (IBM)	2,892,434
3,700	Lexmark International, Inc., Class A, (2)	58,645
3,500	Network Appliance Inc., (2)	69,020
1,100	QLogic Corporation, (2)	13,948
13,600	SanDisk Corporation, (2)	199,784
22,400	Sun Microsystems Inc., (2)	206,528
	Total Computers & Peripherals	7,838,824

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

JCE Nuveen Core Equity Alpha Fund (continued)
Portfolio of INVESTMENTS June 30, 2009 (Unaudited)

Shares	Description (1)	Value
	Construction & Engineering 0.4%	
11,600	Fluor Corporation	\$ 594,964
2,700	Jacobs Engineering Group, Inc., (2)	113,643
	Total Construction & Engineering	708,607
	Construction Materials 0.2%	
7,600	Vulcan Materials Company	327,560
	Consumer Finance 0.7%	
7,300	American Express Company	169,652
15,100	Capital One Financial Corporation	330,388
44,300	Discover Financial Services	454,961
29,800	SLM Corporation, (2)	306,046
	Total Consumer Finance	1,261,047
	Containers & Packaging 0.3%	
3,800	Ball Corporation	171,608
12,800	Bemis Company, Inc.	322,560
1,500	Owens-Illinois, Inc., (2)	42,015
3,200	Pactiv Corporation, (2)	69,440
	Total Containers & Packaging	605,623
	Distributors 0.3%	
15,900	Genuine Parts Company	533,604
	Diversified Consumer Services 0.5%	
800	Apollo Group, Inc., (2)	56,896
1,300	Devry, Inc.	65,052
45,900	H & R Block Inc.	790,857
	Total Diversified Consumer Services	912,805

Diversified Financial Services 2.1%

75,300	Bank of America Corporation	993,960
12,600	CIT Group Inc.	27,090
34,600	Citigroup Inc.	102,762
1,000	CME Group, Inc.	311,110
2,000	Intercontinental Exchange, Inc., (2)	228,480
31,705	JPMorgan Chase & Co.	1,081,458
8,800	Leucadia National Corporation, (2)	185,592
16,200	Moody's Corporation	426,870
8,800	Nasdaq Stock Market, Inc., (2)	187,528
8,600	New York Stock Exchange Euronext	234,350
	Total Diversified Financial Services	3,779,200

Diversified Telecommunication Services 4.8%

226,800	AT&T Inc.	5,633,712
11,200	CenturyTel, Inc.	343,840
14,400	Embarq Corporation	605,664
42,500	Frontier Communications Corporation	303,450
52,500	Qwest Communications International Inc.	217,875
53,000	Verizon Communications Inc.	1,628,690
10,000	Windstream Corporation	83,600
	Total Diversified Telecommunication Services	8,816,831

Electric Utilities 1.5%

6,000	Duke Energy Corporation	87,540
2,300	Entergy Corporation	178,296
4,800	FirstEnergy Corp.	186,000
400	FPL Group, Inc.	22,744
8,300	Northeast Utilities	185,173
14,500	Pinnacle West Capital Corporation	437,175
12,400	PPL Corporation	408,704
16,600	Progress Energy, Inc.	627,978
19,500	Southern Company	607,620
	Total Electric Utilities	2,741,230

Shares	Description (1)	Value
	Electrical Equipment 0.3%	
15,500	Cooper Industries, Ltd., Class A	\$ 481,275
4,300	Rockwell Automation, Inc.	138,116
	Total Electrical Equipment	619,391
	Electronic Equipment & Instruments 0.3%	
2,500	Agilent Technologies, Inc., (2)	50,775
1,800	Amphenol Corporation, Class A	56,952
3,000	Corning Incorporated	48,180
20,600	Jabil Circuit Inc.	152,852
11,900	Molex Inc.	185,045
	Total Electronic Equipment & Instruments	493,804
	Energy Equipment & Services 1.7%	
11,200	Baker Hughes Incorporated	408,128
9,000	BJ Services Company	122,670
3,300	Cooper Cameron Corporation, (2)	93,390
600	Diamond Offshore Drilling, Inc.	49,830
2,200	ENSCO International Incorporated	76,714
3,000	FMC Technologies Inc., (2)	112,740
4,000	Halliburton Company	82,800
7,200	Nabors Industries Inc., (2)	112,176
17,000	National-Oilwell Varco Inc., (2)	555,220
1,700	Rowan Companies Inc.	32,844
23,000	Schlumberger Limited	1,244,530
10,300	Smith International, Inc.	265,225
	Total Energy Equipment & Services	3,156,267
	Food & Staples Retailing 3.3%	
9,900	CVS Caremark Corporation	315,513
78,500	Kroger Co.	1,730,925
33,300	Sysco Corporation	748,584
7,500	Walgreen Co.	220,500
63,900	Wal-Mart Stores, Inc.	3,095,316
1,900	Whole Foods Market, Inc.	36,062
	Total Food & Staples Retailing	6,146,900

Food Products 5.1%

1,400	Archer-Daniels-Midland Company	37,478
27,700	Campbell Soup Company	814,934
3,600	Dean Foods Company, (2)	69,084
35,000	General Mills, Inc.	1,960,700
36,000	H.J. Heinz Company	1,285,200
24,200	Hershey Foods Corporation	871,200
14,000	JM Smucker Company	681,240
32,800	Kellogg Company	1,527,496
65,300	Kraft Foods Inc.	1,654,702
4,700	McCormick & Company, Incorporated	152,891
20,300	Sara Lee Corporation	198,128
9,700	Tyson Foods, Inc., Class A	122,317
	Total Food Products	9,375,370

Gas Utilities 0.1%

5,700	Nicor Inc.	197,334
1,200	Questar Corporation	37,272
	Total Gas Utilities	234,606

Health Care Equipment & Supplies 1.2%

27,200	Baxter International, Inc.	1,440,512
5,000	Boston Scientific Corporation, (2)	50,700
6,300	DENTSPLY International Inc.	192,276
200	Intuitive Surgical, Inc., (2)	32,732
3,000	Medtronic, Inc.	104,670
5,400	Stryker Corporation	214,596
4,800	Varian Medical Systems, Inc., (2)	168,672
	Total Health Care Equipment & Supplies	2,204,158

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

JCE Nuveen Core Equity Alpha Fund (continued)
Portfolio of INVESTMENTS June 30, 2009 (Unaudited)

Shares	Description (1)		Value
	Health Care Providers & Services	2.4%	
1,500	Aetna Inc.		\$ 37,575
1,900	Cardinal Health, Inc.		58,045
5,800	CIGNA Corporation		139,722
2,100	Coventry Health Care, Inc., (2)		39,291
14,300	Davita Inc., (2)		707,278
2,900	Express Scripts, Inc., (2)		199,375
7,300	Humana Inc., (2)		235,498
21,300	Medco Health Solutions, Inc., (2)		971,493
20,700	Quest Diagnostics Incorporated		1,168,101
10,700	UnitedHealth Group Incorporated		267,286
10,300	Wellpoint Inc., (2)		524,167
	Total Health Care Providers & Services		4,347,831
	Health Care Technology	0.1%	
20,700	IMS Health Incorporated		262,890
	Hotels, Restaurants & Leisure	1.7%	
2,800	Carnival Corporation		72,156
10,500	Darden Restaurants, Inc.		346,290
4,900	International Game Technology		77,910
1,706	Marriott International, Inc., Class A		37,657
35,900	McDonald's Corporation		2,063,891
19,500	Starbucks Corporation, (2)		270,855
14,900	Wyndham Worldwide Corporation		180,588
4,100	Wynn Resorts Ltd, (2)		144,730
	Total Hotels, Restaurants & Leisure		3,194,077
	Household Durables	0.7%	
2,500	Black & Decker Corporation		71,650
16,300	Centex Corporation		137,898
5,100	D.R. Horton, Inc.		47,736
4,800	Harman International Industries Inc.		90,240
5,200	KB Home		71,136

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

23,100	Leggett and Platt Inc.	351,813
18,800	Lennar Corporation, Class A	182,172
3,600	Newell Rubbermaid Inc.	37,476
12,400	Pulte Corporation, (2)	109,492
1,600	Snap-on Incorporated	45,984
3,100	Stanley Works	104,904
1,100	Whirlpool Corporation	46,816

Total Household Durables 1,297,317

Household Products 3.6%

15,000	Clorox Company	837,450
10,300	Colgate-Palmolive Company	728,622
12,300	Kimberly-Clark Corporation	644,889
87,100	Procter & Gamble Company	4,450,810

Total Household Products 6,661,771

Independent Power Producers & Energy Traders 0.0%

4,600	AES Corporation, (2)	53,406
-------	----------------------	--------

Industrial Conglomerates 2.4%

11,000	3M Co.	661,100
310,600	General Electric Company	3,640,232
6,700	Textron Inc.	64,722

Total Industrial Conglomerates 4,366,054

Insurance 3.3%

5,100	AFLAC Incorporated	158,559
4,700	Allstate Corporation	114,680
9,400	Chubb Corporation	374,872
11,600	Cincinnati Financial Corporation	259,260
30,700	Hartford Financial Services Group, Inc.	364,409
22,500	Lincoln National Corporation	387,225
44,500	Loews Corporation	1,219,300
33,800	Marsh & McLennan Companies, Inc.	680,394
23,000	MBIA Inc., (2)	99,590

Shares	Description (1)	Value
	Insurance (continued)	
16,400	MetLife, Inc.	\$ 492,164
10,500	Principal Financial Group, Inc.	197,820
30,000	Progressive Corporation, (2)	453,300
12,700	Prudential Financial, Inc.	472,694
4,700	Torchmark Corporation	174,088
3,000	Travelers Companies, Inc.	123,120
14,400	Unum Group	228,384
23,000	XL Capital Ltd, Class A	263,580
	Total Insurance	6,063,439
	Internet & Catalog Retail 0.4%	
8,200	Amazon.com, Inc.,	686,012
2,600	Expedia, Inc., (2)	39,286
	Total Internet & Catalog Retail	725,298
	Internet Software & Services 0.2%	
5,600	Akamai Technologies, Inc., (2)	107,408
800	Google Inc., Class A, (2)	337,272
	Total Internet Software & Services	444,680
	IT Services 1.8%	
6,700	Affiliated Computer Services, Inc., (2)	297,614
42,700	Automatic Data Processing, Inc.	1,513,288
6,500	Cognizant Technology Solutions Corporation, Class A, (2)	173,550
14,600	Computer Sciences Corporation, (2)	646,780
2,000	Fidelity National Information Services	39,920
18,200	Paychex, Inc.	458,640
9,600	Western Union Company	157,440
	Total IT Services	3,287,232
	Leisure Equipment & Products 0.1%	
5,600	Hasbro, Inc.	135,744
	Life Sciences Tools & Services 0.1%	

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

5,600	Thermo Fisher Scientific, Inc., (2)	228,312
	Machinery 1.4%	
20,900	Caterpillar Inc.	690,536
17,200	Cummins Inc.	605,612
1,900	Deere & Company	75,905
20,800	Dover Corporation	688,272
900	Flowserve Corporation	62,829
9,700	Illinois Tool Works, Inc.	362,198
161	Ingersoll Rand Company Limited, Class A	3,365
5,500	Manitowoc Company Inc.	28,930
200	PACCAR Inc.	6,502
200	Pall Corporation	5,312
	Total Machinery	2,529,461
	Media 2.4%	
5,500	CBS Corporation, Class B	38,060
175,800	Comcast Corporation, Class A	2,547,342
17,600	DIRECTV Group, Inc., (2)	434,896
13,200	McGraw-Hill Companies, Inc.	397,452
1,300	Meredith Corporation	33,215
4,800	News Corporation, Class A	43,728
2,866	Time Warner Inc.	72,195
1,600	Viacom Inc., Class B, (2)	36,320
35,500	Walt Disney Company	828,215
	Total Media	4,431,423
	Metals & Mining 0.4%	
1,900	AK Steel Holding Corporation	36,461
2,200	Allegheny Technologies, Inc.	76,846
5,100	Freeport-McMoRan Copper & Gold, Inc.	255,561

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

JCE Nuveen Core Equity Alpha Fund (continued)
Portfolio of INVESTMENTS June 30, 2009 (Unaudited)

Shares	Description (1)	Value
	Metals & Mining (continued)	
1,000	Nucor Corporation	\$ 44,430
6,700	United States Steel Corporation	239,458
	Total Metals & Mining	652,756
	Multiline Retail 0.9%	
700	Big Lots, Inc., (2)	14,721
14,100	Family Dollar Stores, Inc.	399,030
2,900	Federated Department Stores, Inc.	34,104
2,700	J.C. Penney Company, Inc.	77,517
21,600	Kohl's Corporation, (2)	923,400
2,100	Nordstrom, Inc.	41,769
1,000	Sears Holding Corporation, (2)	66,520
2,600	Target Corporation	102,622
	Total Multiline Retail	1,659,683
	Multi-Utilities 2.2%	
19,600	Ameren Corporation	487,844
35,200	Consolidated Edison, Inc.	1,317,184
1,400	Dominion Resources, Inc.	46,788
19,700	DTE Energy Company	630,400
7,200	Integrus Energy Group, Inc.	215,928
20,000	PG&E Corporation	768,800
700	Public Service Enterprise Group Incorporated	22,841
7,000	Scana Corporation	227,290
9,000	TECO Energy, Inc.	107,370
2,500	Wisconsin Energy Corporation	101,775
4,000	Xcel Energy, Inc.	73,640
	Total Multi-Utilities	3,999,860
	Oil, Gas & Consumable Fuels 10.4%	
1,700	Anadarko Petroleum Corporation	77,163
100	Apache Corporation	7,215

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

3,100	Cabot Oil & Gas Corporation	94,984
13,200	Chesapeake Energy Corporation	261,756
51,600	Chevron Corporation	3,418,500
36,800	ConocoPhillips	1,547,808
8,900	CONSOL Energy Inc.	302,244
23,200	Denbury Resources Inc., (2)	341,736
1,800	Devon Energy Corporation	98,100
6,700	El Paso Corporation	61,841
139,400	Exxon Mobil Corporation	9,745,454
900	Hess Corporation	48,375
9,400	Marathon Oil Corporation	283,222
11,200	Massey Energy Company	218,848
14,000	Occidental Petroleum Corporation	921,340
13,200	Peabody Energy Corporation	398,112
8,400	Pioneer Natural Resources Company	214,200
800	Range Resources Corporation	33,128
6,700	Southwestern Energy Company, (2)	260,295
34,400	Spectra Energy Corporation	582,048
1,700	Sunoco, Inc.	39,440
13,200	Tesoro Corporation	168,036
4,100	Valero Energy Corporation	69,249
2,400	Williams Companies, Inc.	37,464
800	XTO Energy, Inc.	30,512
	Total Oil, Gas & Consumable Fuels	19,261,070
	Paper & Forest Products 0.0%	
2,800	International Paper Company	42,364
	Personal Products 0.0%	
2,200	Estee Lauder Companies Inc., Class A	71,874
	Pharmaceuticals 7.2%	
41,100	Abbott Laboratories	1,933,344
2,100	Allergan, Inc.	99,918
80,800	Bristol-Myers Squibb Company	1,641,048
2,200	Eli Lilly and Company	76,208

Shares	Description (1)	Value
	Pharmaceuticals (continued)	
79,000	Johnson & Johnson	\$ 4,487,200
23,700	King Pharmaceuticals Inc., (2)	228,231
58,300	Merck & Co. Inc.	1,630,068
6,200	Mylan Laboratories Inc., (2)	80,910
91,000	Pfizer Inc.	1,365,000
48,100	Schering-Plough Corporation	1,208,272
11,900	Wyeth	540,141
	Total Pharmaceuticals	13,290,340
	Professional Services 0.3%	
5,300	Dun and Bradstreet Inc.	430,413
4,000	Robert Half International Inc.	94,480
	Total Professional Services	524,893
	Real Estate 0.9%	
1,022	AvalonBay Communities, Inc.	57,171
2,500	Boston Properties, Inc.	119,250
9,500	Equity Residential	211,185
12,600	Health Care Property Investors Inc.	266,994
900	Health Care REIT, Inc.	30,690
16,600	Host Hotels & Resorts Inc.	139,274
2,700	Plum Creek Timber Company	80,406
4,500	ProLogis	36,270
6,500	Public Storage, Inc.	425,620
1,712	Simon Property Group, Inc.	88,048
1,100	Ventas Inc.	32,846
3,671	Vornado Realty Trust	165,305
	Total Real Estate	1,653,059
	Real Estate Management & Development 0.1%	
19,400	CB Richard Ellis Group, Inc., Class A, (2)	181,584
	Road & Rail 2.7%	
13,800	Burlington Northern Santa Fe Corporation	1,014,852
31,000	CSX Corporation	1,073,530
43,300	Norfolk Southern Corporation	1,631,111

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

22,600	Union Pacific Corporation	1,176,556
	Total Road & Rail	4,896,049
	Semiconductors & Equipment 2.4%	
52,500	Advanced Micro Devices, Inc., (2)	203,175
40,600	Altera Corporation	660,968
5,400	Analog Devices, Inc.	133,812
21,600	Broadcom Corporation, Class A, (2)	535,464
48,600	Intel Corporation	804,330
1,500	KLA-Tencor Corporation	37,875
22,800	Linear Technology Corporation	532,380
5,200	MEMC Electronic Materials, (2)	92,612
4,100	Microchip Technology Incorporated	92,455
44,600	Micron Technology, Inc., (2)	225,676
19,500	National Semiconductor Corporation	244,725
4,500	Novellus Systems, Inc., (2)	75,150
32,100	NVIDIA Corporation, (2)	362,409
24,800	Xilinx, Inc.	507,408
	Total Semiconductors & Equipment	4,508,439
	Software 2.6%	
7,300	Adobe Systems Incorporated, (2)	206,590
1,900	Autodesk, Inc., (2)	36,062
1,200	Citrix Systems, (2)	38,268
15,400	Compuware Corporation, (2)	105,644
22,700	Intuit, Inc., (2)	639,232
2,700	McAfee Inc., (2)	113,913
39,200	Microsoft Corporation	931,784
99,100	Oracle Corporation	2,122,722
43,900	Symantec Corporation, (2)	683,084
	Total Software	4,877,299

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

JCE Nuveen Core Equity Alpha Fund (continued)
Portfolio of INVESTMENTS June 30, 2009 (Unaudited)

Shares	Description (1)	Value
	Specialty Retail 1.7%	
2,600	AutoNation Inc., (2)	\$ 45,110
500	AutoZone, Inc., (2)	75,555
1,900	Bed Bath and Beyond Inc., (2)	58,425
1,700	GameStop Corporation, (2)	37,417
2,100	Gap, Inc.	34,440
25,600	Home Depot, Inc.	604,928
26,800	Limited Brands, Inc.	320,796
18,000	Lowe's Companies, Inc.	349,380
18,700	Office Depot, Inc., (2)	85,272
7,800	O'Reilly Automotive Inc., (2)	297,024
11,300	RadioShack Corporation	157,748
9,900	Sherwin-Williams Company	532,125
17,000	Staples, Inc.	342,890
1,300	Tiffany & Co.	32,968
6,000	TJX Companies, Inc.	188,760
	Total Specialty Retail	3,162,838
	Textiles, Apparel & Luxury Goods 0.5%	
2,200	Coach, Inc.	59,136
2,200	Nike, Inc., Class B	113,916
4,900	Polo Ralph Lauren Corporation	262,346
9,000	VF Corporation	498,150
	Total Textiles, Apparel & Luxury Goods	933,548
	Thriffs & Mortgage Finance 0.4%	
40,500	Hudson City Bancorp, Inc.	538,245
10,000	People's United Financial, Inc.	150,400
	Total Thriffs & Mortgage Finance	688,645
	Tobacco 0.5%	
2,100	Altria Group, Inc.	34,419
800	Lorillard Inc.	54,216
16,100	Philip Morris International	702,282
3,000	Reynolds American Inc.	115,860

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

	Total Tobacco					906,777
	Trading Companies & Distributors	0.7%				
17,900	Fastenal Company					593,743
8,800	W.W. Grainger, Inc.					720,544
	Total Trading Companies & Distributors					1,314,287
	Wireless Telecommunication Services	0.1%				
5,800	Metropcs Communications Inc., (2)					77,198
31,200	Sprint Nextel Corporation, (2)					150,072
	Total Wireless Telecommunication Services					227,270
	Total Common Stocks (cost \$180,442,444)					177,946,030
Principal Amount	Description (1)	Coupon	Maturity	Rating (3)		Value
(000)	Short-Term Investments	5.8%				
	U.S. Government and Agency Obligations	4.3%				
\$ 5,000	U.S. Treasury Bills	0.000%	7/30/09	AAA	\$	4,999,315
3,000	U.S. Treasury Bills (4)	0.000%	8/27/09	AAA		2,999,373
8,000	Total U.S. Government and Agency Obligations					7,998,688
	Repurchase Agreements	1.5%				
2,691	Repurchase Agreement with State Street Bank, dated 6/30/09, repurchase price \$2,690,790, collateralized by \$2,750,000 U.S. Treasury Bills, 0.000%, due 12/10/09, value \$2,746,150	0.000%	7/01/09	N/A		2,690,790
\$ 10,691	Total Short-Term Investments (cost \$10,688,933)					10,689,478
	Total Investments (cost \$191,131,377)	102.3%				188,635,508

Number of Contracts	Type	Notional Amount (5)	Expiration Date	Strike Price	Value
	Call Options	(0.3)%			
(407,533)	Custom Basket 1 NASDAQ	\$ (40,753,283)	7/16/09	\$ 105.0	\$ (212,976)
(413,421)	Custom Basket 2 NASDAQ	(41,342,096)	8/06/09	105.0	(353,930)
(820,954)	Total Call Options Written (premiums received \$1,012,494)	(82,095,379)			(566,906)
	Other Assets Less Liabilities	(2.0)%			(3,718,224)
	Net Assets	100%			\$ 184,350,378

Investments in Derivatives

Futures Contracts outstanding at June 30, 2009:

Type	Contract Position	Number of Contracts	Contract Expiration	Value at June 30, 2009	Unrealized Appreciation (Depreciation)
S&P 500 Index	Long	125	9/09	\$ 5,721,875	\$ 146,500

- (1) All percentages shown in the Portfolio of Investments are based on net assets.
 - (2) Non-income producing; issuer has not declared a dividend within the past twelve months.
 - (3) Ratings: Using the higher of Standard & Poor's Group (Standard & Poor's) or Moody's Investor Service, Inc. (Moody's) rating. Rating below BBB by Standard & Poor's or Baa by Moody's are considered to be below investment grade.
 - (4) Investment, or portion of investment, has been pledged to collateralize the net payment obligations for investments in derivatives.
 - (5) For disclosure purposes, Notional Amount is calculated by multiplying the Number of Contracts by \$100.
- N/A Not applicable.

See accompanying notes to financial statements.

Statement of
ASSETS & LIABILITIES

June 30, 2009 (Unaudited)

Assets

Investments, at value (cost \$191,131,377)	\$ 188,635,508
Receivables:	
Dividends	293,691
Investments sold	1,629,312
Reclaims	930
Other assets	9,417
Total assets	190,568,858

Liabilities

Cash overdraft	31,669
Call options written, at value (premiums received \$1,012,494)	566,906
Payables:	
Dividends	3,464,150
Investments purchased	1,816,597
Fund shares repurchased	69,516
Variation margin on futures contracts	35,625
Accrued expenses:	
Management fees	144,808
Other	89,209
Total liabilities	6,218,480
Net assets	\$ 184,350,378
Shares outstanding	16,192,686
Net asset value per share outstanding	\$ 11.38

Net assets consist of:

Shares, \$.01 par value per share	\$ 161,927
Paid-in surplus	270,272,376
Undistributed (Over-distribution of) net investment income	(7,535,869)
Accumulated net realized gain (loss) from investments, foreign currency and derivative transactions	(76,644,275)
Net unrealized appreciation (depreciation) of investments and derivative transactions	(1,903,781)
Net assets	\$ 184,350,378

Authorized shares

Unlimited

See accompanying notes to financial statements.

20 Nuveen Investments

Statement of
OPERATIONSSix Months Ended June 30, 2009
(Unaudited)**Investment Income**

Dividends	\$ 2,240,144
Interest	12,809
Total investment income	2,252,953

Expenses

Management fees	833,878
Shareholders' servicing agent fees and expenses	151
Custodian's fees and expenses	84,913
Trustees' fees and expenses	3,276
Professional fees	19,534
Shareholders' reports' printing and mailing expenses	31,071
Stock exchange listing fees	4,572
Investor relations expense	15,604
Other expenses	16,534
Total expenses before custodian fee credit	1,009,533
Custodian fee credit	(12)
Net expenses	1,009,521
Net investment income	1,243,432

Realized and Unrealized Gain (Loss)

Net realized gain (loss) from:	
Investments and foreign currency	(40,972,911)
Call options written	(237,769)
Futures contracts	328,725
Change in net unrealized appreciation (depreciation) of:	
Investments	42,167,436
Call options written	234,696
Futures contracts	35,575
Net realized and unrealized gain (loss)	1,555,752
Net increase (decrease) in net assets from operations	\$ 2,799,184

See accompanying notes to financial statements.

Statement of
CHANGES IN NET ASSETS

(Unaudited)

	Six Months Ended 6/30/09	Year Ended 12/31/08
Operations		
Net investment income	\$ 1,243,432	\$ 2,664,191
Net realized gain (loss) from:		
Investments and foreign currency	(40,972,911)	(55,623,396)
Call options written	(237,769)	25,413,109
Futures contracts	328,725	(5,099,570)
Change in net unrealized appreciation (depreciation) of:		
Investments	42,167,436	(55,356,228)
Call options written	234,696	(3,236,572)
Futures contracts	35,575	507,899
Net increase (decrease) in net assets from operations	2,799,184	(90,730,567)
Distributions to Shareholders		
From and in excess of net investment income	(8,774,236)	
From net investment income		(2,546,797)
Tax return of capital		(21,944,111)
Decrease in net assets from distributions to shareholders	(8,774,236)	(24,490,908)
Capital Share Transactions		
Offering costs adjustments	4,600	(6,968)
Cost of shares repurchased	(858,995)	(1,469,116)
Net increase (decrease) in net assets from capital share transactions	(854,395)	(1,476,084)
Net increase (decrease) in net assets	(6,829,447)	(116,697,559)
Net assets at the beginning of period	191,179,825	307,877,384
Net assets at the end of period	\$ 184,350,378	\$ 191,179,825
Undistributed (Over-distribution of) net investment income at the end of period	\$ (7,535,869)	\$ (5,065)

See accompanying notes to financial statements.

22 Nuveen Investments

Notes to
FINANCIAL STATEMENTS (Unaudited)

1. General Information and Significant Accounting Policies

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

The Fund seeks 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 by employing a proprietary mathematical process designed by the Fund's sub-adviser, INTECH, that seeks to provide, over time, risk-adjusted excess returns above the S&P 500 Index with an equal or lesser amount of relative investment risk.

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.

Investment Valuation

Exchange-listed securities are generally valued at the last sales price on the securities exchange on which such securities are primarily traded. Securities traded on a securities exchange for which there are no transactions on a given day or securities not listed on a securities exchange are valued at the mean of the closing bid and asked prices. Securities traded on NASDAQ are valued at the NASDAQ Official Closing Price. Exchange traded options are valued on last price or average of the bid/ask if no trades occurred. OTC option values are modeled using market implied volatilities. Futures contracts are valued using the closing settlement price, or, in the absence of such a price, at the mean of the bid and asked prices. When market price quotes are not readily available, the pricing service or, in the absence of a pricing service for a particular investment or derivative instrument, the Board of Trustees of the Fund or its designee, may establish fair value using a wide variety of market data including 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. Short-term investments are valued at amortized cost, which approximates value.

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.

Investment Income

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

Income Taxes

The Fund intends to comply with the requirements of Subchapter M of the Internal Revenue Code applicable to regulated investment companies. The Fund intends to distribute substantially all of its investment company taxable income to shareholders. 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. The fund had no retained capital gains for the tax year ended December 31, 2008.

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

Dividends and Distributions to Shareholders

Distributions to shareholders are recorded on the ex-dividend date. The amount and timing of distributions are determined in accordance with federal income tax regulations, which may differ from accounting principles generally accepted in the United States.

Notes to
FINANCIAL STATEMENTS (continued) (Unaudited)

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

The actual character of distributions made by the Fund during the fiscal year ended December 31, 2008, is reflected in the accompanying financial statements.

The distributions made by the Fund during the six months ended June 30, 2009, are provisionally classified as being From and in excess of net investment income, and those distributions will be classified as being from net investment income, net realized capital gains and/or a return of capital for tax purposes after the fiscal year end. For purposes of calculating Undistributed (Over-distribution of) net investment income as of June 30, 2009, the distribution amounts provisionally classified as From and in excess of net investment income were treated as being entirely from net investment income. Consequently, the financial statements at June 30, 2009, reflect an over-distribution of net investment income.

Foreign Currency Transactions

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

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

The realized gains or losses resulting from changes in foreign exchange rates if any, are included in Net realized gain (loss) from investments and foreign currency on the Statement of Operations.

Futures Contracts

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

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

Risks of investments in futures contracts include the possible adverse movement 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.

The average number of futures contracts outstanding during the six months ended June 30, 2009, was 142. Refer to Footnote 3 Derivative Instruments and Hedging Activities for further details on futures contract activity.

Options Transactions

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

The average notional balance on call options written during the six months ended June 30, 2009, was \$(302,712,612). Refer to Footnote 3 Derivative Instruments and Hedging Activities for further details on call options written.

Market and Counterparty Credit Risk

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

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

Repurchase Agreements

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

Custodian Fee Credit

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

Indemnifications

Under the Fund's organizational documents, its Officers and Trustees are indemnified against certain liabilities arising out of the performance of their duties to the Fund. In addition, in the normal course of business, the Fund enters into contracts that provide general indemnifications to other parties. The Fund's maximum exposure under these arrangements is unknown as this would involve future claims that may be made against the Fund that have not yet occurred. However, the Fund has not had prior claims or losses pursuant to these contracts and expects the risk of loss to be remote.

Use of Estimates

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

Notes to
FINANCIAL STATEMENTS (continued) (Unaudited)

2. Fair Value Measurements

In determining the value of the Fund's investments various inputs are used. These inputs are summarized in the three broad levels listed below:

- Level 1 Quoted prices in active markets for identical securities.
 Level 2 Other significant observable inputs (including quoted prices for similar securities, interest rates, prepayment speeds, credit risk, etc.).
 Level 3 Significant unobservable inputs (including management's assumptions in determining the fair value of investments).

The inputs or methodology used for valuing securities are not an indication of the risk associated with investing in those securities. The following is a summary of the Fund's fair value measurements as of June 30, 2009:

	Level 1	Level 2	Level 3	Total
Investments:				
Common Stocks	\$ 177,946,030	\$	\$	\$ 177,946,030
Short-Term Investments	10,689,478			10,689,478
Call Options Written		(566,906)		(566,906)
Derivatives:				
Futures Contracts *	146,500			146,500
Total	\$ 188,782,008	\$ (566,906)	\$	\$ 188,215,102

* Represents net unrealized appreciation (depreciation).

3. Derivative Instruments and Hedging Activities

During the current fiscal period, the Fund adopted the provisions of Statement of Financial Accounting Standards No. 161 (SFAS No. 161) Disclosures about Derivative Instruments and Hedging Activities. This standard is intended to enhance financial statement disclosures for derivative instruments and hedging activities and enable investors to better understand: a) how and why a fund uses derivative instruments; b) how derivative instruments are accounted for; and c) how derivative instruments affect a fund's financial position, results of operations and cash flows, if any. The Fund records derivative instruments at fair value with changes in fair value recognized on the Statement of Operations. Even though the Fund's investments in derivatives may represent economic hedges, they are considered to be non-hedge transactions for SFAS No. 161 disclosure purposes. For additional information on the derivative instruments in which the Fund was invested during and at the end of the reporting period, refer to the Portfolio of Investments, Financial Statements and Footnote 1 General Information and Significant Accounting Policies.

The table below presents the fair value of all derivative instruments held by the Fund as of June 30, 2009, 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	Futures	Payable for variation margin on futures contracts*	\$ 146,500		\$
Equity Price	Options			Call options written, at value	566,906
Total			\$ 146,500		\$ 566,906

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

The following tables present the amount of net realized gain (loss) and change in net unrealized appreciation (depreciation) recognized for the six months ended June 30, 2009, on derivative instruments, as well as the primary risk exposure associated with each.

Net Realized Gain (Loss) from Call Options Written

Risk Exposure

Equity Price	\$ (237,769)
--------------	--------------

Net Realized Gain (Loss) from Futures Contracts

Risk Exposure

Equity Price	\$ 328,725
--------------	------------

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

Risk Exposure

Equity Price	\$ 234,696
--------------	------------

Change in Net Unrealized Appreciation (Depreciation) of Futures

Risk Exposure

Equity Price	\$ 35,575
--------------	-----------

4. Fund Shares

On November 21, 2007, the Fund's Board of Trustees approved an open-market share repurchase program under which the Fund may repurchase an aggregate of up to approximately 10% of its outstanding shares.

Transactions in shares were as follows:

	Six Months Ended 6/30/09	Year Ended 12/31/08
Shares repurchased	(96,200)	(155,100)
Weighted average:		
Price per share repurchased	\$ 8.91	\$ 9.45
Discount per share repurchased	17.87%	20.69%

5. Investment Transactions

Purchases and sales (excluding short-term investments, call options written and derivative transactions) during the six months ended June 30, 2009, aggregated \$88,303,640 and \$95,451,361, respectively.

Transactions in call options written during the six months ended June 30, 2009, were as follows:

	Number of Contracts	Premiums Received
Outstanding, beginning of year	760,176	\$ 3,607,076
Call options written	3,529,477	6,067,811
Call options terminated in closing purchase transactions	(1,517,829)	(2,519,144)
Call options expired	(1,950,870)	(6,143,249)
Outstanding, end of year	820,954	\$ 1,012,494

6. Income Tax Information

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

At June 30, 2009, the cost of investments (excluding call options written) was as follows:

Cost of investments	\$ 197,135,556
---------------------	----------------

Gross unrealized appreciation and gross unrealized depreciation of investments (excluding call options written) at June 30, 2009, were as follows:

Gross unrealized:	
Appreciation	\$ 13,121,733
Depreciation	(21,621,781)
Net unrealized appreciation (depreciation) of investments	\$ (8,500,048)

The tax components of undistributed net ordinary income and net long-term capital gains at December 31, 2008, the Fund's last tax year end, were as follows:

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

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

The tax character of distributions paid during the Fund's last tax year ended December 31, 2008, was designated for purposes of the dividends paid deduction as follows:

Distributions from net ordinary income *	\$ 2,546,797
Tax return of capital	21,944,111

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

Notes to
FINANCIAL STATEMENTS (continued) (Unaudited)

At December 31, 2008, the Fund's last tax year end, the Fund had an unused capital loss carryforward of \$13,413,513 available for federal income tax purposes to be applied against future capital gains, if any. If not applied, the carryforward will expire on December 31, 2016.

The Fund elected to defer net realized losses from investments incurred from November 1, 2008 through December 31, 2008, (post-October losses) in accordance with federal income tax regulations. Post-October capital losses of \$16,233,703 were treated as having arisen on the first day of the current fiscal year.

7. Management Fees and Other Transactions with Affiliates

The Fund's management fee is separated into two components – a complex-level component, based on the aggregate amount of all fund assets managed by the Adviser, and a specific fund-level component, based only on the amount of assets within the Fund. This pricing structure enables Nuveen fund shareholders to benefit from growth in the assets within each individual 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 based upon the average daily managed net assets of the Fund as follows:

Average Daily Managed Net Assets ⁽¹⁾	Fund-Level Fee Rate
For the first \$500 million	.7500%
For the next \$500 million	.7250
For the next \$500 million	.7000
For the next \$500 million	.6750
For Managed Assets over \$2 billion	.6500

The annual complex-level fee, payable monthly, which is additive to the fund-level fee, for all Nuveen sponsored funds in the U.S., is based on the aggregate amount of total fund net assets managed as stated in the following table. As of June 30, 2009, the complex-level fee rate was .1970%.

The complex-level fee schedule is as follows:

Complex-Level Net Asset Breakpoint Level ⁽¹⁾	Effective Rate at Breakpoint Level
\$55 billion	.2000%
\$56 billion	.1996
\$57 billion	.1989
\$60 billion	.1961
\$63 billion	.1931
\$66 billion	.1900
\$71 billion	.1851

\$76 billion	.1806
\$80 billion	.1773
\$91 billion	.1691
\$125 billion	.1599
\$200 billion	.1505
\$250 billion	.1469
\$300 billion	.1445

- (1) The complex-level fee component of the management fee for the funds is calculated based upon the aggregate daily managed net assets of all Nuveen funds, with such daily managed net assets defined separately for each fund in its management agreement, but excluding assets attributable to investments in other Nuveen funds. For the complex-level and fund-level fee components, daily managed net assets include assets managed by the Adviser that are attributable to financial leverage. For these purposes, financial leverage includes the funds' use of preferred stock and borrowings and 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 the TOB trust that has been effectively financed by the trust's issuance of floating rate securities, subject to an agreement by the Adviser to limit the amount of such assets for determining managed net assets in certain circumstances.

The management fee compensates the Adviser for overall investment advisory and administrative services and general office facilities. The Adviser is responsible for the overall strategy and asset allocation decisions. The Adviser has entered into a Sub-Advisory Agreement with INTECH Investment Management LLC (INTECH), under which INTECH manages the portion of the Fund's investment portfolio allocated to common stocks. The Adviser will also be responsible for the Fund's option strategy. INTECH is compensated for its services to the Fund from the management fee paid to the Adviser.

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

8. Subsequent Events

In May 2009, the Financial Accounting Standards Board issued Statement of Financial Accounting Standards No. 165 (SFAS No. 165) Subsequent Events. SFAS No. 165 requires an entity to recognize in the financial statements the effects of all subsequent events that provide additional evidence about conditions that existed at the date of the balance sheet. SFAS No. 165 is intended to establish general standards of accounting and for disclosure of events that occur after the balance sheet date but before financial statements are issued or are available to be issued.

SFAS No. 165 requires the disclosure of the date through which an entity has evaluated subsequent events and the basis for that date that is, whether that date represents the date the financial statements were issued or were available to be issued. SFAS No. 165 is effective for interim and annual periods ending after June 15, 2009. The Fund has performed an evaluation of subsequent events through August 26, 2009, which is the date the financial statements were issued.

Financial
HIGHLIGHTS (Unaudited)

Selected data for a share outstanding throughout each period:

Year Ended 12/31:	Investment Operations			Less Distributions			Tax Return of Capital	Offering Costs	Ending Net Asset Value	Ending Market Value	
	Beginning Net Asset Value	Net Investment Income(a)	Realized/ Unrealized Gain (Loss)	Total Investment Income	Capital Gains	Net					
2009(c)	\$ 11.74	\$.08	\$.10	\$.18	\$ (.54)*****	\$	\$	\$ (.54)	\$ *	\$ 11.38	\$ 9.72
2008	18.72	.16	(5.64)	(5.48)	(.16)		(1.34)	(1.50)	*	11.74	9.61
2007(b)	19.10	.15	.81	0.96	(.14)		(1.16)	(1.30)	(0.04)	18.72	16.35

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

Total Returns		Ratios/Supplemental Data					
Based on Market Value**	Based on Net Asset Value**	Ending Net Assets (000)	Ratios to Average Net Assets Before Credit		Ratios to Average Net Assets After Credit***		Portfolio Turnover Rate
			Expenses	Net Investment Income	Expenses	Net Investment Income	
7.19%	1.82%	\$ 184,350	1.15%****	1.41%****	1.15%****	1.41%****	51%
(34.06)	(30.84)	191,180	1.11	1.04	1.11	1.04	51
(12.08)	4.84	307,877	1.07****	1.03****	1.07****	1.03****	73

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

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

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

*** After custodian fee credit.

**** Annualized.

***** Represents distributions paid From and in excess of net investment income for the six months ended June 30, 2009.

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

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

(c) For the six months ended June 30, 2009.

See accompanying notes to financial statements.

Annual Investment Management
Agreement Approval Process

The Investment Company Act of 1940, as amended (the *1940 Act*), provides, in substance, that each investment advisory agreement between a fund and its investment adviser (including sub-advisers) will continue in effect from year to year only if its continuance is approved at least annually by the fund's board members, including by a vote of a majority of the board members who are not parties to the advisory agreement or interested persons of any parties (the *Independent Board Members*), cast in person at a meeting called for the purpose of considering such approval. In connection with such approvals, the fund's board members must request and evaluate, and the investment adviser is required to furnish, such information as may be reasonably necessary to evaluate the terms of the advisory agreement. Accordingly, at a meeting held on May 27-29, 2009 (the *May Meeting*), the Board of Trustees (the *Board*, and each Trustee, a *Board Member*) of the Fund, including a majority of the Independent Board Members, considered and approved the continuation of the advisory and sub-advisory agreements for the Fund for an additional one-year period. These agreements include the investment advisory agreement between Nuveen Asset Management (*NAM*) and the Fund and the sub-advisory agreement between NAM and INTECH Investment Management LLC (the *Sub-Adviser*). In preparation for their considerations at the May Meeting, the Board also held a separate meeting on April 21-22, 2009 (the *April Meeting*). Accordingly, the factors considered and determinations made regarding the renewals by the Independent Board Members include those made at the April Meeting.

In addition, in evaluating the advisory agreement (the *Investment Management Agreement*) and the sub-advisory agreement (the *Sub-advisory Agreement*, and the Investment Management Agreement and Sub-advisory Agreement are each an *Advisory Agreement*), the Independent Board Members reviewed a broad range of information relating to the Fund, NAM and the Sub-Adviser (NAM and the Sub-Adviser are each a *Fund Adviser*), including absolute performance, fee and expense information for the Fund as well as comparative performance, fee and expense information for a comparable peer group of funds, the performance information of recognized and/or customized benchmarks (as applicable) of the Fund, the profitability of Nuveen for its advisory activities (which includes its wholly owned subsidiaries other than Winslow Capital Management, Inc. (*Winslow Capital*), which was recently acquired in December 2008), and other information regarding the organization, personnel, and services provided by the respective Fund Adviser. The Independent Board Members also met quarterly as well as at other times as the need arose during the year and took into account the information provided at such meetings and the knowledge gained therefrom. Prior to approving the renewal of the Advisory Agreements, the Independent Board Members reviewed the foregoing information with their independent legal counsel and with management, reviewed materials from independent legal counsel describing applicable law and their duties in reviewing advisory contracts, and met with independent legal counsel in private sessions without management present. The Independent Board Members considered the legal advice provided by independent legal counsel and relied upon their knowledge of the Fund Adviser, its services and the Fund resulting from their meetings and other interactions throughout the year and their own business judgment in determining the factors to be considered in evaluating the Advisory Agreements. Each Board Member may have accorded different weight to the various factors in reaching his or her conclusions with respect to the Fund's Advisory Agreements. The Independent Board Members did not identify any single factor as all-important or controlling. The Independent Board Members' considerations were instead based on a comprehensive consideration of all the information presented. The principal factors considered by the Board and its conclusions are described below.

A. Nature, Extent and Quality of Services

In considering renewal of the Advisory Agreements, the Independent Board Members considered the nature, extent and quality of the Fund Adviser's services, including advisory services and administrative services. The Independent

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

Board Members reviewed materials outlining, among other things, the Fund Adviser's organization and business; the types of services that the Fund Adviser or its affiliates provide and are expected to provide to

32 Nuveen Investments

the Fund; the performance record of the Fund (as described in further detail below); and any initiatives Nuveen had taken for the applicable fund product line.

In reviewing the services provided and the initiatives undertaken during the past year, the Independent Board Members recognized the severe market turmoil experienced in the capital markets during recent periods, including sustained periods of high volatility, credit disruption and government intervention. The Independent Board Members considered the Fund Adviser's efforts, expertise and other actions taken to address matters as they arose that impacted the Fund. The Independent Board Members recognized the role of the Investment Services group which, among other things, monitors the various positions throughout the Nuveen fund complex to identify and address any systematic risks. In addition, the Capital Markets Committee of NAM provides a multi-departmental venue for developing new policies to mitigate any risks. The Independent Board Members further recognized NAM's continuous review of the Nuveen funds' investment strategies and mandates in seeking to continue to refine and improve the investment process for the funds, particularly in light of market conditions. With respect to closed-end funds that issued auction rate preferred shares (ARPs) or that otherwise utilize leverage, the Independent Board Members noted, in particular, NAM's efforts in refinancing the preferred shares of such funds frozen by the collapse of the auction rate market and managing leverage during a period of rapid market declines, particularly for the non-equity funds. Such efforts included negotiating and maintaining the availability of bank loan facilities and other sources of credit used for investment purposes or to satisfy liquidity needs, liquidating portfolio securities during difficult times to meet leverage ratios, and seeking alternative forms of debt and other leverage that may over time reduce financing costs associated with ARPs and enable the funds that have issued ARPs to restore liquidity to ARPs holders. The Independent Board Members also noted Nuveen's continued commitment and efforts to keep investors and financial advisers informed as to its progress with the ARPs through, among other things, conference calls, emails, press releases, information posted on its website, and telephone calls and in-person meetings with financial advisers. In addition to the foregoing, the Independent Board Members also noted the additional services that NAM or its affiliates provide to closed-end funds, including, in particular, Nuveen's continued commitment to supporting the secondary market for the common shares of its closed-end funds through a variety of programs designed to raise investor and analyst awareness and understanding of closed-end funds. These efforts include maintaining an investor relations program to provide timely information and education to financial advisers and investors; providing advertising and marketing for the closed-end funds; maintaining websites; and providing educational seminars.

As part of their review, the Independent Board Members also evaluated the background, experience and track record of the Fund Adviser's investment personnel. In this regard, the Independent Board Members considered any changes in the personnel, and the impact on the level of services provided to the Fund, if any. The Independent Board Members also reviewed information regarding portfolio manager compensation arrangements to evaluate the Fund Adviser's ability to attract and retain high quality investment personnel, preserve stability, and reward performance but not provide an incentive for taking undue risks.

In addition to advisory services, the Independent Board Members considered the quality of administrative services provided by NAM and its affiliates including product management, fund administration, oversight of service providers, shareholder services, administration of Board relations, regulatory and portfolio compliance and legal support. Given the importance of compliance, the Independent Board Members considered NAM's compliance program, including the report of the chief compliance officer regarding the Fund's compliance policies and procedures.

The Independent Board Members also considered NAM's oversight of the performance, business activities and compliance of the Sub-Adviser. In that regard, the Independent Board Members reviewed an evaluation of the Sub-Adviser from NAM. The evaluation also included information relating to the Sub-Adviser's organization, operations, personnel, assets under management, investment philosophy, strategies and techniques in managing the Fund, developments affecting the Sub-Adviser, and an analysis of the Sub-Adviser. As described in further detail below, the Board considered the performance of the Fund. The Board also recognized that the Sub-advisory

Agreement was essentially an agreement for portfolio management services only and the Sub-Adviser was not expected to supply other significant administrative services to the Fund. As part of their oversight, the Independent Board Members also continued their program of seeking to visit each sub-adviser to the Nuveen funds at least once over a multiple year rotation, meeting with key investment and business personnel. The Independent Board Members noted that NAM recommended the renewal of the Sub-advisory Agreement and considered the basis for such recommendations and any qualifications in connection therewith.

Annual Investment Management
Agreement Approval Process (continued)

Based on their review, the Independent Board Members found that, overall, the nature, extent and quality of services provided (and expected to be provided) to the Fund under the Investment Management Agreement or Sub-advisory Agreement, as applicable, were satisfactory.

B. The Investment Performance of the Fund and Fund Advisers

The Board considered the investment performance of the Fund, including the Fund's historic performance as well as its performance compared to funds with similar investment objectives (the *Performance Peer Group*) based on data provided by an independent provider of mutual fund data as well as recognized and/or customized benchmarks. The Independent Board Members reviewed performance information including, among other things, total return information compared with the Fund's Performance Peer Group and recognized and/or customized benchmarks for the quarter- and one-year periods ending December 31, 2008 and for the same periods ending March 31, 2009. This information supplemented the Fund performance information provided to the Board at each of its quarterly meetings.

In comparing a fund's performance with that of its Performance Peer Group, the Independent Board Members took into account that the closest Performance Peer Group in certain instances may not adequately reflect the respective fund's investment objectives and strategies thereby hindering a meaningful comparison of the fund's performance with that of the Performance Peer Group. The Independent Board Members further considered the performance of the Fund in the context of the volatile market conditions during the past year, and their impact on various asset classes and the portfolio management of the Fund.

Based on their review and factoring in the severity of market turmoil in 2008, the Independent Board Members determined that the Fund's investment performance over time had been satisfactory.

C. Fees, Expenses and Profitability

1. Fees and Expenses

The Board evaluated the management fees and expenses of the Fund reviewing, among other things, the Fund's gross management fees, net management fees and total expense ratios (before and after expense reimbursements and/or waivers) in absolute terms as well as compared to the fee and expenses of a comparable universe of unaffiliated funds based on data provided by an independent fund data provider (the *Peer Universe*) and in certain cases, to a more focused subset of funds in the Peer Universe (the *Peer Group*).

The Independent Board Members further reviewed data regarding the construction of the applicable Peer Universe and Peer Group. In reviewing the comparisons of fee and expense information, the Independent Board Members took into account that in certain instances various factors such as the asset level of a fund relative to peers, the size and particular composition of the Peer Universe or Peer Group, the investment objectives of the peers, expense anomalies, changes in the funds comprising the Peer Universe or Peer Group from year to year, levels of reimbursement and the timing of information used may impact the comparative data, thereby limiting the ability to make a meaningful comparison. The Independent Board Members also considered, among other things, the differences in the use and type of leverage compared to the peers. In reviewing the fee schedule for the Fund, the Independent Board Members also considered the fund-level and complex-wide breakpoint schedules (described in further detail below) and any fee waivers and reimbursements provided by Nuveen (applicable, in particular, for certain closed-end funds launched since 1999).

Based on their review of the fee and expense information provided, the Independent Board Members determined that the Fund's management fees and net total expense ratio were reasonable in light of the nature, extent and quality of

services provided to the Fund.

2. Comparisons with the Fees of Other Clients

The Independent Board Members further reviewed information regarding the nature of services and fee rates offered by NAM to other clients. Such clients include separately managed accounts (both retail and institutional accounts) and funds that are not offered by Nuveen but are sub-advised by one of Nuveen's investment management teams. In evaluating the comparisons of fees, the Independent Board Members noted that the fee rates charged to the Fund and other clients vary, among other things, because of the

34 Nuveen Investments

different services involved and the additional regulatory and compliance requirements associated with registered investment companies, such as the Fund. Accordingly, the Independent Board Members considered the differences in the product types, including, but not limited to, the services provided, the structure and operations, product distribution and costs thereof, portfolio investment policies, investor profiles, account sizes and regulatory requirements. The Independent Board Members noted, in particular, that the range of services provided to the Fund (as discussed above) is much more extensive than that provided to separately managed accounts. Given the inherent differences in the products, particularly the extensive services provided to the Fund, the Independent Board Members believe such facts justify the different levels of fees.

In considering the fees of the Sub-Adviser, the Independent Board Members also considered the pricing schedule or fees that the Sub-Adviser charges for similar investment management services for other fund sponsors or clients (such as retail and/or institutional managed accounts) as applicable. The Independent Board Members noted that such fees were the result of arm's-length negotiations.

3. Profitability of Fund Advisers

In conjunction with its review of fees, the Independent Board Members also considered the profitability of Nuveen for its advisory activities (which incorporated Nuveen's wholly-owned affiliated sub-advisers other than Winslow Capital) and its financial condition. The Independent Board Members reviewed the revenues and expenses of Nuveen's advisory activities for the last two years, the allocation methodology used in preparing the profitability data and an analysis of the key drivers behind the changes in revenues and expenses that impacted profitability in 2008. In addition, the Independent Board Members reviewed information regarding the financial results of Nuveen for 2008 based on its Form 8-K filed on March 31, 2009. The Independent Board Members noted this information supplemented the profitability information requested and received during the year to help keep them apprised of developments affecting profitability (such as changes in fee waivers and expense reimbursement commitments). In this regard, the Independent Board Members noted that they had also appointed an Independent Board Member as a point person to review and keep them apprised of changes to the profitability analysis and/or methodologies during the year. The Independent Board Members also considered Nuveen's revenues for advisory activities, expenses, and profit margin compared to that of various unaffiliated management firms with similar amounts of assets under management and relatively comparable asset composition prepared by Nuveen.

In reviewing profitability, the Independent Board Members recognized the subjective nature of determining profitability which may be affected by numerous factors including the allocation of expenses. Further, the Independent Board Members recognized the difficulties in making comparisons as the profitability of other advisers generally is not publicly available and the profitability information that is available for certain advisers or management firms may not be representative of the industry and may be affected by, among other things, the adviser's particular business mix, capital costs, types of funds managed and expense allocations. Notwithstanding the foregoing, the Independent Board Members reviewed Nuveen's methodology and assumptions for allocating expenses across product lines to determine profitability. In reviewing profitability, the Independent Board Members recognized Nuveen's investment in its fund business.

Based on their review, the Independent Board Members concluded that Nuveen's level of profitability for its advisory activities was reasonable in light of the services provided. The Independent Board Members also considered the Sub-Adviser's revenues, expenses and profitability margins (pre- and post-tax). Based on their review, the Independent Board Members were satisfied that the Sub-Adviser's level of profitability was reasonable in light of the services provided.

In evaluating the reasonableness of the compensation, the Independent Board Members also considered other amounts paid to a Fund Adviser by the Fund as well as any indirect benefits (such as soft dollar arrangements, if any) the Fund Adviser and its affiliates receive, or are expected to receive, that are directly attributable to the management of

the Fund, if any. See Section E below for additional information on indirect benefits the Fund Adviser may receive as a result of its relationship with the Fund. Based on their review of the overall fee arrangements of the Fund, the Independent Board Members determined that the advisory fees and expenses of the Fund were reasonable.

Annual Investment Management
Agreement Approval Process (continued)

D. Economies of Scale and Whether Fee Levels Reflect These Economies of Scale

With respect to economies of scale, the Independent Board Members have recognized the potential benefits resulting from the costs of a fund being spread over a larger asset base, although economies of scale are difficult to measure and predict with precision, particularly on a fund-by-fund basis. One method to help ensure the shareholders share in these benefits is to include breakpoints in the advisory fee schedule. Generally, management fees for funds in the Nuveen complex are comprised of a fund-level component and a complex-level component, subject to certain exceptions. Accordingly, the Independent Board Members reviewed and considered the applicable fund-level breakpoints in the advisory fee schedules that reduce advisory fees as asset levels increase. In this regard, the Independent Board Members noted that although closed-end funds may from time-to-time make additional share offerings, the growth of their assets will occur primarily through the appreciation of such funds' investment portfolio. While economies of scale result when costs can be spread over a larger asset base, the Independent Board Members also recognized that the asset levels generally declined in 2008 due to, among other things, the market downturn. Accordingly, for funds with a reduction in assets under management, advisory fee levels may have increased as breakpoints in the fee schedule were no longer surpassed.

In addition to fund-level advisory fee breakpoints, the Board also considered the Fund's complex-wide fee arrangement. Pursuant to the complex-wide fee arrangement, the fees of the funds in the Nuveen complex generally are reduced as the assets in the fund complex reach certain levels. The complex-wide fee arrangement seeks to provide the benefits of economies of scale to fund shareholders when total fund complex assets increase, even if assets of a particular fund are unchanged or have decreased. The approach reflects the notion that some of Nuveen's costs are attributable to services provided to all its funds in the complex and therefore all funds benefit if these costs are spread over a larger asset base. Generally, the complex-wide pricing reduces Nuveen's revenue because total complex fund assets have consistently grown in prior years. As noted, however, total fund assets declined in 2008 resulting in a smaller downward adjustment of revenues due to complex-wide pricing compared to the prior year.

Based on their review, the Independent Board Members concluded that the breakpoint schedules and complex-wide fee arrangement (as applicable) were acceptable and reflect economies of scale to be shared with shareholders when assets under management increase.

E. Indirect Benefits

In evaluating fees, the Independent Board Members received and considered information regarding potential fall out or ancillary benefits the respective Fund Adviser or its affiliates may receive as a result of its relationship with the Fund. In this regard, the Independent Board Members considered revenues received by affiliates of NAM for serving as agent at Nuveen's trading desk.

In addition to the above, the Independent Board Members considered whether the Fund Adviser received any benefits from soft dollar arrangements whereby a portion of the commissions paid by the Fund for brokerage may be used to acquire research that may be useful to the Fund Adviser in managing the assets of the Fund and other clients. With respect to NAM, the Independent Board Members noted that NAM does not currently have any soft dollar arrangements; however, to the extent certain bona fide agency transactions that occur on markets that traditionally trade on a principal basis and riskless principal transactions are considered as generating commissions, NAM intends to comply with the applicable safe harbor provisions. With respect to the Sub-Adviser, the Independent Board Members considered that the Sub-Adviser does not participate in soft dollar arrangements. It may, however, pay higher commissions for execution services as permitted under applicable law.

Based on their review, the Independent Board Members concluded that any indirect benefits received by a Fund Adviser as a result of its relationship with the Fund were reasonable and within acceptable parameters.

F. Other Considerations

The Independent Board Members did not identify any single factor discussed previously as all-important or controlling. The Board Members, including the Independent Board Members, unanimously concluded that the terms of the Investment Management Agreement and Sub-advisory Agreement are fair and reasonable, that the respective Fund Adviser's fees are reasonable in light of the services provided to the Fund and that the Investment Management Agreement and the Sub-advisory Agreement be renewed.

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 Dividend Reinvestment Plan

Your Nuveen Closed-End Fund allows you to conveniently reinvest dividends and/or capital gains 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 tax-free compounding. Just like dividends or distributions in cash, there may be times when income or capital gains taxes may be payable on dividends or 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 month you will receive a statement showing your total dividends and 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. Dividends and distributions received to purchase shares in the open market will normally be invested shortly after the dividend payment date. No interest will be paid on dividends and 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 dividend or 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. Should you withdraw, you can receive a certificate for all whole shares credited to your reinvestment account and cash payment for fractional shares, or cash payment for all reinvestment account shares, less brokerage commissions and a \$2.50 service fee.

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 dividends and/or 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.

Glossary of Terms
Used in this Report

- n ***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.
- n ***Current Distribution Rate (also known as Market Yield, Dividend Yield or Current Yield):*** Market yield is based on the Fund's current annualized quarterly distribution divided by the Fund's current market price. The Fund's quarterly distributions to its shareholders may be comprised of ordinary income, net realized capital gains and, if at the end of the calendar year the Fund's cumulative net ordinary income and net realized gains are less than the amount of the Fund's distributions, a tax return of capital.
- n ***Net Asset Value (NAV):*** A Fund's NAV per share is calculated by subtracting the liabilities of the Fund from its total assets and then dividing the remainder by the number of shares outstanding. Fund NAVs are calculated at the end of each business day.

Notes

40 Nuveen Investments

Notes

Nuveen Investments 41

Notes

42 Nuveen Investments

Other Useful Information

Board of Trustees

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

Fund Manager

Nuveen Asset Management
333 West Wacker Drive
Chicago, IL 60606

Custodian

State Street Bank & Trust Company
Boston, MA

**Transfer Agent and
Shareholder Services**

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

Legal Counsel

Chapman and Cutler LLP
Chicago, IL

**Independent Registered
Public Accounting Firm**

PricewaterhouseCoopers LLP
Chicago, IL

Quarterly Portfolio of Investments and Proxy Voting Information

You may obtain (i) the Fund's quarterly portfolio of investments, (ii) information regarding how the Fund voted proxies relating to portfolio securities held during the most recent twelve-month period ended June 30, 2009, and (iii) a description of the policies and procedures that the Fund used to determine how to vote proxies relating to portfolio securities without charge, upon request, by calling Nuveen Investments toll-free at (800) 257-8787 or on Nuveen's website at www.nuveen.com.

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

CEO Certification Disclosure

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

Common Share Information

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

Common Shares Repurchased
96,200

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

Nuveen Investments:
Serving Investors for Generations

Since 1898, financial advisors and their clients have relied on Nuveen Investments to provide dependable investment solutions. For the past century, Nuveen Investments has adhered to the belief that the best approach to investing is to apply conservative risk-management principles to help minimize volatility. Building on this tradition, we today offer a range of high quality equity and fixed-income solutions that are integral to a well-diversified core portfolio. Our clients have come to appreciate this diversity, as well as our continued adherence to proven, long-term investing principles.

We offer many different investing solutions for our clients different needs.

Nuveen Investments is a global investment management firm that seeks to help secure the long-term goals of institutions and high net worth investors as well as the consultants and financial advisors who serve them. Nuveen Investments markets its growing range of specialized investment solutions under the high-quality brands of HydePark, NWQ, Nuveen, Santa Barbara, Symphony, Tradewinds and Winslow Capital. In total, the Company managed approximately \$128 billion of assets on June 30, 2009.

Find out how we can help you reach your financial goals.

To learn more about the products and services Nuveen Investments offers, talk to your financial advisor, or call us at **(800) 257-8787**. Please read the information provided carefully before you invest. Be sure to obtain a prospectus, where applicable. Investors should consider the investment objective and policies, risk considerations, charges and expenses of the Fund carefully before investing. The prospectus contains this and other information relevant to an investment in the Fund. For a prospectus, please contact your securities representative or **Nuveen Investments, 333 W. Wacker Dr., Chicago, IL 60606**. Please read the prospectus carefully before you invest or send money.

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

Share prices

Fund details

Daily financial news

Investor education

Interactive planning tools

Distributed by
Nuveen Investments, LLC
333 West Wacker Drive
Chicago, IL 60606

www.nuveen.com
ESA-I-0609D

ITEM 2. CODE OF ETHICS.

Not applicable to this filing.

ITEM 3. AUDIT COMMITTEE FINANCIAL EXPERT.

Not applicable to this filing.

ITEM 4. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

Not applicable to this filing.

ITEM 5. AUDIT COMMITTEE OF LISTED REGISTRANTS.

Not applicable to this filing.

ITEM 6. SCHEDULE OF INVESTMENTS.

See Portfolio of Investments in Item 1.

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

Not applicable to this filing.

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

Not applicable to this filing.

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

Period*	(a) TOTAL NUMBER OF SHARES (OR UNITS) PURCHASED	(b) AVERAGE PRICE PAID PER SHARE (OR UNIT)	(c) TOTAL NUMBER OF (OR UNITS) PURCHASED AS PART OF PUBLICLY ANNOUNCED PLANS OR PROGRAMS	(d)* MAXIMUM NUMBER (OR APPROXIMATE DOLLAR VALUE) OF SHARES (OR UNITS) THAT MAY YET BE PURCHASED UNDER THE PLANS OR PROGRAMS
JANUARY 1-31, 2009	0		0	1,489,900
FEBRUARY 1-28, 2009	16,200	8.36	16,200	1,473,700
MARCH 1-31, 2009	15,300	7.14	15,300	1,458,400
APRIL 1-30, 2009	0		0	1,458,400
MAY 1-31, 2009	10,300	9.30	10,300	1,448,100
JUNE 1-30, 2009	54,400	9.50	54,400	1,393,700
TOTAL	96,200			

* The registrant's repurchase program, which authorized the repurchase of

1,645,000
shares, was
announced
August 7, 2008.
Any repurchases
made by the
registrant
pursuant to the
program were
made through
open-market
transactions.

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

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

ITEM 11. CONTROLS AND PROCEDURES.

- (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 to this filing.

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

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

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

SIGNATURES

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

(Registrant) Nuveen Core Equity Alpha Fund

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

Date: September 8, 2009

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

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

Date: September 8, 2009

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

Date: September 8, 2009

* Print the name and title of each signing officer under his or her signature.