

Nuveen Core Equity Alpha Fund
Form N-CSR
March 09, 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: December 31, 2008

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

Annual Report
December 31, 2008

Nuveen Investments
Closed-End Funds

NUVEEN
CORE EQUITY
ALPHA FUND
JCE

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

Life is complex.
Nuveen
makes things
e-simple.

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

Free e-Reports right to your e-mail!

www.investordelivery.com

If you received your Nuveen Fund dividends and statements from your financial advisor or brokerage account.

OR

www.nuveen.com/accountaccess

If you received your Nuveen Fund dividends and statements directly from Nuveen.

Chairman's
LETTER TO SHAREHOLDERS

i Robert P. Bremner ii Chairman of the Board

Dear Shareholders,

I write this letter in a time of continued uncertainty about the current state of the U.S. financial system and pessimism about the future of the global economy. Many have observed that the conditions that led to the crisis have built up over time and will complicate and extend the course of recovery. At the same time, government officials in the U.S. and abroad have implemented a wide range of programs to restore stability to the financial system and encourage economic recovery. History teaches us that these efforts will moderate the extent of the downturn and hasten the inevitable recovery, even though it is hard to envision that outcome in the current environment.

As you will read in this report, the continuing financial and economic problems are weighing heavily on the values of equities and fixed-income assets, and unfortunately the performance of your Nuveen Fund has been similarly affected. In addition to the financial statements, I hope that you will carefully review the Portfolio Managers' Comments, the Distribution and Share Price Information and the Performance Overview sections of this report. These comments highlight the managers' pursuit of investment strategies that depend on thoroughly researched securities, diversified portfolio holdings and well established investment disciplines to achieve your Fund's investment goals. The Fund Board believes that a consistent focus on long-term investment goals provides the basis for successful investment over time and we monitor your Fund with that objective in mind.

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 Board
February 23, 2009

Portfolio Managers COMMENTS

Nuveen Investments Closed-End Funds

JCE

Nuveen Core Equity Alpha Fund (JCE) is managed by INTECH Investment Management LLC (INTECH), an independently managed subsidiary of Janus Capital Group Inc. INTECH's Chief Investment Officer Dr. Robert Fernholz, PhD, leads the portfolio management team. Here Dr. Fernholz and team members talk about the management strategy and the performance of the equity portion of the Fund for the twelve-month period ended December 31, 2008.

WHAT WERE THE GENERAL ECONOMIC CONDITIONS AND MARKET TRENDS DURING THE TWELVE-MONTH PERIOD ENDED DECEMBER 31, 2008?

The period was dominated by fears of an economic recession, triggered or exacerbated by several significant developments. The cascading effects of sub-prime mortgage defaults, constrained liquidity in the capital markets and limited lending by many financial institutions caused many investors to seek refuge in U.S. Treasury securities. These events forced some financial firms to merge, restructure or go out of business. At the same time, the U.S. government essentially took over Fannie Mae and Freddie Mac, and also intervened on behalf of the giant insurer AIG. By the end of 2008, the U.S. Treasury had disbursed approximately \$350 billion of capital to financial institutions and others under the Troubled Assets Relief Program, with indications that a like amount would be distributed in 2009.

Another indicator of economic weakness was the U.S. unemployment rate, which soared to 7.2% as of December 31, 2008, compared with 4.9% one year earlier. Practically all segments of the economy showed signs of slowing by the end of the period. During the third quarter of 2008, gross domestic product contracted to an annual rate of 0.5%, the biggest decrease since 2001. Preliminary reports for the fourth quarter showed a contraction of 3.8%, the worst showing in more than 25 years. This was mainly the result of the first decline in consumer spending since 1991 and an 18% drop in residential investment. Fortunately, inflation was not a significant factor as the Consumer Price Index rose just 0.1% in 2008. The Federal Reserve cut the widely followed short-term fed funds rate seven times during 2008, lowering the rate from 4.25% to 0-0.25% as of year end.

The Dow Jones Industrial Average suffered its worst annual decline since 1931 and the NASDAQ Composite suffered its worst annual decline ever – even greater than that experienced during the retreat after the technology bubble in 2000. The S&P 500 Index was down 37% for the year and approximately 17% in October alone, driven by significant global

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.

weakness. The problems spread broadly across all sectors and markets. Spot prices for certain base metals (steel, aluminum, copper) and crude oil declined as much as 50-70% in the last six months of 2008.

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.

¹ The S&P 500 Index is an unmanaged Index generally considered representative of the U.S. Stock Market.

WHAT KEY STRATEGIES WERE USED TO MANAGE THE FUND DURING THIS REPORTING PERIOD?

The market turmoil during 2008 reconfirmed the importance of risk management, which is a critical component of INTECH's portfolio construction and monitoring process. The practical risk controls embedded in the firm's investment process aid in minimizing tracking error during periods of short-term market instability. The Fund's 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.

INTECH's investment process requires some level of volatility be present in individual stocks that can then be captured in our optimization and rebalancing process. We expect that there will be individual periods or years in which we exceed or underperform our targets.

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.

The Fund also employs an option strategy to enhance its risk adjusted returns overtime. Over this period, the Fund wrote (sold) call options primarily on custom baskets of securities. The sale of equity call options was used to generate current gains that could be used to partially offset equity portfolio losses in certain situations. The option strategy was administered by Nuveen Asset Management, the Fund's investment adviser.

HOW DID THE FUND PERFORM OVER THIS TWELVE-MONTH PERIOD?

The performance of JCE, as well as a widely followed equity index, is presented in the accompanying table.

Average Annual Total Returns on Common Share Net Asset Value
For the twelve-month period ended 12/31/08

JCE	-30.84%
S&P 500 Index ¹	-37.00%

For the twelve-month period ended December 31, 2008, the Fund's total return on net asset value was negative, but it did outperform its benchmark. As noted earlier, most equity investments performed poorly in 2008. This unfavorable environment is reflected in the returns of the Fund and the index shown above.

The Fund's investment strategy often leads us to purchase the smaller members of the large cap stock universe. In the short term, this can impact the performance of the Fund relative to a passive benchmark. For example, during periods when capital flows from larger to smaller stocks or when, the Fund's smaller stock tendency may prove to be a positive for performance.

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 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.

Distribution and Share Price

INFORMATION

The information below regarding your Fund's distributions is current as of December 31, 2008, 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 twice during the course of 2008. 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 information regarding the Fund's distributions and total return performance for the fiscal year ended December 31, 2008. This information is intended to help you better understand whether the Fund's returns for the specified time period were sufficient to meet the Fund's distributions.

As of 12/31/08	JCE
Inception date	3/27/07
Calendar year ended December 31, 2008:	
Per share distribution:	
From net investment income	\$0.16
From short-term capital gains	
From long-term capital gains	
From return of capital	1.34
Total per share distribution	\$1.50
Distribution rate on NAV	12.78%
Annualized total returns:	
1-Year on NAV	-30.84%
Since Inception on NAV	-16.65%

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 up to 10% of its outstanding common shares. As of December 31, 2008, the Fund has cumulatively repurchased 182,600 common shares, representing approximately 1.1% of the Fund's total common shares outstanding. Common shares were repurchased at a weighted average discount per share of 20.69% and at a weighted average purchase price of \$9.45.

As of December 31, 2008, the Fund was trading at a -18.14% discount to its NAV, compared with an average discount of -13.85% for the entire twelve-month period.

Fund Snapshot

Share Price	\$9.61
Net Asset Value	\$11.74
Premium/(Discount) to NAV	-18.14%
Current Distribution Rate ¹	11.86%
Net Assets (\$000)	\$191,180

Average Annual Total Return

(Inception 3/27/07)

	On Share	
	Price	On NAV
1-Year	-34.06%	-30.84%
Since Inception	-26.58%	-16.65%

Industries

(as a % of total investments)²

Oil, Gas & Consumable Fuels	11.0%
Pharmaceuticals	5.0%
Commercial Banks	4.3%
Computers & Peripherals	4.0%
Diversified Telecommunication Services	4.0%
Road & Rail	3.7%
Health Care Equipment & Supplies	3.3%
Household Products	3.2%
Electric Utilities	3.1%
Industrial Conglomerates	3.0%
Beverages	2.9%
Insurance	2.8%

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

Food & Staples Retailing	2.7%
Energy Equipment & Services	2.6%
Semiconductors & Equipment	2.5%
Aerospace & Defense	2.5%
Software	2.3%
Real Estate	2.1%
Food Products	2.1%
Specialty Retail	1.9%
Communications Equipment	1.9%
Media	1.9%
Machinery	1.8%
Hotels, Restaurant & Leisure	1.7%
U.S. Government and Agency Obligations	3.1%
Short-Term Investments	1.9%
Other	18.7%

JCE
Performance
 OVERVIEW

Nuveen
 Core Equity
 Alpha Fund
 as of December 31, 2008

Portfolio Allocation (as a % of total investments)²

2007-2008 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 investments in derivatives.

9

Report of INDEPENDENT REGISTERED
PUBLIC ACCOUNTING FIRM

TO THE BOARD OF TRUSTEES AND SHAREHOLDERS OF
NUVEEN CORE EQUITY ALPHA FUND

In our opinion, the accompanying statement of assets and liabilities, including the portfolio of investments, and the related statements of operations and of changes in net assets and the financial highlights present fairly, in all material respects, the financial position of Nuveen Core Equity Alpha Fund (the Fund) at December 31, 2008, and the results of its operations for the year then ended, the changes in its net assets and the financial highlights for the year then ended and for the period March 27, 2007 (commencement of operations) through December 31, 2007, in conformity with accounting principles generally accepted in the United States of America. These financial statements and financial highlights (hereafter referred to as financial statements) are the responsibility of the Fund's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these financial statements in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits, which included confirmation of securities at December 31, 2008 with the custodian and brokers, provide a reasonable basis for our opinion.

PricewaterhouseCoopers LLP
February 25, 2009

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

JCE Nuveen Core Equity Alpha Fund
Portfolio of INVESTMENTS

December 31, 2008

Shares	Description (1)	Value
	Common Stocks 96.4%	
	Aerospace & Defense 2.5%	
8,600	Boeing Company	\$ 366,962
10,000	General Dynamics Corporation	575,900
1,700	Goodrich Corporation	62,934
29,600	Honeywell International Inc.	971,768
600	L-3 Communications Holdings, Inc.	44,268
22,800	Lockheed Martin Corporation	1,917,024
1,300	Northrop Grumman Corporation	58,552
3,500	Precision Castparts Corporation	208,180
3,500	Raytheon Company	178,640
8,300	United Technologies Corporation	444,880
	Total Aerospace & Defense	4,829,108
	Air Freight & Logistics 0.4%	
8,800	C.H. Robinson Worldwide, Inc.	484,264
600	Expeditors International of Washington Inc.	19,962
700	FedEx Corporation	44,905
2,700	United Parcel Service, Inc., Class B	148,932
	Total Air Freight & Logistics	698,063
	Airlines 0.2%	
52,900	Southwest Airlines Co.	455,998
	Auto Components 0.5%	
27,200	Goodyear Tire & Rubber Company, (2)	162,384
37,800	Johnson Controls, Inc.	686,448
	Total Auto Components	848,832
	Beverages 2.9%	
9,500	Brown-Forman Corporation	489,155
61,800	Coca-Cola Company	2,797,686
1,200	Dr. Pepper Snapple Group, (2)	19,500
4,900	Molson Coors Brewing Company, Class B	239,708
37,300	PepsiCo, Inc.	2,042,921

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

	Total Beverages	5,588,970
	Biotechnology 1.1%	
4,900	Amgen Inc., (2)	282,975
500	Biogen Idec Inc., (2)	23,815
13,700	Celgene Corporation, (2)	757,336
1,500	Cephalon, Inc., (2)	115,560
2,900	Genzyme Corporation, (2)	192,473
15,300	Gilead Sciences, Inc., (2)	782,442
	Total Biotechnology	2,154,601
	Building Products 0.3%	
14,400	Fastenal Company	501,840
	Capital Markets 0.6%	
5,000	American Capital Limited	16,200
3,800	Bank of New York Company, Inc.	107,654
6,200	Charles Schwab Corporation	100,254
7,900	Federated Investors Inc.	133,984
1,700	Invesco LTD	24,548
11,300	State Street Corporation	444,429
7,100	T. Rowe Price Group Inc.	251,624
	Total Capital Markets	1,078,693
	Chemicals 1.3%	
3,600	Air Products & Chemicals Inc.	180,972
2,000	CF Industries Holdings, Inc.	98,320
1,700	Dow Chemical Company	25,653

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

JCE Nuveen Core Equity Alpha Fund (continued)
Portfolio of INVESTMENTS December 31, 2008

Shares	Description (1)	Value
	Chemicals (continued)	
28,200	E.I. Du Pont de Nemours and Company	\$ 713,460
5,800	Eastman Chemical Company	183,918
2,300	Ecolab Inc.	80,845
3,700	PPG Industries, Inc.	156,991
8,500	Praxair, Inc.	504,560
1,900	Rohm and Haas Company	117,401
11,000	Sigma-Aldrich Corporation	464,640
	Total Chemicals	2,526,760
	Commercial Banks 4.4%	
127,100	Bank of America Corporation	1,789,568
19,800	BB&T Corporation	543,708
3,100	Comerica Incorporated	61,535
3,900	First Horizon National Corporation	41,223
5,900	Goldman Sachs Group, Inc.	497,901
36,305	JPMorgan Chase & Co.	1,144,697
5,900	KeyCorp.	50,268
4,300	M&T Bank Corporation	246,863
24,100	Morgan Stanley	386,564
10,700	Northern Trust Corporation	557,898
10,600	PNC Financial Services Group, Inc.	519,400
10,100	Regions Financial Corporation	80,396
37,000	U.S. Bancorp	925,370
32,900	Wachovia Corporation	182,266
42,100	Wells Fargo & Company	1,241,108
4,700	Zions Bancorporation	115,197
	Total Commercial Banks	8,383,962
	Commercial Services & Supplies 1.1%	
1,200	Avery Dennison Corporation	39,276
3,400	Dun and Bradstreet Inc.	262,480
5,300	Equifax Inc.	140,556
1,600	Pitney Bowes Inc.	40,768
21,535	Republic Services, Inc.	533,853
10,400	Robert Half International Inc.	216,528
1,900	Stericycle Inc., (2)	98,952
20,800	Waste Management, Inc.	689,312

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

	Total Commercial Services & Supplies	2,021,725
	Communications Equipment 1.9%	
108,900	Cisco Systems, Inc., (2)	1,775,070
41,600	Corning Incorporated	396,448
42,400	QUALCOMM Inc.	1,519,192
	Total Communications Equipment	3,690,710
	Computers & Peripherals 4.0%	
17,400	Apple, Inc., (2)	1,485,090
5,400	EMC Corporation, (2)	56,538
69,000	Hewlett-Packard Company	2,504,010
38,800	International Business Machines Corporation (IBM)	3,265,408
3,100	Lexmark International, Inc., Class A, (2)	83,390
3,200	McAfee Inc., (2)	110,624
13,500	Network Appliance Inc., (2)	188,595
	Total Computers & Peripherals	7,693,655
	Construction & Engineering 0.4%	
11,900	Fluor Corporation	533,953
6,000	Jacobs Engineering Group Inc., (2)	288,600
	Total Construction & Engineering	822,553
	Construction Materials 0.1%	
2,800	Vulcan Materials Company	194,824

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

Shares	Description (1)	Value
	Consumer Finance 0.8%	
10,000	Capital One Financial Corporation	\$ 318,900
23,300	Discover Financial Services	222,049
3,200	MasterCard, Inc.	457,376
14,200	SLM Corporation, (2)	126,380
31,000	Western Union Company	444,540
	Total Consumer Finance	1,569,245
	Containers & Packaging 0.6%	
10,000	Ball Corporation	415,900
9,600	Bemis Company, Inc.	227,328
300	Pactiv Corporation, (2)	7,464
33,300	Sealed Air Corporation	497,502
	Total Containers & Packaging	1,148,194
	Diversified Consumer Services 0.6%	
1,200	Apollo Group, Inc., (2)	91,944
43,500	H & R Block Inc.	988,320
	Total Diversified Consumer Services	1,080,264
	Diversified Financial Services 0.8%	
5,800	CIT Group Inc.	26,332
21,500	Citigroup Inc.	144,265
100	CME Group, Inc.	20,811
37,000	Leucadia National Corporation, (2)	732,600
29,000	Moody's Corporation	582,610
3,000	Nasdaq Stock Market, Inc., (2)	74,130
	Total Diversified Financial Services	1,580,748
	Diversified Telecommunication Services 4.0%	
236,200	AT&T Inc.	6,731,700
2,800	CenturyTel, Inc.	76,524
3,600	Embarq Corporation	129,456
16,900	Frontier Communications Corporation	147,706
17,300	Verizon Communications Inc.	586,470
	Total Diversified Telecommunication Services	7,671,856
	Electric Utilities 3.1%	
5,100	American Electric Power Company, Inc.	169,728
1,100	Edison International	35,332
12,800	Entergy Corporation	1,064,064

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

700	Exelon Corporation	38,927
15,400	FirstEnergy Corp.	748,132
38,400	FPL Group, Inc.	1,932,672
1,000	PG&E Corporation	38,710
39,900	PPL Corporation	1,224,531
8,800	Southern Company	325,600
31,800	TECO Energy, Inc.	392,730
	Total Electric Utilities	5,970,426
	Electrical Equipment 0.1%	
2,600	Emerson Electric Company	95,186
	Electronic Equipment & Instruments 0.8%	
2,000	Amphenol Corporation, Class A	47,960
19,700	Jabil Circuit Inc.	132,975
4,400	MEMC Electronic Materials, (2)	62,832
26,300	Thermo Fisher Scientific, Inc., (2)	896,041
24,300	Tyco Electronics, Limited	393,903
	Total Electronic Equipment & Instruments	1,533,711
	Energy Equipment & Services 2.7%	
10,800	Anadarko Petroleum Corporation	416,340
25,900	BJ Services Company	302,253
21,000	Cabot Oil & Gas Corporation	546,000
12,400	ENSCO International Incorporated	352,036
23,500	Halliburton Company	427,230
37,900	Nabors Industries Inc., (2)	453,663
21,200	National-Oilwell Varco Inc., (2)	518,128

JCE Nuveen Core Equity Alpha Fund (continued)
Portfolio of INVESTMENTS December 31, 2008

Shares	Description (1)	Value
Energy Equipment & Services (continued)		
1,200	Noble Corporation	\$ 26,508
2,200	Rowan Companies Inc.	34,980
29,500	Schlumberger Limited	1,248,735
13,600	Smith International, Inc.	311,304
44,000	Weatherford International Ltd, (2)	476,080
	Total Energy Equipment & Services	5,113,257
Food & Staples Retailing 2.7%		
4,600	Costco Wholesale Corporation	241,500
31,700	CVS Caremark Corporation	911,058
52,900	Kroger Co.	1,397,089
5,400	Safeway Inc.	128,358
1,000	Sysco Corporation	22,940
7,400	Walgreen Co.	182,558
41,300	Wal-Mart Stores, Inc.	2,315,278
	Total Food & Staples Retailing	5,198,781
Food Products 2.1%		
2,300	Archer-Daniels-Midland Company	66,309
11,700	Campbell Soup Company	351,117
11,200	General Mills, Inc.	680,400
24,400	H.J. Heinz Company	917,440
5,700	Hershey Foods Corporation	198,018
2,700	JM Smucker Company	117,072
6,600	Kellogg Company	289,410
9,200	Kraft Foods Inc.	247,020
1,100	McCormick & Company, Incorporated	35,046
11,500	Monsanto Company	809,025
39,700	Tyson Foods, Inc., Class A	347,772
	Total Food Products	4,058,629
Gas Utilities 0.2%		
2,600	Equitable Resources Inc.	87,230
1,200	Questar Corporation	39,228
9,500	Spectra Energy Corporation	149,530

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

	Total Gas Utilities	275,988
	Health Care Equipment & Supplies 3.4%	
1,200	AmerisourceBergen Corporation	42,792
30,800	Baxter International Inc.	1,650,572
3,900	Becton, Dickinson and Company	266,721
79,200	Boston Scientific Corporation, (2)	613,008
2,200	C. R. Bard, Inc.	185,372
9,300	Cardinal Health, Inc.	320,571
26,200	Covidien Limited	949,488
3,000	DENTSPLY International Inc.	84,720
2,100	Hospira Inc., (2)	56,322
12,200	Medtronic, Inc.	383,324
3,400	Patterson Companies Inc., (2)	63,750
5,200	Saint Jude Medical Inc., (2)	171,392
20,100	Stryker Corporation	802,995
18,100	Varian Medical Systems, Inc., (2)	634,224
6,200	Zimmer Holdings, Inc., (2)	250,604
	Total Health Care Equipment & Supplies	6,475,855
	Health Care Providers & Services 1.4%	
21,800	CIGNA Corporation	367,330
9,600	Express Scripts, Inc., (2)	527,808
800	Laboratory Corporation of America Holdings, (2)	51,528
35,700	Medco Health Solutions, Inc., (2)	1,496,187
4,300	Quest Diagnostics Incorporated	223,213
25,700	Tenet Healthcare Corporation, (2)	29,555
	Total Health Care Providers & Services	2,695,621
	Health Care Technology 0.1%	
14,200	IMS Health Incorporated	215,272

Shares	Description (1)	Value
	Hotels, Restaurants & Leisure 1.7%	
5,900	Carnival Corporation	\$ 143,488
5,500	Darden Restaurants Inc.	154,990
1,200	Marriott International, Inc., Class A	23,340
38,900	McDonald's Corporation	2,419,191
11,600	Starwood Hotels & Resorts Worldwide, Inc.	207,640
1,300	Wynn Resorts Ltd, (2)	54,938
6,800	YUM! Brands, Inc.	214,200
	Total Hotels, Restaurants & Leisure	3,217,787
	Household Durables 1.2%	
22,500	Centex Corporation	239,400
28,500	D.R. Horton, Inc.	201,495
12,400	KB Home	168,888
22,100	Leggett and Platt Inc.	335,699
23,000	Lennar Corporation, Class A	199,410
40,200	Pulte Corporation	439,386
13,200	Snap-on Incorporated	519,816
3,400	Stanley Works	115,940
200	Whirlpool Corporation	8,270
	Total Household Durables	2,228,304
	Household Products 3.2%	
21,300	Colgate-Palmolive Company	1,459,902
75,600	Procter & Gamble Company	4,673,592
	Total Household Products	6,133,494
	Independent Power Producers & Energy Traders 0.1%	
7,500	Constellation Energy Group	188,175
	Industrial Conglomerates 3.0%	
6,900	3M Co.	397,026
278,800	General Electric Company	4,516,560
1,500	Textron Inc.	20,805
39,200	Tyco International Ltd.	846,720
	Total Industrial Conglomerates	5,781,111
	Insurance 2.8%	
16,100	AFLAC Incorporated	738,024
2,600	Allstate Corporation	85,176
19,700	Assurant Inc.	591,000
800	Chubb Corporation	40,800

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

4,600	Hartford Financial Services Group, Inc.	75,532
4,500	Lincoln National Corporation	84,780
60,500	Loews Corporation	1,709,125
31,700	Marsh & McLennan Companies, Inc.	769,359
19,100	MBIA Inc.	77,737
2,400	MetLife, Inc.	83,664
2,500	Principal Financial Group, Inc.	56,425
29,900	Progressive Corporation	442,819
4,800	Prudential Financial, Inc.	145,248
2,800	Torchmark Corporation	125,160
1,400	Travelers Companies, Inc.	63,280
15,800	Unum Group	293,880
8,700	XL Capital Ltd, Class A	32,190
	Total Insurance	5,414,199
	Internet & Catalog Retail 0.4%	
14,200	Amazon.com, Inc., (2)	728,176
	Internet Software & Services 0.3%	
1,600	Google Inc., Class A, (2)	492,240
6,800	Yahoo! Inc., (2)	82,960
	Total Internet Software & Services	575,200

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

JCE Nuveen Core Equity Alpha Fund (continued)
Portfolio of INVESTMENTS December 31, 2008

Shares	Description (1)	Value
	IT Services 0.6%	
20,200	Affiliated Computer Services Inc., (2)	\$ 928,190
1,700	Automatic Data Processing, Inc.	66,878
3,200	Computer Sciences Corporation, (2)	112,448
10,400	Convergys Corporation, (2)	66,664
	Total IT Services	1,174,180
	Leisure Equipment & Products 0.6%	
27,700	Hasbro, Inc.	808,009
21,300	Mattel, Inc.	340,800
	Total Leisure Equipment & Products	1,148,809
	Life Sciences Tools & Services 0.1%	
2,414	Life Technologies Corporation, (2)	56,270
14,100	Perkinelmer Inc.	196,131
	Total Life Sciences Tools & Services	252,401
	Machinery 1.8%	
24,700	Caterpillar Inc.	1,103,349
17,000	Cummins Inc.	454,410
200	Danaher Corporation	11,322
4,900	Deere & Company	187,768
28,700	Dover Corporation	944,804
3,300	Flowserve Corporation	169,950
3,000	Illinois Tool Works Inc.	105,150
9,161	Ingersoll Rand Company Limited, Class A	158,943
3,700	ITT Industries Inc.	170,163
1,900	PACCAR Inc.	54,340
3,300	Pall Corporation	93,819
100	Parker Hannifin Corporation	4,254
	Total Machinery	3,458,272
	Media 1.9%	
91,400	Comcast Corporation, Class A	1,542,832
29,000	DIRECTV Group, Inc., (2)	664,390
46,700	Interpublic Group Companies, Inc., (2)	184,932

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

13,600	McGraw-Hill Companies, Inc.	315,384
14,400	New York Times, Class A	105,552
15,100	News Corporation, Class A	137,259
10,500	Scripps Networks Interactive, Class A Shares	231,000
7,200	Time Warner Inc.	72,432
18,500	Walt Disney Company	419,765
	Total Media	3,673,546
	Metals & Mining 0.6%	
20,800	AK Steel Holding Corporation	193,856
4,800	Alcoa Inc.	54,048
8,800	CONSOL Energy Inc.	251,504
6,100	Nucor Corporation	281,820
7,400	United States Steel Corporation	275,280
	Total Metals & Mining	1,056,508
	Multiline Retail 0.5%	
17,200	Big Lots, Inc., (2)	249,228
15,300	Family Dollar Stores, Inc.	398,871
2,200	J.C. Penney Company, Inc.	43,340
4,300	Kohl's Corporation, (2)	155,660
2,800	Nordstrom, Inc.	37,268
700	Target Corporation	24,171
	Total Multiline Retail	908,538
	Multi-Utilities 0.5%	
4,000	NiSource Inc.	43,880
27,700	Public Service Enterprise Group Incorporated	808,009
1,700	Wisconsin Energy Corporation	71,366
1,000	Xcel Energy, Inc.	18,550
	Total Multi-Utilities	941,805

Shares	Description (1)	Value
	Oil, Gas & Consumable Fuels 11.2%	
6,700	Apache Corporation	\$ 499,351
24,200	Chesapeake Energy Corporation	391,314
46,600	Chevron Corporation	3,447,002
33,100	ConocoPhillips	1,714,580
4,800	Devon Energy Corporation	315,408
6,700	El Paso Corporation	52,461
9,700	EOG Resources, Inc.	645,826
126,300	Exxon Mobil Corporation, Sponsored ADR	10,082,529
10,400	Hess Corporation	557,856
16,800	Marathon Oil Corporation	459,648
22,400	Massey Energy Company	308,896
6,400	Murphy Oil Corporation	283,840
16,900	Occidental Petroleum Corporation	1,013,831
5,500	Peabody Energy Corporation	125,125
18,500	Pioneer Natural Resources Company	299,330
12,700	Range Resources Corporation	436,753
16,400	Southwestern Energy Company, (2)	475,108
900	Valero Energy Corporation	19,476
5,050	XTO Energy, Inc.	178,114
	Total Oil, Gas & Consumable Fuels	21,306,448
	Paper & Forest Products 0.0%	
1,400	Weyerhaeuser Company	42,854
	Personal Products 0.3%	
8,100	Avon Products, Inc.	194,643
12,700	Estee Lauder Companies Inc., Class A	393,192
	Total Personal Products	587,835
	Pharmaceuticals 5.0%	
32,200	Abbott Laboratories	1,718,514
5,100	Bristol-Myers Squibb Company	118,575
3,400	Eli Lilly and Company	136,918
4,300	Forest Laboratories, Inc., (2)	109,521
46,600	Johnson & Johnson	2,788,078
50,200	King Pharmaceuticals Inc., (2)	533,124
96,300	Merck & Co. Inc.	2,927,520
11,800	Mylan Laboratories Inc., (2)	116,702
30,300	Pfizer Inc.	536,613
1,881	Teva Pharmaceutical Industries Limited, Sponsored ADR	80,074
500	Watson Pharmaceuticals Inc., (2)	13,285
14,100	Wyeth	528,891

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

	Total Pharmaceuticals	9,607,815
	Real Estate 2.1%	
21,238	Apartment Investment & Management Company, Class A	245,299
1,400	AvalonBay Communities, Inc.	84,812
8,600	Boston Properties, Inc.	473,000
2,000	Developers Diversified Realty Corporation	9,760
22,600	Equity Residential	673,932
28,500	Health Care Property Investors Inc.	791,445
4,600	Kimco Realty Corporation	84,088
3,100	Plum Creek Timber Company	107,694
3,400	ProLogis	47,226
14,400	Public Storage, Inc.	1,144,800
7,200	Simon Property Group, Inc.	382,536
800	Vornado Realty Trust	48,280
	Total Real Estate	4,092,872
	Real Estate Management & Development 0.1%	
21,400	CB Richard Ellis Group, Inc., Class A, (2)	92,448

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

JCE Nuveen Core Equity Alpha Fund (continued)
Portfolio of INVESTMENTS December 31, 2008

Shares	Description (1)	Value
	Road & Rail 3.7%	
23,900	Burlington Northern Santa Fe Corporation	\$ 1,809,469
56,500	CSX Corporation	1,834,555
33,600	Norfolk Southern Corporation	1,580,880
13,800	Ryder System, Inc.	535,164
28,400	Union Pacific Corporation	1,357,520
	Total Road & Rail	7,117,588
	Semiconductors & Equipment 2.5%	
35,100	Altera Corporation	586,521
17,000	Analog Devices, Inc.	323,340
6,700	Applied Materials, Inc.	67,871
12,100	Broadcom Corporation, Class A, (2)	205,337
55,300	Intel Corporation	810,698
30,300	Linear Technology Corporation	670,236
14,700	LSI Logic Corporation, (2)	48,363
39,400	Microchip Technology Incorporated	769,482
13,700	National Semiconductor Corporation	137,959
31,500	QLogic Corporation, (2)	423,360
21,100	Teradyne Inc., (2)	89,042
2,500	Texas Instruments Incorporated	38,800
38,200	Xilinx, Inc.	680,724
	Total Semiconductors & Equipment	4,851,733
	Software 2.3%	
1,300	Adobe Systems Incorporated, (2)	27,677
2,600	Akamai Technologies, Inc., (2)	39,234
8,300	BMC Software, Inc., (2)	223,353
36,800	Compuware Corporation, (2)	248,400
3,400	Intuit Inc., (2)	80,886
81,600	Microsoft Corporation	1,586,304
70,000	Oracle Corporation, (2)	1,241,100
5,600	Salesforce.com, Inc., (2)	179,256
39,700	Symantec Corporation, (2)	536,744
16,000	VeriSign, Inc., (2)	305,280
	Total Software	4,468,234
	Specialty Retail 2.0%	

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

200	Abercrombie & Fitch Co., Class A	4,614
7,100	AutoNation Inc., (2)	70,148
3,300	AutoZone, Inc., (2)	460,251
3,700	Bed Bath and Beyond Inc., (2)	94,054
2,700	Best Buy Co., Inc.	75,897
1,100	GameStop Corporation, (2)	23,826
8,700	Gap, Inc.	116,493
31,600	Home Depot, Inc.	727,432
8,500	Limited Brands, Inc.	85,340
25,500	Lowe's Companies, Inc.	548,760
4,300	RadioShack Corporation	51,342
42,600	Staples, Inc.	763,392
2,900	Tiffany & Co.	68,527
32,000	TJX Companies, Inc.	658,240
	Total Specialty Retail	3,748,316
	Textiles, Apparel & Luxury Goods 1.1%	
13,700	Coach, Inc., (2)	284,549
16,500	Jones Apparel Group, Inc.	96,690
21,200	Nike, Inc., Class B	1,081,200
5,000	Polo Ralph Lauren Corporation	227,050
7,400	VF Corporation	405,298
	Total Textiles, Apparel & Luxury Goods	2,094,787
	Thriffs & Mortgage Finance 0.7%	
78,700	Hudson City Bancorp, Inc.	1,256,052
5,300	People's United Financial, Inc.	94,499
	Total Thriffs & Mortgage Finance	1,350,551

Shares	Description (1)		Value
	Tobacco 0.9%		
26,400	Altria Group, Inc.		\$ 397,584
28,100	Philip Morris International		1,222,631
1,000	UST Inc.		69,380
	Total Tobacco		1,689,595
	Trading Companies & Distributors 0.1%		
2,600	W.W. Grainger, Inc.		204,984
	Total Common Stocks (cost \$228,978,492)		184,309,892

Principal Amount (000)	Descriptions (1)	Coupon	Maturity	Ratings (3)	Value
	U.S. Government and Agency Obligations 3.2%				
\$ 6,000	U.S. Treasury Bills (4)	0.000%	3/05/09	Aaa	\$ 5,999,100
	Total U.S. Government and Agency Obligations (cost \$5,993,805)				5,999,100

Principal Amount (000)	Description (1)	Coupon	Maturity	Value
	Short-Term Investments 1.9%			
\$ 3,658	Repurchase Agreement with State Street Bank, dated 12/31/08, repurchase price \$3,657,567, collateralized by \$3,740,000 U.S. Treasury Bills, 0.000%, due 7/30/09, value \$3,734,390	0.010%	1/02/09	\$ 3,657,565
	Total Short-Term Investments (cost \$3,657,565)			3,657,565
	Total Investments (cost \$238,629,862) 101.5%			193,966,557

Number	Notional	Expiration	Strike
--------	----------	------------	--------

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

of Contracts	Type	Amount (5)	Date	Price	Value
	Call Options Written (1.8)%				
(375,956)	Custom Basket 1 NASDAQ	\$ (37,595,553)	1/22/09	\$ 105.0	\$ (1,842,896)
(384,220)	Custom Basket 3 NASDAQ	(38,422,039)	2/05/09	105.0	(1,553,288)
(760,176)	Total Call Options Written (premium received \$3,607,076)	(76,017,592)			(3,396,184)
	Other Assets Less Liabilities 0.3%				609,452
	Net Assets 100%				\$ 191,179,825

Investments in Derivatives

Futures Contracts outstanding at December 31, 2008:

Type	Contract Position	Number of Contracts	Contract Expiration	Value at December 31, 2008	Unrealized Appreciation (Depreciation)
S&P 500 Index	Long	150	3/09	\$6,750,750	\$ 110,925

- (1) All percentages shown in Portfolio or Investments are based on net assets.
 - (2) Non-income producing.
 - (3) Ratings (not covered by the report of independent registered public accounting firm): 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.
- ADR American Depositary Receipt.

See accompanying notes to financial statements.

Statement of
ASSETS & LIABILITIES

December 31, 2008

Assets

Investments, at value (cost \$238,629,862)	\$ 193,966,557
Cash	493,725
Deposits with brokers for open futures contracts	98,062
Receivables:	
Dividends	453,006
Investments sold	6,027,800
Variation margin on futures contracts	89,250
Other assets	5,969
Total assets	201,134,369

Liabilities

Call options written, at value (premiums received \$3,607,076)	3,396,184
Payable for investments purchased	6,188,976
Accrued expenses:	
Management fees	149,603
Other	219,781
Total liabilities	9,954,544

Net assets	\$ 191,179,825
Shares outstanding	16,288,886
Net asset value per share outstanding	\$ 11.74

Net assets consist of:

Shares, \$.01 par value per share	\$ 162,889
Paid-in surplus	271,125,809
Undistributed (Over-distribution of) net investment income	(5,065)
Accumulated net realized gain (loss) from investments, foreign currency and derivative transactions	(35,762,320)
Net unrealized appreciation (depreciation) of investments and derivative transactions	(44,341,488)
Net assets	\$ 191,179,825
Authorized shares	Unlimited

See accompanying notes to financial statements.

Statement of
OPERATIONS

Year Ended December 31, 2008

Investment Income

Dividends (net of foreign tax withheld of \$682)	\$ 5,275,715
Interest	232,594
Total investment income	5,508,309

Expenses

Management fees	2,412,678
Shareholders' servicing agent fees and expenses	307
Custodian's fees and expenses	195,543
Trustees' fees and expenses	5,305
Professional fees	61,017
Shareholders' reports' printing and mailing expenses	73,740
Stock exchange listing fees	9,531
Investor relations expense	38,829
Other expenses	53,296
Total expenses before custodian fee credit	2,850,246
Custodian fee credit	(6,128)
Net expenses	2,844,118
Net investment income	2,664,191

Realized and Unrealized Gain (Loss)

Net realized gain (loss) from:	
Investments and foreign currency	(55,623,396)
Call options written	25,413,109
Futures	(5,099,570)
Change in net unrealized appreciation (depreciation) of:	
Investments	(55,356,228)
Call options written	(3,236,572)
Futures	507,899
Net realized and unrealized gain (loss)	(93,394,758)
Net increase (decrease) in net assets from operations	\$ (90,730,567)

See accompanying notes to financial statements.

Statement of
CHANGES in NET ASSETS

	Year Ended 12/31/08	For the Period 3/27/2007 (commencement of operations) through 12/31/07
Operations		
Net investment income	\$ 2,664,191	\$ 2,429,993
Net realized gain (loss) from:		
Investments and foreign currency	(55,623,396)	(3,166,043)
Call options written	25,413,109	1,927,754
Futures	(5,099,570)	589,158
Change in net unrealized appreciation (depreciation) of:		
Investments	(55,356,228)	10,692,923
Call options written	(3,236,572)	3,447,464
Futures	507,899	(396,974)
Net increase (decrease) in net assets from operations	(90,730,567)	15,524,275
Distributions to Shareholders		
From net investment income	(2,546,797)	(2,351,291)
Tax return of capital	(21,944,111)	(18,846,940)
Decrease in net assets from distributions to shareholders	(24,490,908)	(21,198,231)
Capital Share Transactions		
Proceeds from sale of shares, net of offering costs adjustments	(6,968)	311,671,189
Proceeds from shares issued to shareholders due to reinvestment of distributions		2,215,645
Cost of shares repurchased	(1,469,116)	(435,578)
Net increase (decrease) in net assets from capital share transactions	(1,476,084)	313,451,256
Net increase (decrease) in net assets	(116,697,559)	307,777,300
Net assets at the beginning of period	307,877,384	100,084
Net assets at the end of period	\$ 191,179,825	\$ 307,877,384
Undistributed (Over-distribution of) net investment income at the end of period	\$ (5,065)	\$ (2,465)

See accompanying notes to financial statements.

Notes to
FINANCIAL STATEMENTS

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.

Prior to the commencement of operations, the Fund had no operations other than those related to organizational matters, the initial capital contribution of \$100,084 by Nuveen Asset Management (the Adviser), a wholly owned subsidiary of Nuveen Investments, Inc. (Nuveen), the recording of the organization expenses (\$11,000) and their reimbursement by Nuveen Investments, LLC, also a wholly owned subsidiary of Nuveen.

Effective October 28, 2008, the Fund's sub-adviser, Enhanced Investment Technologies, LLC changed its name to INTECH Investment Management LLC (INTECH).

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.

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). Further, 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.

Notes to
FINANCIAL STATEMENTS (continued)

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 corporate income tax regulations, which may differ from accounting principles generally accepted in the United States.

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 accompanying financial statements.

Foreign Currency Transactions

The Fund is authorized to engage in foreign currency exchange transactions, including foreign currency forward, futures, options and swap contracts. To the extent that the Fund invests in securities and/or contracts that are denominated in a currency other than U.S. 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 Realized gain (loss) from investments and foreign currency on the Statement of Operations.

Futures Contracts

The Fund is authorized to invest in futures contracts. 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. Subsequent payments (variation margin) are made or received by the Fund each day, depending on the daily fluctuation of the value of the contract.

During the period the futures contract is open, changes in the value of the contract are recognized as an unrealized gain or loss by marking-to-market on a daily basis to reflect the changes in market value of the contract. 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. Cash held by the broker to cover initial margin requirements on open futures contracts, if any, is recognized on the Statement of Assets and Liabilities. Additionally, the Statement of Assets and Liabilities reflects a receivable or payable for the variation margin, when applicable.

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.

Options Transactions

The Fund is authorized to write (sell) call options, primarily on custom baskets of securities. When the Fund writes a call option, an amount equal to the net premium received (the premium less commission) is recorded as a liability 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. 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 on effecting a closing purchase transaction, including commission, is treated as a net realized gain on option contracts written or, if the net premium received is less than the amount paid, as a net realized loss on option contracts written. 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.

Market and Credit Risk

In the normal course of business the Fund invests in financial instruments and enters 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 (credit risk). Similar to credit risk, the Fund may be exposed to counterparty risk, or the risk that an institution or other entity with which the Fund has unsettled or open transactions will default. The potential loss could exceed the value of the financial assets recorded on the financial statements. Financial assets, which potentially expose the Fund to credit risk, consist principally of cash due from counterparties on forward, option and swap transactions. The extent of the Fund's exposure to credit and counterparty risks in respect to these financial assets approximates their carrying value as recorded on the Statement of Assets and Liabilities.

The Fund helps manage credit risk by entering into agreements only with counterparties the Adviser believes have the financial resources to honor their obligations and by having the Adviser monitor the financial stability of the counterparties. Additionally, all counterparties are 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.

Organization and Offering Costs

Nuveen Investments, LLC has agreed to reimburse all organization expenses (approximately \$11,000) and pay all offering costs (other than the sales load) that exceed \$.04 per share. The Fund's share of offering costs of \$620,779 was recorded as a reduction of the proceeds from the sale of shares.

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

Notes to
FINANCIAL STATEMENTS (continued)

financial statements and the reported amounts of increases and decreases in net assets from operations during the reporting period. Actual results may differ from those estimates.

2. Fair Value Measurements

During the current fiscal period, the Fund adopted the provisions of Statement of Financial Accounting Standards No. 157 (SFAS No. 157) Fair Value Measurements. SFAS No. 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, and expands disclosure about 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 December 31, 2008:

	Level 1	Level 2	Level 3	Total
Investments	\$ 193,966,557	\$	\$	\$ 193,966,557
Derivatives*	110,925			110,925
Call options written		(3,396,184)		(3,396,184)
Total	\$ 194,077,482	\$ (3,396,184)	\$	\$ 190,681,298

* Represents net unrealized appreciation (depreciation). Derivatives may include open futures, forwards and swap contracts. See Investments in Derivatives in the Portfolio Investments.

3. 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:

	Year Ended 12/31/08	For the Period 3/27/07 (commencement of operations) through 12/31/07
Shares sold		16,350,000
Shares issued to shareholders due to reinvestment of distributions		116,246
Shares repurchased	(155,100)	(27,500)
	(155,100)	16,438,746
Weighted average price per share repurchased	\$9.45	\$15.82
Weighted average discount per share repurchased	20.69%	14.14%

4. Investment Transactions

Purchases and sales (including maturities but excluding short-term investments, call options written and derivative transactions) during the fiscal year ended December 31, 2008, were as follows:

Purchases:	
Investment securities	\$217,439,429
U.S. Government and agency obligations	11,944,191
Sales and maturities:	
Investment securities	214,606,215
U.S. Government and agency obligations	5,991,453

Transactions in call options written during the fiscal year ended December 31, 2008, were as follows:

	Number of Contracts	Premiums Received
Outstanding, beginning of year	1,404,575	\$ 5,916,687
Call options written	9,970,988	32,245,066
Call options terminated in closing purchase transactions	(4,169,927)	(12,832,173)
Call options expired	(6,445,460)	(21,722,504)
Outstanding, end of year	760,176	\$ 3,607,076

5. 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 December 31, 2008, the cost of investments (excluding call options written) was as follows:

Cost of investments	\$ 244,629,548
---------------------	----------------

Gross unrealized appreciation and gross unrealized depreciation of investments (excluding call options written) at December 31, 2008, were as follows:

Gross unrealized:	
Appreciation	\$ 2,383,010
Depreciation	(53,046,001)
Net unrealized appreciation (depreciation) of investments	\$ (50,662,991)

The tax components of undistributed net ordinary income and net long-term capital gains at December 31, 2008, the Fund's 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.

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

The tax character of distributions paid during the Fund's tax years ended December 31, 2007 and December 31, 2008, was designated for purposes of the dividends paid deduction as follows:

2008

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

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

Distributions from net ordinary income *	\$ 2,351,291
Tax return of capital	18,846,940

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

At December 31, 2008, the Fund's 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 following fiscal year.

6. 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

Notes to
FINANCIAL STATEMENTS (continued)

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 Assets of the Fund as follows:

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

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 assets managed as stated in the following table. As of December 31, 2008, the complex-level fee rate was .2000%.

The complex-level fee schedule is as follows:

Complex-Level 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 net assets of all Nuveen funds, with such daily net assets to include assets attributable to preferred stock issued by or borrowings by such funds (Managed Assets) but to exclude assets attributable to investments in other Nuveen funds.

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, 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.

7. New Accounting Pronouncement

Financial Accounting Standards Board Statement of Financial Accounting Standards No. 161 (SFAS No. 161)

In March 2008, the FASB issued 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 understand: a) how and why a fund uses derivative instruments, b) how derivative instruments and related hedge items are accounted for, and c) how derivative instruments and related hedge items affect a fund's financial position, results of operations and cash flows. SFAS No. 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008. As of December 31, 2008, management does not believe the adoption of SFAS No. 161 will impact the financial statement amounts; however, additional footnote disclosures may be required about the use of derivative instruments and hedging items.

Financial
HIGHLIGHTS

Financial
HIGHLIGHTS

Selected data for a share outstanding throughout each period:

Year Ended 12/31:	Beginning Net Asset Value	Investment Operations		Less Distributions					Ending Net Asset Value	Ending Market Value	
		Net Investment Income(a)	Realized/ Unrealized Gain (Loss)	Net Investment Total	Capital Income	Gains	Tax Return of Capital	Offering Total Costs			
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

Total Returns		Ratios/Supplemental Data					
		Ratios to Average Net Assets			Ratios to Average Net Assets After Credit***		
Based on Market Value**	Based on Net Asset Value**	Ending Net Assets (000)	Before Credit Expenses	Net Investment Income	Net Investment Expenses	Net Investment Income	Portfolio Turnover Rate
(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.

(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.

See accompanying notes to financial statements.

Board Members & OFFICERS

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

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

INDEPENDENT BOARD MEMBERS:

n ROBERT P. BREMNER

8/22/40 i Chairman of
333 W. Wacker the Board
Drive and Board member
Chicago, IL 60606

1997
Class III

Private Investor and
Management Consultant.

192

n JACK B. EVANS

10/22/48 i Board member
333 W. Wacker
Drive
Chicago, IL 60606

1999
Class III

President, The Hall-Perrine
Foundation, a private
philanthropic corporation (since
1996); Director and Vice
Chairman, United Fire Group, a
publicly held company; Member
of the Board of Regents for the
State of Iowa University
System; Director, Gazette
Companies; Life Trustee of Coe
College and Iowa College
Foundation; Member of the
Advisory Council of the
Department of Finance in the
Tippie College of Business,
University of Iowa; formerly,
Director, Alliant Energy;

192

formerly, Director, Federal Reserve Bank of Chicago; formerly, President and Chief Operating Officer, SCI Financial Group, Inc., a regional financial services firm.

n WILLIAM C. HUNTER

3/6/48 i
333 W. Wacker Board member
Drive
Chicago, IL 60606

**2004
Annual**

Dean, Tippie College of Business, University of Iowa (since July 2006); formerly, Dean and Distinguished Professor of Finance, School of Business at the University of Connecticut (2003-2006); previously, Senior Vice President and Director of Research at the Federal Reserve Bank of Chicago (1995-2003); Director (since 1997), Credit Research Center at Georgetown University; Director (since 2004) of Xerox Corporation; Director (since 2005), Beta Gamma Sigma International Honor Society; Director, SS&C Technologies, Inc. (May 2005-October 2005).

192

Name, Birthdate and Address	Position(s) Held with the Fund	Year First Elected or Appointed and Term ⁽¹⁾	Principal Occupation(s) Including other Directorships During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Board Member
INDEPENDENT BOARD MEMBERS (continued):				
n DAVID J. KUNDERT 10/28/42 333 W. Wacker Drive Chicago, IL 60606	Board member	2005 Class II	Director, Northwestern Mutual Wealth Management Company; Retired (since 2004) as Chairman, JPMorgan Fleming Asset Management, President and CEO, Banc One Investment Advisors Corporation, and President, One Group Mutual Funds; prior thereto, Executive Vice President, Banc One Corporation and Chairman and CEO, Banc One Investment Management Group; Member, Board of Regents, Luther College; member of the Wisconsin Bar Association; member of Board of Directors, Friends of Boerner Botanical Gardens; member of Investment Committee, Greater Milwaukee Foundation.	192
n WILLIAM J. SCHNEIDER 9/24/44 333 W. Wacker Drive Chicago, IL 60606	Board member	1997 Annual	Chairman, formerly, Senior Partner and Chief Operating Officer (retired, 2004) of Miller-Valentine Partners Ltd., a real estate investment company; Director, Dayton Development Coalition; formerly, member, Business Advisory Council, Cleveland Federal Reserve Bank.	192
n JUDITH M. STOCKDALE 12/29/47 333 W. Wacker Drive Chicago, IL 60606	Board member	1997 Class I	Executive Director, Gaylord and Dorothy Donnelley Foundation (since 1994); prior thereto, Executive Director, Great Lakes	192

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

Protection Fund (from 1990 to 1994).

n CAROLE E. STONE
6/28/47
333 W. Wacker Drive
Chicago, IL 60606

ï

Board member

2007
Class I

Director, Chicago Board Options Exchange (since 2006); Commissioner, New York State Commission on Public Authority Reform (since 2005); formerly, Chair New York Racing Association Oversight Board (2005-2007); formerly, Director, New York State Division of the Budget (2000-2004), Chair, Public Authorities Control Board (2000-2004) and Director, Local Government Assistance Corporation (2000-2004).

192

n TERENCE J. TOTH
9/29/59
333 W. Wacker Drive
Chicago, IL 60606

ï

Board member

2008
Class II

Director, Legal & General Investment Management (since 2008); Private Investor (since 2007); CEO and President, Northern Trust Investments (2004-2007); Executive Vice President, Quantitative Management & Securities Lending (2004-2007); prior thereto, various positions with Northern Trust Company (since 1994); Member: Goodman Theatre Board (Since 2004); Chicago Fellowship Boards (since 2005), University of Illinois Leadership Council Board (since 2007) and Catalyst Schools of Chicago Board (since 2008); formerly Member: Northern Trust Mutual Funds Board (2005-2007), Northern Trust Japan Board (2004-2007), Northern Trust Securities Inc. Board (2003-2007) and Northern Trust Hong Kong Board (1997-2004).

192

INTERESTED BOARD MEMBER:

n JOHN P. AMBOIAN⁽²⁾

ï

192

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

6/14/61
333 W. Wacker Drive
Chicago, IL 60606

Board member

2008
Class II

Chief Executive Officer (since July 2007) and Director (since 1999) of Nuveen Investments, Inc.; Chief Executive Officer (since 2007) of Nuveen Asset Management, Rittenhouse Asset Management, Nuveen Investments Advisors, Inc. formerly, President (1999-2004) of Nuveen Advisory Corp. and Nuveen Institutional Advisory Corp.⁽³⁾

33

Name, Birthdate and Address	Position(s) Held with the Fund	Year First Elected or Appointed ⁽⁴⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Officer
OFFICERS of the FUND:				
n GIFFORD R. ZIMMERMAN 9/9/56 333 W. Wacker Drive Chicago, IL 60606	i Chief Administrative Officer	1988	Managing Director (since 2002), Assistant Secretary and Associate General Counsel of Nuveen Investments, LLC; Managing Director (since 2002), Associate General Counsel and Assistant Secretary, of Nuveen Asset Management; Vice President and Assistant Secretary of NWQ Investment Management Company, LLC. (since 2002), Nuveen Investments Advisers Inc. (since 2002), Symphony Asset Management LLC, and NWQ Investment Management Company, LLC (since 2003), Tradewinds Global Investors, LLC, and Santa Barbara Asset Management, LLC (since 2006), Nuveen HydePark Group LLC and Nuveen Investment Solutions, Inc. (since 2007); Managing Director, Associate General Counsel and Assistant Secretary of Rittenhouse Asset Management, Inc. (since 2003); Managing Director (since 2004)	192

and Assistant Secretary (since 1994) of Nuveen Investments, Inc.; formerly, Managing Director (2002-2004), General Counsel (1998-2004) and Assistant Secretary of Nuveen Advisory Corp. and Nuveen Institutional Advisory Corp.⁽³⁾; Chartered Financial Analyst.

<p>n WILLIAM ADAMS IV 6/9/55 i 333 W. Wacker Drive Chicago, IL 60606</p>	<p>Vice President</p>	<p>2007</p>	<p>Executive Vice President of Nuveen Investments, Inc.; Executive Vice President, U.S. Structured Products of Nuveen Investments, LLC, (since 1999), prior thereto, Managing Director of Structured Investments.</p>	<p>120</p>
<p>n CEDRIC H. ANTOSIEWICZ 1/11/62 i 333 W. Wacker Drive Chicago, IL 60606</p>	<p>Vice President</p>	<p>2007</p>	<p>Managing Director, (since 2004) previously, Vice President (1993-2004) of Nuveen Investments, LLC.</p>	<p>120</p>
<p>n MICHAEL T. ATKINSON 2/3/66 i 333 W. Wacker Drive Chicago, IL 60606</p>	<p>Vice President and Assistant Secretary</p>	<p>2000</p>	<p>Vice President (since 2002) of Nuveen Investments, LLC; Vice President of Nuveen Asset Management (since 2005).</p>	<p>192</p>
<p>n LORNA C. FERGUSON 10/24/45 i 333 W. Wacker Drive Chicago, IL 60606</p>	<p>Vice President</p>	<p>1998</p>	<p>Managing Director (since 2004), formerly, Vice President of Nuveen Investments, LLC, Managing Director (since 2005) of Nuveen Asset</p>	<p>192</p>

Management;
 Managing Director
 (2004-2005) formerly,
 Vice President
 (1998-2004) of Nuveen
 Advisory Corp. and
 Nuveen Institutional
 Advisory Corp.⁽³⁾

n STEPHEN D. FOY
 5/31/54
 333 W. Wacker Drive
 Chicago, IL 60606

ï Vice President
 and Controller

1998

Vice President (since
 1993) and Funds
 Controller (since 1998)
 of Nuveen Investments,
 LLC; formerly, Vice
 President and Funds
 Controller (1998-2004)
 of Nuveen Investments,
 Inc.; Certified Public
 Accountant.

192

n WALTER M. KELLY
 2/24/70
 333 W. Wacker Drive
 Chicago, IL 60606

ï Chief Compliance
 Officer and
 Vice President

2003

Senior Vice President
 (since 2008), Vice
 President (2006-2008)
 formerly, Assistant
 Vice President and
 Assistant General
 Counsel (2003-2006) of
 Nuveen Investments,
 LLC; Vice President
 (since 2006) and
 Assistant Secretary
 (since 2008) of Nuveen
 Asset Management.

192

Name, Birthdate and Address	Position(s) Held with the Fund	Year First Elected or Appointed ⁽⁴⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Officer
OFFICERS of the FUND (continued):				
n DAVID J. LAMB 3/22/63 333 W. Wacker Drive Chicago, IL 60606	i Vice President	2000	Vice President (since 2000) of Nuveen Investments, LLC; Vice President of Nuveen Asset Management (since 2005); Certified Public Accountant.	192
n TINA M. LAZAR 8/27/61 333 W. Wacker Drive Chicago, IL 60606	i Vice President	2002	Vice President of Nuveen Investments, LLC (since 1999); Vice President of Nuveen Asset Management (since 2005).	192
n LARRY W. MARTIN 7/27/51 333 W. Wacker Drive Chicago, IL 60606	i Vice President and Assistant Secretary	1988	Vice President, Assistant Secretary and Assistant General Counsel of Nuveen Investments, LLC; Vice President (since 2005) and Assistant Secretary of Nuveen Investments, Inc.; Vice President (since 2005) and Assistant Secretary (since 1997) of Nuveen Asset Management; Vice President (since 2000), Assistant Secretary and Assistant General Counsel (since 1998) of Rittenhouse Asset Management, Inc.; Vice President and Assistant Secretary of Nuveen Investments Advisers Inc. (since 2002); NWQ Investment Management	192

Company, LLC (since 2002), Symphony Asset Management LLC (since 2003), Tradewinds Global Investors, LLC, Santa Barbara Asset Management LLC (since 2006) and of Nuveen HydePark Group, LLC and Nuveen Investment Solutions, Inc. (since 2007); formerly, Vice President and Assistant Secretary of Nuveen Advisory Corp. and Nuveen Institutional Advisory Corp.⁽³⁾

n KEVIN J. MCCARTHY

3/26/66 i Vice President
333 W. Wacker and Secretary
Drive
Chicago, IL 60606

2007

Managing Director (since 2008), formerly, Vice President (2007-2008), Nuveen Investments, LLC; Vice President, and Assistant Secretary, Nuveen Asset Management, Rittenhouse Asset Management, Inc., Nuveen Investment Advisers Inc., Nuveen Investment Institutional Services Group LLC, NWQ Investment Management Company, LLC, Tradewinds Global Investors LLC, NWQ Holdings, LLC, Symphony Asset Management LLC, Santa Barbara Asset Management LLC, Nuveen HydePark Group, LLC and Nuveen Investment Solutions, Inc. (since 2007); prior thereto, Partner, Bell, Boyd & Lloyd LLP (1997-2007).

192

n JOHN V. MILLER

4/10/67 i Vice President
333 W. Wacker

2007

Managing Director (since 2007), formerly, Vice

192

Drive
Chicago, IL 60606

President (2002-2007) of
Nuveen Asset
Management and Nuveen
Investments, LLC;
Chartered Financial
Analyst.

n CHRISTOPHER M. ROHRBACHER

8/1/71 i Vice President **2008**
333 W. Wacker and Assistant Secretary
Drive
Chicago, IL 60606

Vice President, Nuveen
Investments, LLC (since
2008); Vice President and
Assistant Secretary,
Nuveen Asset
Management (since 2008); **192**
prior thereto, Associate,
Skadden, Arps, Slate
Meagher & Flom LLP
(2002-2008).

n JAMES F. RUANE

7/3/62 i Vice President **2007**
333 W. Wacker and Assistant Secretary
Drive
Chicago, IL 60606

Vice President, Nuveen
Investments, LLC (since
2007); prior thereto,
Partner, Deloitte &
Touche USA LLP **192**
(2005-2007), formerly,
senior tax manager
(2002-2005); Certified
Public Accountant.

Name, Birthdate and Address	Position(s) Held with the Fund	Year First Elected or Appointed ⁽⁴⁾	Principal Occupation(s) During Past 5 Years	Number of Portfolios in Fund Complex Overseen by Officer
OFFICERS of the FUND (continued):				
n MARK L. WINGET 12/21/68 333 W. Wacker Drive Chicago, IL 60606	i Vice President and Assistant Secretary	2008	Vice President, Nuveen Investments, LLC (since 2008); Vice President and Assistant Secretary, Nuveen Asset Management (since 2008); prior thereto, Counsel, Vedder Price P.C. (1997-2007).	192

- (1) Board Members serve three year terms. The Board of Trustees is divided into three classes, Class I, Class II, and Class III, with each being elected to serve until the third succeeding annual shareholders meeting subsequent to its election or thereafter in each case when its respective successors are duly elected or appointed. The first year elected or appointed represents the year in which the board member was first elected or appointed to any fund in the Nuveen Complex.
- (2) Mr. Amboian is an interested trustee because of his position with Nuveen Investments, Inc. and certain of its subsidiaries, which are affiliates of the Nuveen Funds.
- (3) Nuveen Advisory Corp. and Nuveen Institutional Advisory Corp. were reorganized into Nuveen Asset Management, effective January 1, 2005.
- (4) Officers serve one year terms through July of each year. The year first elected or appointed represents the year in which the Officer was first elected or appointed to any fund in the Nuveen Complex.

Reinvest Automatically
EASILY and CONVENIENTLY

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

Nuveen Closed-End Funds 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.

40

NOTES

41

42

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

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 155,100 shares of its common stock. Any future repurchases will be reported to shareholders in the next annual or semi-annual report.

Other Useful INFORMATION

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, 2008, and (iii) a description of the policies and procedures that the Fund used to determine how to vote proxies relating to portfolio securities without charge, upon request, by calling Nuveen Investments toll-free at (800) 257-8787 or on Nuveen's website at www.nuveen.com.

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

CEO Certification Disclosure

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

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

Distribution Information

Nuveen Core Equity Alpha Fund (JCE) hereby designates 100% of dividends paid from net ordinary income as dividends qualifying for the 70% dividends received deduction for corporations and 100% as qualified dividend income for individuals under Section 1(h)(11) of the Internal Revenue Code. The actual qualified dividend income distributions will be reported to shareholders on Form 1099-DIV which will be sent to shareholders shortly after calendar year end.

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. In total, the Company managed approximately \$134 billion of assets on September 30, 2008.

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

EAN-I-1208D

ITEM 2. CODE OF ETHICS.

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

ITEM 3. AUDIT COMMITTEE FINANCIAL EXPERT.

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

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

ITEM 4. PRINCIPAL ACCOUNTANT FEES AND SERVICES.

Nuveen Core Equity Alpha Fund

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

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

SERVICES THAT THE FUND'S AUDITOR BILLED TO THE FUND

Fiscal Year Ended	Audit Fees Billed to Fund¹	Audit-Related Fees Billed to Fund²	Tax Fees Billed to Fund³	All Other Fees Billed to Fund⁴
December 31, 2008	\$ 19,231	\$ 0	\$ 2,750	\$ 0
Percentage approved pursuant to pre-approval exception	0%	0%	0%	0%
December 31, 2007 ⁴	\$ 24,130	\$ 0	\$ 0	\$ 0

Percentage approved pursuant to pre-approval exception	0%	0%	0%	0%
--	----	----	----	----

1 Audit Fees are the aggregate fees billed for professional services for the audit of the Fund's annual financial statements and services provided in connection with statutory and regulatory filings or engagements.

2 Audit Related Fees are the aggregate fees billed for assurance and related services reasonably related to the performance of the audit or review of financial statements and are not reported under Audit Fees.

3 Tax Fees are the aggregate fees billed for professional services for tax advice, tax compliance, and tax planning.

4 The Fund commenced operations

March 27, 2007.

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

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

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

Fiscal Year Ended	Audit-Related Fees Billed to Adviser and Affiliated Fund Service Providers	Tax Fees Billed to Adviser and Affiliated Fund Service Providers	All Other Fees Billed to Adviser and Affiliated Fund Service Providers
December 31, 2008	\$ 0	\$ 0	\$ 0
Percentage approved pursuant to pre-approval exception	0%	0%	0%
December 31, 2007 ¹	\$ 0	\$ 0	\$ 0
Percentage approved pursuant to pre-approval exception	0%	0%	0%

¹ The Fund commenced operations March 27, 2007.

NON-AUDIT SERVICES

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

Fiscal Year Ended	Total Non-Audit Fees Billed to Fund	Total Non-Audit Fees billed to Adviser and Affiliated Fund Service Providers (engagements related directly to the operations and financial reporting of the Fund)		Total Non-Audit Fees billed to Adviser and Affiliated Fund Service Providers (all other engagements)	Total
December 31, 2008	\$ 2,750	\$ 0	\$ 0	\$ 0	\$2,750
December 31, 2007 ¹	\$ 0	\$ 0	\$ 0	\$ 0	\$ 0

¹ The Fund commenced operations March 27, 2007.

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

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

ITEM 5. AUDIT COMMITTEE OF LISTED REGISTRANTS.

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

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.

Nuveen Asset Management (NAM) is the registrant's investment adviser (NAM is also referred to as the "Adviser.") NAM, as Adviser, provides discretionary investment advisory services. NAM is responsible for the selection and on-going monitoring of the Fund's investment portfolio, managing the Fund's business affairs and providing certain clerical, bookkeeping and administrative services. The Adviser has engaged INTECH Investment Management LLC (formerly, Enhanced Investment Technologies, LLC) ("INTECH") as Sub-Adviser to provide discretionary investment advisory services (INTECH is also referred to as "Sub-Adviser"). As part of these services, the Adviser has also delegated to the Sub-Adviser the full responsibility for proxy voting on securities held in its portfolio and related duties in accordance with the Sub-Adviser's policy and procedures. The Adviser periodically will monitor the Sub-Adviser's voting to ensure that they are carrying out their duties. The Adviser's and each Sub-Adviser's proxy voting policies and procedures are summarized as follows:

NAM

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

INTECH

The Fund is responsible for voting proxies on securities held in its portfolio. When the Fund receives a proxy, the decision regarding how to vote such proxy will be made by INTECH in accordance with its proxy voting procedures. INTECH has engaged Risk Metrics Group (formerly Institutional Shareholder Services, ("RMG")) to vote all Fund proxies in accordance with the RMG Benchmark Proxy Voting Guidelines ("RMG Recommendations"). Concurrent with the adoption of these procedures, INTECH will not accept direction in the voting of proxies for which it has voting responsibility from any person or organization other than the RMG Recommendations. INTECH has adopted procedures and controls to avoid conflicts of interest that may arise in connection with proxy voting.

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

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

NAM, as Adviser, provides discretionary investment advisory services. NAM is responsible for the selection and on-going monitoring of the Fund's investment portfolio, managing the Fund's business affairs and providing certain clerical, bookkeeping and administrative services. The Adviser has engaged INTECH as Sub-Adviser to provide discretionary investment advisory services. The following section provides information on the portfolio managers at the Adviser as well as the Sub-Adviser:

NAM

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

Messrs. Rob A. Guttschow, CFA and John Gambla, CFA are primarily responsible for the day-to-day management of the registrant's portfolio (Portfolio Manager) since 2007.

Mr. Guttschow is a Managing Director of Nuveen HydePark Group, LLC (HydePark) and NAM. Mr. Guttschow joined NAM in May 2004 to develop and implement a derivative overlay capability. Mr. Guttschow then joined Nuveen HydePark Group LLC in September 2007, while retaining his Managing Director status with Nuveen Asset Management. Mr. Guttschow was a Managing Director and Senior Portfolio Manager at Lotsoff Capital Management (LCM) from 1993 until 2004. While at LCM, Mr. Guttschow managed a variety of taxable fixed income portfolios and enhanced equity index products totaling \$1.5 billion. Mr. Guttschow is a Chartered Financial Analyst (CFA) and a member of the Association for Investment Management Research. He has served as a member of the TRIAD group for the Investment Analyst Society of Chicago. Education: University of Illinois at Urbana/Champaign, B.S., M.B.A., CFA.

Mr. Gambla is a Managing Director of HydePark and a Managing Director at NAM, since 2007. He is responsible for designing and maintaining equity and alternative investment portfolios. Prior to this, he was a Senior Trader and Quantitative Specialist for NAM (since 2003), and a Portfolio Manager for Nuveen's closed-end fund managed account. Additional responsibilities included quantitative research and product development. Mr. Gambla joined Nuveen in 1992 as an Assistant Portfolio Manager. In 1993, he became a lead Portfolio Manager responsible for seven closed-end and open-end bond funds totaling \$1.5 billion. In 1998, he became Manager of Defined Portfolio Advisory which provided fundamental research, quantitative research and trading for Nuveen's \$11 billion of equity and fixed-income Unit Trusts. Prior to his career with Nuveen, he was a Financial Analyst with Abbott Laboratories. He is a Chartered Financial Analyst, Certified Financial Risk Manager and a member of Phi Beta Kappa. Education: University of Illinois, B.A., B.S., University of Chicago, M.B.A.

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

(i) Name of Portfolio Manager	(ii) Number of Other Accounts Managed and Assets by Account Type					(iii) Number of Other Accounts and Assets for Which Advisory Fee is Performance-Based		
	Other		Other Pooled		Other Accounts	Other		Other Accounts
	Registered Investment Companies	\$	Investment Vehicles	\$		Registered Investment Companies	Investment Vehicles	
Rob A. Guttschow, CFA	\$10	804MM	2	\$12MM	14	\$306	2	\$12MM
John Gambla, CFA	\$10	\$804MM	1	\$ 1MM	14	\$306MM		

POTENTIAL MATERIAL CONFLICTS OF INTEREST

The simultaneous management of the Fund and the other registered investment companies noted above by the Portfolio Managers may present actual or apparent conflicts of interest with respect to the allocation and aggregation of securities orders placed on behalf of the Fund and the other accounts.

The Adviser has adopted several policies that address potential conflicts of interest, including best execution and trade allocation policies that are designed to ensure (1) that portfolio management is seeking the best price for portfolio securities under the circumstances, (2) fair and equitable allocation of investment opportunities among accounts over time and (3) compliance with applicable regulatory requirements. All accounts are to be treated in a non-preferential manner, such that allocations are not based upon account performance, fee structure or preference of the portfolio manager. In addition, the Adviser has adopted a Code of Conduct that sets forth policies regarding conflicts of interest.

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

Compensation. Each Portfolio Manager's compensation consists of three basic elements: base salary, cash bonus and long-term incentive compensation. The Adviser's compensation strategy is to annually compare overall compensation, including these three elements, to the market in order to create a compensation structure that is competitive and consistent with similar financial services companies. As discussed below, several factors are considered in determining each Portfolio Manager's total compensation. In any year these factors may include, among others, the effectiveness of the investment strategies recommended by the Portfolio Manager's investment team, the investment performance of the accounts managed by the Portfolio Manager's, and the overall performance of Nuveen Investments, Inc. (the parent company of the Adviser). Although investment performance is a factor in determining each Portfolio Manager's compensation, it is not necessarily a decisive factor.

Base salary. Each Portfolio Manager is paid a base salary that is set at a level determined by the Adviser in accordance with its overall compensation strategy discussed above. The Adviser is not under any current contractual obligation to increase a Portfolio Manager's base salary.

Cash bonus. Each Portfolio Manager is also eligible to receive an annual cash bonus. The level of this bonus is based upon evaluations and determinations made by each Portfolio Manager's supervisors. These reviews and evaluations often take into account a number of factors, including the effectiveness of the investment strategies recommended to the Adviser's investment team, the performance of the accounts for which he serves as portfolio manager relative to any benchmarks established for those accounts, his effectiveness in communicating investment performance to stockholders and their representatives, and his contribution to the Adviser's investment process and to the execution of investment strategies. The cash bonus component is also impacted by the overall performance of Nuveen Investments, Inc. in achieving its business objectives.

Long-term incentive compensation. Each Portfolio Manager is eligible to receive two forms of long term incentive compensation. One form is tied to the successful revenue growth of the HydePark. The second form of long term compensation is tied to the success of Nuveen Investments, Inc and its ability to grow its business as a private company.

Item 8(a)(4). OWNERSHIP OF JCE SECURITIES AS OF DECEMBER 31, 2008

Name of Portfolio Manager	None	\$1- \$10,000	\$10,001- \$50,000	\$50,001- \$100,000	\$100,001- \$500,000	\$500,001- \$1,000,000	Over \$1,000,000
Rob Guttschow	X						
John Gambla	X						

INTECH

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

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

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

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

Jason Greene, Ph.D. has been Vice President and Senior Investment Officer of INTECH since September 2006. Dr. Greene joined INTECH in September of 2006 from Georgia State University where he was a tenured Associate Professor of Finance. He was also a consultant for the Office of Economic Analysis at the Securities and Exchange Commission and an expert consultant to mutual fund advisors. Dr. Greene has published numerous articles in premier academic and practitioner journals. He is a graduate of Rhodes College, cum laude, with a B.A. in Economics and Mathematics and Indiana University with a PhD in Finance. Dr. Greene has oversight, supervisory, and support responsibility for the day-to-day implementation of the portfolio management and trading process.

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

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

In addition to managing the Equity Portfolio, Dr. Fernholz is also primarily responsible for the day-to-day portfolio management of the following accounts. Information is provided as of December 31, 2008 unless otherwise indicated:

Type of Account Managed	Number of Accounts	Assets
Registered Investment Company*	19	\$ 6,468,485,223
Other Pooled Investment	35	\$ 6,942,438,317
Other Accounts**	347	\$28,972,966,746

In addition to managing the Equity Portfolio, Dr. Banner is also primarily responsible for the day-to-day portfolio management of the following accounts. Information is provided as of December 31, 2008 unless otherwise indicated:

Type of Account Managed	Number of Accounts	Assets
Registered Investment Company*	19	\$ 6,468,485,223
Other Pooled Investment	35	\$ 6,942,438,317
Other Accounts**	347	\$28,972,966,746

In addition to managing the Equity Portfolio, Dr. Greene is also primarily responsible for the day-to-day portfolio management of the following accounts. Information is provided as of December 31, 2008 unless otherwise indicated:

Type of Account Managed	Number of Accounts	Assets
Registered Investment Company*	19	\$ 6,468,485,223
Other Pooled Investment	35	\$ 6,942,438,317
Other Accounts**	347	\$28,972,966,746

In addition to managing the Equity Portfolio, Mr. Runnels is also primarily responsible for the day-to-day portfolio management of the following accounts. Information is provided as of December 31, 2008 unless otherwise indicated:

Type of Account Managed	Number of Accounts	Assets
Registered Investment Company*	19	\$ 6,468,485,223
Other Pooled Investment	35	\$ 6,942,438,317
Other Accounts**	347	\$28,972,966,746

* 3 of the accounts included in the totals, consisting of \$324,684,996 of the total assets in the category, have performance-based advisory fees.

** 50 of the accounts included in the totals, consisting of \$5,540,091,081 of the total assets in the category, have performance-based advisory fees.

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

The management of multiple accounts may result in a portfolio manager devoting unequal time and attention to the management of each account. INTECH believes its mathematical investment process and the procedures it has in place are reasonably designed to mitigate these potential conflicts and risks. Specifically, INTECH's mathematical investment process significantly removes investment discretion.

If a portfolio manager identifies a limited investment opportunity that may be suitable for more than one account, an account may not be able to take full advantage of that opportunity due to an allocation of filled purchase or sale orders across all eligible accounts. For INTECH, all allocations are based on computer-generated target weightings and trades occur simultaneously for all accounts on a rotating basis. Before submission for execution, trades are reviewed by the trader for errors or discrepancies. Trades are submitted to designated brokers in a single electronic file at one time during the day, pre-allocated to individual clients. In the event that an aggregated order is not completely filled, executed shares are allocated to participating client accounts in proportion to the order.

INTECH has an established procedure for the selection, approval, management and annual review of broker relationships. INTECH gives primary consideration to obtaining the most favorable price and efficient execution. INTECH may, however, pay a higher commission than would otherwise be necessary for a particular transaction when, in INTECH's opinion, to do so would further the goal of obtaining the best available execution. INTECH does not participate in soft dollar or directed brokerage commission arrangements and will not accept directed brokerage instructions. INTECH has a policy of paying commissions for execution services only and does not purchase research or other services from or through brokers using commissions.

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

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

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

Salary and Cash Bonus. With respect to INTECH, the compensation structure of the investment personnel is determined by INTECH and is summarized by INTECH below. The following describes the structure and method of calculating INTECH's investment personnel's compensation as of December 31, 2008.

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

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

Item 8(a)(4). OWNERSHIP OF JCE SECURITIES AS OF DECEMBER 31, 2008

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

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 (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, 2008	0		0	1,572,500
FEBRUARY 1-29, 2008	0		0	1,572,500
MARCH 1-31, 2008	0		0	1,572,500
APRIL 1-30, 2008	0		0	1,572,500
MAY 1-31, 2008	0		0	1,572,500
JUNE 1-30, 2008	0		0	1,572,500
JULY 1-31, 2008	0		0	1,572,500
AUGUST 1-6, 2008	0		0	1,572,500
AUGUST 7-31, 2008	0		0	1,645,000
SEPTEMBER 1-30, 2008	0		0	1,645,000
OCTOBER 1-31, 2008	106,300	\$ 9.96	106,300	1,538,700
NOVEMBER 1-30, 2008	43,000	\$ 8.28	43,000	1,495,700

DECEMBER 1-31, 2008	5,800	\$ 8.71	5,800	1,489,900
TOTAL	155,100			

* The registrant's first repurchase program, which authorized the repurchase of 1,600,000 shares, was announced on November 20, 2007 and expired on August 6, 2008. A second repurchase program, which authorized the repurchase of 1,645,000 shares, was announced on 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. Letter or number the

exhibits in the sequence indicated.

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

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

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

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

SIGNATURES

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

(Registrant) Nuveen Core Equity Alpha Fund

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

Kevin J. McCarthy
Vice President and Secretary

Date: March 9, 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: March 9, 2009

By (Signature and Title) /s/ Stephen D. Foy

Stephen D. Foy
Vice President and Controller
(principal financial officer)

Date: March 9, 2009