

Nuveen Core Equity Alpha Fund
Form N-Q
November 29, 2016

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM N-Q

**QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED MANAGEMENT
INVESTMENT COMPANY**

Investment Company Act file number 811-22003

Nuveen Core Equity Alpha Fund

(Exact name of registrant as specified in charter)

333 West Wacker Drive, Chicago, Illinois 60606

(Address of principal executive offices) (Zip code)

Gifford R. Zimmerman Vice President and Secretary

333 West Wacker Drive, Chicago, Illinois 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: September 30, 2016

Form N-Q is to be used by management investment companies, other than small business investment companies registered on Form N-5 (§§ 239.24 and 274.5 of this chapter), to file reports with the Commission, not later than 60 days after the close of the first and third fiscal quarters, pursuant to rule 30b1-5 under the Investment Company Act of 1940 (17 CFR 270.30b1-5). The Commission may use the information provided on Form N-Q in its regulatory, disclosure review, inspection, and policymaking roles.

A registrant is required to disclose the information specified by Form N-Q, and the Commission will make this information public. A registrant is not required to respond to the collection of information contained in Form N-Q 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 the 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. § 3507.

Item 1. Schedule of Investments

JCE

Nuveen Core Equity Alpha Fund
Portfolio of Investments

September 30, 2016 (Unaudited)

Shares	Description (1)	Value
	LONG-TERM INVESTMENTS 98.4%	
	COMMON STOCKS 98.4%	
	Aerospace & Defense 4.2%	
3,800	L-3 Communications Holdings, Inc.	\$ 572,774
19,100	Lockheed Martin Corporation, (2)	4,578,652
7,000	Northrop Grumman Corporation	1,497,650
18,300	Raytheon Company	2,491,179
6,500	Rockwell Collins, Inc.	548,210
800	TransDigm Group Inc., (3)	231,296
	Total Aerospace & Defense	9,919,761
	Air Freight & Logistics 0.3%	
6,400	C.H. Robinson Worldwide, Inc.	450,944
4,100	Expeditors International of Washington, Inc.	211,232
	Total Air Freight & Logistics	662,176
	Airlines 1.7%	
99,300	Southwest Airlines Co., (2)	3,861,777
	Auto Components 0.3%	
15,065	Johnson Controls International PLC	700,974
	Banks 0.2%	
3,100	Comerica Incorporated	146,692
15,200	People's United Financial, Inc., (2)	240,464
	Total Banks	387,156
	Beverages 2.1%	
22,300	Constellation Brands, Inc., Class A	3,712,727
13,800	Dr. Pepper Snapple Group, (2)	1,260,078
	Total Beverages	4,972,805
	Building Products 0.2%	
1,300	Allegion PLC	89,583
4,000	Fortune Brands Home & Security	232,400
4,500	Masco Corporation	154,395
	Total Building Products	476,378
	Capital Markets 0.7%	
12,700	CME Group, Inc., (2)	1,327,404
3,400	NASDAQ Stock Market, Inc.	229,636
	Total Capital Markets	1,557,040

Chemicals 2.2%

15,300	Albemarle Corporation	1,307,997
6,500	Eastman Chemical Company	439,920
17,700	FMC Corporation	855,618
1,700	International Flavors & Fragrances Inc.	243,049
14,700	LyondellBasell Industries NV	1,185,702
7,300	PPG Industries, Inc.	754,528
1,200	Sherwin-Williams Company	331,992
	Total Chemicals	5,118,806

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

September 30, 2016 (Unaudited)

Shares	Description (1)	Value
Commercial Services & Supplies 1.3%		
9,500	Cintas Corporation	\$ 1,069,700
25,900	Republic Services, Inc.	1,306,655
10,200	Waste Management, Inc.	650,352
	Total Commercial Services & Supplies	3,026,707
Communications Equipment 0.3%		
8,400	Harris Corporation	769,524
Construction & Engineering 1.2%		
19,800	Fluor Corporation	1,016,136
23,200	Jacobs Engineering Group, Inc., (3)	1,199,904
21,900	Quanta Services Incorporated, (3)	612,981
	Total Construction & Engineering	2,829,021
Construction Materials 1.6%		
8,500	Martin Marietta Materials	1,522,435
18,400	Vulcan Materials Company	2,092,632
	Total Construction Materials	3,615,067
Consumer Finance 0.1%		
12,100	Navient Corporation	175,087
Containers & Packaging 1.5%		
15,200	Avery Dennison Corporation	1,182,408
6,300	Ball Corporation	516,285
30,400	International Paper Company	1,458,592
9,100	WestRock Company	441,168
	Total Containers & Packaging	3,598,453
Distributors 0.3%		
7,000	Genuine Parts Company	703,150
2,800	LKQ Corporation, (3)	99,288
	Total Distributors	802,438
Electric Utilities 3.7%		
8,000	Alliant Energy Corporation	306,480
9,500	American Electric Power Company, Inc.	609,995
7,700	Edison International	556,325
10,000	Entergy Corporation	767,300
9,600	Eversource Energy	520,128
22,800	Exelon Corporation	759,012
6,400	NextEra Energy Inc.	782,848
7,000	PG&E Corporation	428,190
7,200	Pinnacle West Capital Corporation	547,128
48,100	PPL Corporation	1,662,817
20,500	Southern Company	1,051,650

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18,100	Xcel Energy, Inc.	744,634
	Total Electric Utilities	8,736,507
	Electrical Equipment 1.5%	
13,100	Eaton PLC	860,801
15,200	Emerson Electric Company	828,552
14,300	Rockwell Automation, Inc.	1,749,462
	Total Electrical Equipment	3,438,815
	Electronic Equipment, Instruments & Components 0.4%	
8,200	Amphenol Corporation, Class A	532,344
19,800	Corning Incorporated	468,270
	Total Electronic Equipment, Instruments & Components	1,000,614

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Shares	Description (1)	Value
	Energy Equipment & Services 1.2%	
40,400	Halliburton Company	\$ 1,813,152
14,500	Helmerich & Payne Inc.	975,850
	Total Energy Equipment & Services	2,789,002
	Equity Real Estate Investment Trusts 7.7%	
2,000	American Tower Corporation	226,660
400	Boston Properties, Inc.	54,516
500	Crown Castle International Corporation	47,105
12,700	Digital Realty Trust Inc.	1,233,424
5,543	Equinix Inc.	1,996,866
1,700	Essex Property Trust Inc.	378,590
8,300	Extra Space Storage Inc.	659,103
6,000	Federal Realty Investment Trust	923,580
42,800	Iron Mountain Inc.	1,606,284
51,900	Kimco Realty Corporation	1,502,505
30,300	Prologis Inc.	1,622,262
16,100	Public Storage, Inc.	3,592,554
23,600	Realty Income Corporation	1,579,548
1,700	Simon Property Group, Inc.	351,917
800	SL Green Realty Corporation	86,480
28,800	Ventas Inc.	2,034,144
	Total Equity Real Estate Investment Trusts	17,895,538
	Food & Staples Retailing 0.3%	
16,300	Sysco Corporation	798,863
	Food Products 3.1%	
14,500	Archer-Daniels-Midland Company	611,465
26,600	Campbell Soup Company, (2)	1,455,020
34,800	ConAgra Foods, Inc.	1,639,428
1,900	General Mills, Inc.	121,372
10,300	Kellogg Company	797,941
2,600	McCormick & Company, Incorporated	259,792
30,300	Tyson Foods, Inc., Class A	2,262,501
	Total Food Products	7,147,519
	Health Care Equipment & Supplies 3.1%	
16,700	Baxter International, Inc.	794,920
2,200	Becton, Dickinson and Company	395,406
22,400	Boston Scientific Corporation, (3)	533,120
3,200	C. R. Bard, Inc.	717,696
10,600	DENTSPLY SIRONA Inc.	629,958
12,200	Edwards Lifesciences Corporation, (3)	1,470,832
900	Intuitive Surgical, Inc., (3)	652,347
7,600	Stryker Corporation	884,716
2,100	Varian Medical Systems, Inc., (3)	209,013
7,600	Zimmer Biomet Holdings, Inc.	988,152
	Total Health Care Equipment & Supplies	7,276,160

Health Care Providers & Services 5.7%

8,500	Aetna Inc.	981,325
23,400	Anthem Inc.	2,932,254
34,800	Cardinal Health, Inc.	2,703,960
7,900	Centene Corporation, (3)	528,984
3,700	Davita Inc., (3)	244,459
9,100	HCA Holdings Inc., (3)	688,233
8,200	Henry Schein Inc., (3)	1,336,436
5,500	Quest Diagnostics Incorporated	465,465
18,200	UnitedHealth Group Incorporated	2,548,000
6,400	Universal Health Services, Inc., Class B	788,608
	Total Health Care Providers & Services	13,217,724

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Portfolio of Investments (continued)

September 30, 2016 (Unaudited)

Shares	Description (1)	Value
Hotels, Restaurants & Leisure 2.4%		
22,700	McDonald's Corporation	\$ 2,618,672
19,000	Starbucks Corporation	1,028,660
10,500	Wynn Resorts Ltd	1,022,910
10,500	YUM! Brands, Inc.	953,505
	Total Hotels, Restaurants & Leisure	5,623,747
Household Durables 1.6%		
31,700	D.R. Horton, Inc.	957,340
5,600	Garmin Limited	269,416
10,700	Leggett and Platt Inc.	487,706
16,300	Newell Brands Inc.	858,358
9,200	PulteGroup Inc.	184,368
6,600	Whirlpool Corporation	1,070,256
	Total Household Durables	3,827,444
Household Products 1.3%		
6,000	Church & Dwight Company Inc.	287,520
4,300	Clorox Company	538,274
17,500	Kimberly-Clark Corporation	2,207,450
	Total Household Products	3,033,244
Independent Power & Renewable Electricity Producers 0.7%		
82,500	AES Corporation	1,060,125
41,600	NRG Energy Inc.	466,336
	Total Independent Power & Renewable Electricity Producers	1,526,461
Industrial Conglomerates 0.3%		
2,100	Honeywell International Inc.	244,839
2,600	Roper Technologies, Inc.	474,422
	Total Industrial Conglomerates	719,261
Insurance 4.1%		
4,200	Ace Limited	527,730
21,100	AFLAC Incorporated	1,516,457
1,700	Allstate Corporation	117,606
3,100	AON PLC	348,719
6,400	Arthur J. Gallagher & Co.	325,568
5,600	Assurant Inc.	516,600
29,000	Cincinnati Financial Corporation	2,187,180
14,800	Hartford Financial Services Group, Inc.	633,736
4,000	Loews Corporation	164,600
10,200	Marsh & McLennan Companies, Inc.	685,950
41,400	Progressive Corporation	1,304,100

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3,500	Torchmark Corporation	223,615
5,900	Travelers Companies, Inc.	675,845
10,100	Unum Group	356,631
	Total Insurance	9,584,337
	Internet Software & Services 1.5%	
17,400	Facebook Inc., Class A Shares, (3)	2,231,898
12,400	VeriSign, Inc., (3)	970,176
7,600	Yahoo! Inc., (3)	327,560
	Total Internet Software & Services	3,529,634
	IT Services 2.9%	
3,300	Accenture Limited	403,161
10,300	Automatic Data Processing, Inc.	908,460
26,000	Fiserv, Inc., (3)	2,586,220
31,000	Paychex, Inc.	1,793,970
24,900	Total System Services Inc.	1,174,035
	Total IT Services	6,865,846

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Shares	Description (1)	Value
	Leisure Products 0.9%	
13,700	Hasbro, Inc.	\$ 1,086,821
35,700	Mattel, Inc.	1,080,996
	Total Leisure Products	2,167,817
	Life Sciences Tools & Services 1.1%	
11,800	Agilent Technologies, Inc.	555,662
7,500	Thermo Fisher Scientific, Inc.	1,192,950
4,900	Waters Corporation, (3)	776,601
	Total Life Sciences Tools & Services	2,525,213
	Machinery 2.7%	
2,600	Caterpillar Inc.	230,802
3,300	Cummins Inc.	422,895
3,900	Dover Corporation	287,196
9,400	Flowserve Corporation	453,456
6,700	Fortive Corporation	341,030
4,300	Illinois Tool Works, Inc.	515,312
14,200	Ingersoll Rand Company Limited, Class A	964,748
4,600	Parker Hannifin Corporation	577,438
8,700	Pentair Limited	558,888
8,800	Stanley Black & Decker Inc.	1,082,224
16,500	Xylem Inc.	865,425
	Total Machinery	6,299,414
	Media 1.4%	
26,300	CBS Corporation, Class B	1,439,662
67,800	Interpublic Group of Companies, Inc.	1,515,330
4,100	Omnicom Group, Inc.	348,500
400	Scripps Networks Interactive, Class A Shares	25,396
	Total Media	3,328,888
	Metals & Mining 1.7%	
43,700	Freeport-McMoRan, Inc.	474,582
49,700	Newmont Mining Corporation	1,952,713
29,300	Nucor Corporation	1,448,885
	Total Metals & Mining	3,876,180
	Multiline Retail 0.1%	
2,800	Dollar General Corporation	195,972
700	Dollar Tree Stores Inc., (3)	55,251
400	Target Corporation	27,472
	Total Multiline Retail	278,695
	Multi-Utilities 4.1%	
21,600	Ameren Corporation	1,062,288
57,900	CenterPoint Energy, Inc.	1,345,017
13,200	CMS Energy Corporation	554,532
18,100	Consolidated Edison, Inc.	1,362,930
4,000	DTE Energy Company	374,680

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74,000	NiSource Inc., (2)	1,784,140
6,800	Public Service Enterprise Group Incorporated	284,716
23,400	Scana Corporation	1,693,458
2,800	Sempra Energy	300,132
15,600	WEC Energy Group, Inc.	934,128
	Total Multi-Utilities	9,696,021
	Oil, Gas & Consumable Fuels 8.8%	
47,800	Apache Corporation	3,052,986
46,700	Cabot Oil & Gas Corporation	1,204,860
8,400	Cimarex Energy Company	1,128,708

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

September 30, 2016 (Unaudited)

Shares	Description (1)	Value
Oil, Gas & Consumable Fuels (continued)		
8,600	Concho Resources Inc., (3)	\$ 1,181,210
17,200	Devon Energy Corporation	758,692
18,900	EQT Corporation	1,372,518
17,200	Hess Corporation	922,264
7,700	Marathon Oil Corporation	121,737
21,100	Murphy Oil Corporation	641,440
25,200	Newfield Exploration Company, (3)	1,095,192
7,300	Occidental Petroleum Corporation	532,316
28,600	ONEOK, Inc.	1,469,754
29,600	Phillips 66	2,384,280
1,200	Pioneer Natural Resources Company	222,780
26,300	Range Resources Corporation	1,019,125
63,800	Southwestern Energy Company, (3)	882,992
41,700	Spectra Energy Corporation	1,782,675
26,400	Williams Companies, Inc.	811,272
	Total Oil, Gas & Consumable Fuels	20,584,801
Pharmaceuticals 0.2%		
1,900	Bristol-Myers Squibb Company	102,448
6,900	Zoetis Incorporated, (2)	358,869
	Total Pharmaceuticals	461,317
Professional Services 1.7%		
4,900	Dun and Bradstreet Inc.	669,438
23,400	Equifax Inc.	3,149,172
3,200	Nielsen Holdings PLC	171,424
	Total Professional Services	3,990,034
Road & Rail 0.7%		
10,700	J.B. Hunt Transports Services Inc.	868,198
8,900	Kansas City Southern Industries	830,548
	Total Road & Rail	1,698,746
Semiconductors & Semiconductor Equipment 6.2%		
114,200	Applied Materials, Inc.	3,443,130
21,044	Broadcom Limited	3,630,511
13,700	KLA-Tencor Corporation	955,027
11,600	Lam Research Corporation	1,098,636
1,000	Linear Technology Corporation	59,290
12,200	Microchip Technology Incorporated	758,108
58,700	NVIDIA Corporation, (2)	4,022,124
4,000	Qorvo Inc., (3)	222,960
200	QUALCOMM, Inc.	13,700
5,600	Texas Instruments Incorporated	393,008

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	Total Semiconductors & Semiconductor Equipment	14,596,494
	Software 2.3%	
33,000	Adobe Systems Incorporated, (2), (3)	3,581,820
4,200	Electronic Arts Inc., (2), (3)	358,680
5,400	Intuit, Inc.	594,054
29,600	Symantec Corporation	742,960
	Total Software	5,277,514
	Specialty Retail 2.6%	
3,500	Best Buy Co., Inc.	133,630
19,500	Home Depot, Inc.	2,509,260
36,400	Lowe's Companies, Inc., (2)	2,628,444
400	O'Reilly Automotive Inc., (3)	112,044
1,100	Ross Stores, Inc.	70,730
4,900	Tractor Supply Company	330,015
1,400	Ulta Salon, Cosmetics & Fragrance, Inc., (3)	333,172
	Total Specialty Retail	6,117,295

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Shares	Description (1)	Value
	Textiles, Apparel & Luxury Goods 0.9%	
28,800	Coach, Inc.	\$ 1,052,928
9,500	PVH Corporation	1,049,750
	Total Textiles, Apparel & Luxury Goods	2,102,678
	Tobacco 2.1%	
33,100	Altria Group, Inc.	2,092,913
60,078	Reynolds American Inc., (2)	2,832,678
	Total Tobacco	4,925,591
	Trading Companies & Distributors 0.3%	
2,500	Fastenal Company	104,450
7,600	United Rentals Inc., (3)	596,524
	Total Trading Companies & Distributors	700,974
	Water Utilities 0.9%	
27,700	American Water Works Company	2,073,068
	Total Long-Term Investments (cost \$199,809,225)	230,184,626

Principal Amount (000)	Description (1)	Coupon	Maturity	Ratings (4)	Value
	SHORT-TERM INVESTMENTS 3.8%				
	REPURCHASE AGREEMENTS 2.7%				
\$ 5,019	Repurchase Agreement with Fixed Income Clearing Corporation, dated 9/30/16, repurchase price \$5,019,528, collateralized by \$4,525,000 U.S. Treasury Bonds, 2.875%, due 8/15/45, value \$5,124,563	0.030%	10/03/16	N/A	\$ 5,019,515
1,349	Repurchase Agreement with Fixed Income Clearing Corporation, dated 9/30/16, repurchase price \$1,348,602, collateralized by \$1,180,000 U.S. Treasury Bonds, 3.000%, due 11/15/45, value \$1,377,650	0.030%	10/03/16	N/A	1,348,599
6,368	Total Repurchase Agreements				6,368,114
	U.S. GOVERNMENT AND AGENCY OBLIGATIONS 1.1%				

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	2,500	U.S. Treasury Bills, (2)	0.000%	2/02/17	AAA	2,497,232
\$	8,868	Total Short-Term Investments (cost \$8,864,557)				8,865,346
		Total Investments (cost \$208,673,782)				239,049,972
		102.2%				
		Other Assets Less Liabilities (2.2%)				(5,124,751)
		(5)				
		Net Assets 100%				\$ 233,925,221

Investments in Derivatives as of September 30, 2016

Options Written

Number of Contracts	Description	Notional Amount (6)	Expiration Date	Strike Price	Value
(250)	RUSSELL 2000® Index	\$ (31,250,000)	10/21/16	\$ 1,250	\$ (438,750)
(195)	RUSSELL 2000® Index	(24,570,000)	10/21/16	1,260	(234,000)
(350)	RUSSELL 2000® Index	(44,450,000)	10/21/16	1,270	(264,250)
	Total Options Written (premiums received)				
(795)	\$648,826)	\$ (100,270,000)			\$ (937,000)

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

September 30, 2016 (Unaudited)

Futures Contracts

Description	Contract Position	Number of Contracts	Contract Expiration	Notional Amount at Value	Variation Margin Receivable/ (Payable)	Unrealized Appreciation (Depreciation)
S&P 500 E-Mini	Long	40	12/16	\$ 4,320,800	\$ 23,800	\$ 16,813

Fair Value Measurements

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

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

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

	Level 1	Level 2	Level 3	Total
Long-Term Investments:				
Common Stocks	\$ 230,184,626	\$	\$	\$ 230,184,626
Short-Term Investments:				
Repurchase Agreements		6,368,114		6,368,114
U.S. Government and Agency Obligations		2,497,232		2,497,232
Investments in Derivatives:				
Options Written	(937,000)			(937,000)
Futures Contracts*	16,813			16,813
Total	\$ 229,264,439	\$ 8,865,346	\$	\$ 238,129,785

* Represents net unrealized appreciation (depreciation).

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 and certain options 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.

As of September 30, 2016, the cost of investments (excluding investments in derivatives) was \$208,714,017.

Gross unrealized appreciation and gross unrealized depreciation of investments (excluding investments in derivatives) as of September 30, 2016, were as follows:

Gross unrealized:	
Appreciation	\$ 33,220,092
Depreciation	(2,884,137)
Net unrealized appreciation (depreciation) of investments	\$ 30,335,955

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

- (1) All percentages shown in the Portfolio of Investments are based on net assets.
- (2) Investment, or portion of investment, has been pledged to collateralize the net payment obligations for investments in derivatives.
- (3) Non-income producing; issuer has not declared a dividend within the past twelve months.
- (4) For financial reporting purposes, the ratings disclosed are the highest of Standard & Poor's Group (Standard & Poor's), Moody's Investors Service, Inc. (Moody's) or Fitch, Inc. (Fitch) rating. This treatment of split-rated securities may differ from that used for other purposes, such as Fund investment policies. Ratings below BBB by Standard & Poor's, Baa by Moody's or BBB by Fitch are considered to be below investment grade. Holdings designated N/R are not rated by any of these national rating agencies.
- (5) Other assets less liabilities includes the unrealized appreciation (depreciation) of certain over-the-counter (OTC) derivatives as well as the OTC-cleared and exchange-traded derivatives, when applicable. Other assets less liabilities also includes the value of options.
- (6) For disclosure purposes, Notional Amount is calculated by multiplying the Number of Contracts by the Strike Price by 100.

N/A Not Applicable

Item 2. 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 Rule 13a-15(b) or 15d-15(b) under the Securities Exchange Act of 1934 (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 registrant's last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the registrant's internal control over financial reporting.

Item 3. Exhibits.

File as exhibits as part of this Form 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)), exactly as set forth below: EX-99 CERT Attached hereto.

SIGNATURES

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

(Registrant) Nuveen Core Equity Alpha Fund

By (Signature and Title) /s/ Gifford R. Zimmerman

Gifford R. Zimmerman
Vice President and Secretary

Date: November 29, 2016

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

By (Signature and Title) /s/ Cedric H. Antosiewicz

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

Date: November 29, 2016

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

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

Date: November 29, 2016