Nuveen Core Equity Alpha Fund Form N-Q May 30, 2014

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)

Kevin J. McCarthy Vice President and Secretary

333 West Wacker Drive, Chicago, Illinois 60606

(Name and address of agent for service) 312-917-7700

Date of fiscal year

end: 12/31

Date of reporting period: 3/31/2014

Registrant s telephone number, including area code:

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

Portfolio of Investments (Unaudited) Nuveen Core Equity Alpha Fund (JCE) March 31, 2014

Shares	Description (1)	Value
	LONG-TERM INVESTMENTS 100.0%	
	COMMON STOCKS 100.0% Aerospace & Defense 5.3%	
	Boeing Company	\$ 2,798,427
	General Dynamics Corporation	381,220
	L-3 Communications Holdings, Inc. Lockheed Martin Corporation	283,560 3,199,504
47.600	Northrop Grumman Corporation	5,872,888
	Precision Castparts Corporation	429,692
	Raytheon Company	2,301,807
1,100	Rockwell Collins, Inc.	87,637
	Total Aerospace & Defense Air Freight & Logistics 0.3%	15,354,735
5.200	FedEx Corporation	689,312
	United Parcel Service, Inc., Class B	155,808
	Total Air Freight & Logistics	845,120
45.000	Airlines 0.7%	500.000
,	Delta Air Lines, Inc. Southwest Airlines Co.	526,680 1,475,625
02,300	Total Airlines	2,002,305
	Auto Components 2.4%	_,00_,000
	BorgWarner Inc.	958,932
	Delphi Automotive PLC	4,322,682
,	Goodyear Tire & Rubber Company Johnson Controls, Inc.	870,129 761,852
10,100	Total Auto Components	6,913,595
	Automobiles 0.2%	0,0.0,000
	Ford Motor Company	321,360
	General Motors Company	24,094
2,700	Harley-Davidson, Inc. Total Automobiles	179,847 525,301
	Banks 2.0%	323,301
14,700	Bank of America Corporation	252,840
	BB&T Corporation	1,618,851
	Citigroup Inc.	133,280
	Comerica Incorporated Fifth Third Bancorp.	129,500 80,325
	JPMorgan Chase & Co.	322,067
	KeyCorp.	431,472
	M&T Bank Corporation	1,601,160
	U.S. Bancorp	492,890
16,450	Wells Fargo & Company Total Banks	818,223 5,880,608
	Beverages 1.9%	3,000,000
4,900	Beam Inc.	408,170
	Brown-Forman Corporation	152,473
	Coca-Cola Company	425,260
	Constellation Brands, Inc., Class A, (2) Dr. Pepper Snapple Group	3,900,123 81,690
	Monster Beverage Corporation, (2)	76,395
	PepsiCo, Inc.	567,800
•	Total Beverages	5,611,911
0.000	Biotechnology 2.3%	1 110 000
	Amgen Inc. Biogen Idec Inc., (2)	1,110,060 2,416,373
	Celgene Corporation, (2)	795,720
	Gilead Sciences, Inc., (2)	2,288,778
	Total Biotechnology	6,610,931
	Building Products 0.1%	

5,000	Allegion PLC	260,850
07.000	Capital Markets 3.4%	0.004.011
	Ameriprise Financial, Inc. BlackRock Inc.	3,004,911 1,037,784
	Charles Schwab Corporation	1,074,069
	E*Trade Group Inc., (2)	775,774
2,700	Goldman Sachs Group, Inc.	442,395
	Legg Mason, Inc.	147,120
	Morgan Stanley State Street Corporation	93,510 3,400,995
48,900	State Street Corporation Total Capital Markets	3,400,995 9,976,558
	Chemicals 3.4%	0,070,000
400	Air Products & Chemicals Inc.	47,616
	Airgas, Inc.	42,604
	CF Industries Holdings, Inc.	390,960
	Dow Chemical Company E.I. Du Pont de Nemours and Company	121,475 261,690
	Ecolab Inc.	712,734
	FMC Corporation	666,072
900	International Flavors & Fragrances Inc.	86,103
	LyondellBasell Industries NV	498,064
	Monsanto Company PPG Industries, Inc.	500,588
	Praxair, Inc.	2,340,866 798,917
	Sherwin-Williams Company	3,055,515
	Sigma-Aldrich Corporation	354,844
	Total Chemicals	9,878,048
40.000	Commercial Services & Supplies 0.8%	1 100 050
	Cintas Corporation Iron Mountain Inc.	1,168,356 57,897
	Pitney Bowes Inc.	306,682
	Republic Services, Inc.	242,536
	Stericycle Inc., (2)	159,068
9,300	Waste Management, Inc. Total Commercial Services & Supplies	391,251 2,325,790
	Communications Equipment 0.9%	2,020,730
1,300	F5 Networks, Inc., (2)	138,619
	Harris Corporation	1,543,676
	Juniper Networks Inc., (2) Motorola Solutions Inc.	226,688
	QUALCOMM, Inc.	257,160 354,870
1,000	Total Communications Equipment	2,521,013
	Computers & Peripherals 1.8%	
	Apple, Inc.	3,274,114
-	Hewlett-Packard Company	627,784 380,070
	NetApp, Inc. Seagate Technology	286,416
	Western Digital Corporation	587,648
	Total Computers & Peripherals	5,156,032
0.000	Construction & Engineering 0.2%	455 400
	Fluor Corporation Jacobs Engineering Group, Inc., (2)	155,460 514,350
0,100	Total Construction & Engineering	669,810
	Consumer Finance 1.6%	,
	American Express Company	1,098,366
,	Discover Financial Services	349,140
126,300	SLM Corporation Total Consumer Finance	3,091,824 4,539,330
	Containers & Packaging 0.2%	.,000,000
	Avery Dennison Corporation	212,814
	Ball Corporation	120,582
	Bemis Company, Inc. Sealed Air Corporation	113,796 72,314
2,200	Total Containers & Packaging	519,506
	Diversified Consumer Services 1.0%	•
	Graham Holdings Company	633,375
80,200	H & R Block Inc. Total Diversified Consumer Services	2,421,238 3,054,613
	Diversified Financial Services 1.6%	0,004,010
1,200	Berkshire Hathaway Inc., Class B, (2)	149,964

20,500	CME Group, Inc.	1,517,205
6,092	IntercontinentalExchange Group Inc.	1,205,180
	McGraw-Hill Companies, Inc.	1,251,320
	Moody s Corporation	142,776
12,500	NASDAQ Stock Market, Inc.	461,750
	Total Diversified Financial Services Diversified Telecommunication Services 0.4%	4,728,195
18 600	AT&T Inc.	652,302
	Frontier Communications Corporation	307,230
	Verizon Communications Inc.	233,093
.,000	Total Diversified Telecommunication Services	1,192,625
	Electric Utilities 1.5%	, - ,
6,000	American Electric Power Company, Inc.	303,960
39,256	Duke Energy Corporation	2,795,812
1,800	Edison International	101,898
	Entergy Corporation	53,480
	NextEra Energy Inc.	401,604
	Northeast Utilities	81,900
16,000	PPL Corporation Total Floatria Utilities	530,240
	Total Electric Utilities Electrical Equipment 0.7%	4,268,894
15 744	Eaton PLC	1,182,689
-	Rockwell Automation, Inc.	597,840
	Roper Industries Inc.	173,563
,	Total Electrical Equipment	1,954,092
	Electronic Equipment & Instruments 0.9%	
34,200	FLIR Systems Inc.	1,231,200
	Jabil Circuit Inc.	631,800
10,500	TE Connectivity Limited	632,205
	Total Electronic Equipment & Instruments	2,495,205
0.500	Energy Equipment & Services 0.7%	100 EE0
	Baker Hughes Incorporated Ensco PLC	162,550 63,336
	Halliburton Company	859,794
2 400	Helmerich & Payne Inc.	258,144
	Nabors Industries Inc.	219,385
,	National-Oilwell Varco Inc.	249,184
2,100	Schlumberger Limited	204,750
2,000	Transocean Inc.	82,680
	Total Energy Equipment & Services	2,099,823
	Food & Staples Retailing 2.5%	
	Costco Wholesale Corporation	212,192
	CVS Caremark Corporation	179,664
	Kroger Co. Safeway Inc.	2,496,780 384,176
	Sysco Corporation	93,938
	Walgreen Co.	1,564,911
	Wal-Mart Stores, Inc.	2,269,971
	Whole Foods Market, Inc.	55,781
	Total Food & Staples Retailing	7,257,413
	Food Products 2.4%	
	ConAgra Foods, Inc.	667,145
	General Mills, Inc.	627,022
	Hershey Foods Corporation	1,482,480
	Hormel Foods Corporation	1,547,078
	JM Smucker Company Kellogg Company	632,060 62,710
	Keurig Green Mountain Inc.	242,857
	McCormick & Company, Incorporated	129,132
	Mead Johnson Nutrition Company, Class A Shares	290,990
	Tyson Foods, Inc., Class A	1,399,518
	Total Food Products	7,080,992
	Gas Utilities 0.1%	
7,400	AGL Resources Inc.	362,304
000	Health Care Equipment & Supplies 2.0%	50.007
	Baxter International, Inc.	58,864
	Becton, Dickinson and Company Boston Scientific Corporation, (2)	1,159,092 1,817,088
	C. R. Bard, Inc.	443,940
	CareFusion Corporation, (2)	575,146
,500		3. 5,1 10

	Covidien PLC DENTSPLY International Inc.	81,026 128,912
	Intuitive Surgical, Inc., (2)	569,387
	Medtronic, Inc.	80,002
	Saint Jude Medical Inc.	588,510
	Stryker Corporation Varion Medical Systems Inc. (2)	65,176
	Varian Medical Systems, Inc., (2) Zimmer Holdings, Inc.	83,990 94,580
1,000	Total Health Care Equipment & Supplies	5,745,713
	Health Care Providers & Services 6.0%	
	Aetna Inc.	2,096,086
	AmerisourceBergen Corporation Cardinal Health, Inc.	2,052,967
	CIGNA Corporation	1,028,706 2,595,630
	Davita Inc., (2)	1,845,180
7,700	Express Scripts, Holding Company, (2)	578,193
,	Humana Inc.	1,070,840
	Laboratory Corporation of America Holdings, (2) McKesson HBOC Inc.	746,396 2,118,840
,	Patterson Companies, Inc.	116,928
	Quest Diagnostics Incorporated	451,776
	UnitedHealth Group Incorporated	655,920
19,200	Wellpoint Inc.	1,911,360
	Total Health Care Providers & Services Health Care Technology 0.0%	17,268,822
1.000	Cerner Corporation, (2)	56,250
.,000	Hotels, Restaurants & Leisure 0.8%	00,200
	Carnival Corporation	174,156
	Chipotle Mexican Grill, (2)	795,270
	McDonald s Corporation Starbucks Corporation	176,454 388,914
	Wyndham Worldwide Corporation	183,075
	Wynn Resorts Ltd	466,515
1,800	YUM! Brands, Inc.	135,702
	Total Hotels, Restaurants & Leisure	2,320,086
9 700	Household Durables 0.9% Garmin Limited	536,022
,	Harman International Industries Inc.	776,720
45,700	Newell Rubbermaid Inc.	1,366,430
	Total Household Durables	2,679,172
7 400	Household Products 0.7% Clorox Company	651,274
	Colgate-Palmolive Company	265,967
	Kimberly-Clark Corporation	782,775
4,100	Procter & Gamble Company	330,460
	Total Household Products	2,030,476
6 800	Independent Power & Renewable Electricity Producers 0.7% AES Corporation	97,104
	NRG Energy Inc.	1,831,680
,	Total Independent Power & Renewable Electricity Producers	1,928,784
	Industrial Conglomerates 0.2%	
	3M Co. General Electric Company	230,622 315,858
12,200	Total Industrial Conglomerates	546,480
	Insurance 7.1%	0.10, 100
	Ace Limited	108,966
	AFLAC Incorporated	2,061,408
	Allstate Corporation AON PLC	5,199,702 1,458,044
,	Assurant Inc.	2,111,200
	Chubb Corporation	196,460
	Cincinnati Financial Corporation	715,302
	Genworth Financial Inc., Class A, (2)	138,294
	Hartford Financial Services Group, Inc. Lincoln National Corporation	380,916 1,175,544
	Marsh & McLennan Companies, Inc.	394,400
2,300	MetLife, Inc.	121,440
	Principal Financial Group, Inc.	1,876,392
	Progressive Corporation Prudential Financial, Inc.	75,082 880,360
10,400	radoniar manda, me.	000,300

	Torchmark Corporation	1,082,125
8,100	Travelers Companies, Inc.	689,310
48,100	Unum Group	1,698,411
6,300	XL Capital Ltd, Class A	196,875
	Total Insurance	20,560,231
	Internet & Catalog Retail 1.2%	
,	Amazon.com, Inc., (2)	504,780
	NetFlix.com Inc., (2)	774,466
	priceline.com Incorporated, (2)	1,668,646
4,300	TripAdvisor Inc., (2)	389,537
	Total Internet & Catalog Retail Internet Software & Services 2.5%	3,337,429
24 400	Internet Software & Services 2.5% Facebook Inc., Class A Shares, (2)	1,469,856
	Google Inc., Class A, (2)	2,897,726
	VeriSign, Inc., (2)	566,055
	Yahoo! Inc., (2)	2,315,550
01,000	Total Internet Software & Services	7,249,187
	IT Services 2.7%	.,,
600	Accenture Limited	47,832
4,100	Alliance Data Systems Corporation, (2)	1,117,045
	Automatic Data Processing, Inc.	262,684
12,200	Cognizant Technology Solutions Corporation, Class A, (2)	617,442
	Computer Sciences Corporation	742,004
31,300	Fidelity National Information Services	1,672,985
1,000	Fiserv, Inc., (2)	56,690
1,200	International Business Machines Corporation (IBM)	230,988
11,500	MasterCard, Inc.	859,050
	Paychex, Inc.	264,120
	Total System Services Inc.	586,913
	Visa Inc.	1,100,886
15,200	Xerox Corporation	171,760
	Total IT Services	7,730,399
	Leisure Equipment & Products 0.2%	
	Hasbro, Inc.	461,646
1,800	Mattel, Inc.	72,198
	Total Leisure Equipment & Products	533,844
0.700	Life Sciences Tools & Services 0.7%	000 004
	Agilent Technologies, Inc.	206,904
15,600	Thermo Fisher Scientific, Inc.	1,875,744
	Total Life Sciences Tools & Services Machinery 1.8%	2,082,648
2 000	Deere & Company	181,600
	Dover Corporation	1,545,075
	Flowserve Corporation	1,903,662
	Ingersoll Rand Company Limited, Class A	171,720
	Pall Corporation	348,933
	Parker Hannifin Corporation	71,826
	Pentair Limited	119,010
	Snap-on Incorporated	476,616
	Xylem Inc.	295,002
- '	Total Machinery	5,113,444
	Media 7.6%	· · ·
	Cablevision Systems Corporation	94,472
123,900	Comcast Corporation, Class A	6,197,478
8,700	DirecTV, (2)	664,854
5,300	Discovery Communications inc., Class A Shares, (2)	438,310
	Interpublic Group Companies, Inc.	442,212
	News Corporation, Class A Shares, (2)	324,167
	Omnicom Group, Inc.	145,200
	Scripps Networks Interactive, Class A Shares	1,176,605
	Time Warner Cable, Class A	2,167,444
	Time Warner Inc.	4,161,521
	Twenty First Century Fox Inc., Class A Shares	2,407,341
	Viacom Inc., Class B	849,900
36,500	Walt Disney Company	2,922,555
	Total Media	21,992,059
00.000	Metals & Mining 0.7%	040.000
	Alcoa Inc.	346,203
	Freeport-McMoRan Copper & Gold, Inc.	168,657 480,520
0,500	Newmont Mining Corporation	480,520

38,100	United States Steel Corporation	1,051,941
	Total Metals & Mining	2,047,321
	Multiline Retail 0.3%	
3.900	Dollar General Corporation, (2)	216,372
	Dollar Tree Stores Inc., (2)	250,464
	Family Dollar Stores, Inc.	214,637
	·	56,800
1,000	Kohl s Corporation	•
	Total Multiline Retail	738,273
	Multi-Utilities 2.0%	
	Ameren Corporation	148,320
6,600	CMS Energy Corporation	193,248
3,800	Dominion Resources, Inc.	269,762
29,900	NiSource Inc.	1,062,347
9.700	Public Service Enterprise Group Incorporated	369,958
	Sempra Energy	2,670,576
	Wisconsin Energy Corporation	1,061,340
22,000	Total Multi-Utilities	5,775,551
	Oil, Gas & Consumable Fuels 3.9%	3,773,331
700		FO 000
	Anadarko Petroleum Corporation	59,332
	Apache Corporation	124,425
	Cabot Oil & Gas Corporation	1,002,848
34,100	Chesapeake Energy Corporation	873,642
3,500	Chevron Corporation	416,185
7,000	ConocoPhillips	492,450
	CONSOL Energy Inc.	207,740
	Devon Energy Corporation	220,869
	EOG Resources, Inc.	823,914
		•
	EQT Corporation	1,386,671
	Exxon Mobil Corporation	166,056
	Hess Corporation	306,656
	Marathon Oil Corporation	138,528
7,650	Marathon Petroleum Corporation	665,856
2,800	Murphy Oil Corporation	176,008
	Newfield Exploration Company, (2)	203,840
	Noble Energy, Inc.	113,664
	Occidental Petroleum Corporation	524,095
	ONEOK, Inc.	633,975
		·
	Peabody Energy Corporation	433,010
	Phillips 66	339,064
	QEP Resources Inc.	91,264
2,000	Range Resources Corporation	165,940
9,700	Southwestern Energy Company, (2)	446,297
15,500	Spectra Energy Corporation	572,570
5,200	Valero Energy Corporation	276,120
	Williams Companies, Inc.	328,698
-,	Total Oil, Gas & Consumable Fuels	11,189,717
	Personal Products 0.0%	11,100,717
700		40.010
700	Estee Lauder Companies Inc., Class A	46,816
	Pharmaceuticals 3.7%	
,	AbbVie Inc.	128,500
16,500	Actavis Inc., (2)	3,396,525
48,000	Bristol-Myers Squibb Company	2,493,600
2,000	Forest Laboratories, Inc., (2)	184,540
	Hospira Inc., (2)	181,650
	Johnson & Johnson	402,743
	Merck & Company Inc.	1,074,770
	•	1,665,103
	Mylan Laboratories Inc., (2)	·
	Perrigo Company	603,174
,	Pfizer Inc.	186,296
9,300	Zoetis Incorporated	269,142
	Total Pharmaceuticals	10,586,043
	Professional Services 0.9%	
2,200	Dun and Bradstreet Inc.	218,570
,	Equifax Inc.	1,190,525
	Nielsen Holdings BV	1,169,306
_0,_00	Total Professional Services	2,578,401
		2,570,401
46 400	Real Estate Investment Trust 1.9%	0.400.000
	Crown Castle International Corporation	3,423,392
	General Growth Properties Inc.	35,200
2,500	Public Storage, Inc.	421,225

	Vornado Realty Trust Weyerhaeuser Company Total Real Estate Investment Trust Road & Rail 0.2%	108,416 1,579,030 5,567,263
3,300	Kansas City Southern Industries Norfolk Southern Corporation Union Pacific Corporation Total Road & Rail	132,678 320,661 243,958 697,297
4,800 11,900 1,800 34,300 71,600	Semiconductors & Equipment 1.2% Applied Materials, Inc. Broadcom Corporation, Class A Intel Corporation Linear Technology Corporation LSI Logic Corporation Micron Technology, Inc., (2) Xilinx, Inc. Total Semiconductors & Equipment	551,340 151,104 307,139 87,642 379,701 1,694,056 200,799 3,371,781
2,900 35,600 19,900 2,500 27,200 2,100	Software 1.5% Adobe Systems Incorporated, (2) Autodesk, Inc., (2) CA Inc. Electronic Arts Inc., (2) Intuit, Inc. Microsoft Corporation Salesforce.com, Inc., (2) Symantec Corporation Total Software Specialty Retail 6.9%	880,916 142,622 1,102,532 577,299 194,325 1,114,928 119,889 309,535 4,442,046
2,100 23,100 20,500 11,000 108,300 8,900 3,800 3,400 1,500 11,300 4,700 106,100	AutoZone, Inc., (2) Bed Bath and Beyond Inc., (2) Best Buy Co., Inc. GameStop Corporation Gap, Inc. Home Depot, Inc. L Brands Inc. Lowe s Companies, Inc. O Reilly Automotive Inc., (2) PetSmart Inc. Ross Stores, Inc. Tiffany & Co. TJX Companies, Inc. Tractor Supply Company Total Specialty Retail	268,550 144,480 610,071 842,550 440,660 8,569,778 505,253 185,820 504,526 103,335 808,515 404,905 6,434,965 63,567 19,886,975
900 9,200 4,300 2,300	Textiles, Apparel & Luxury Goods Coach, Inc. Fossil Group Inc., (2) Michael Kors Holdings Limited, (2) Nike, Inc., Class B PVH Corporation VF Corporation Total Textiles, Apparel & Luxury Goods Thiifte & Markey Finance Co	74,490 104,949 858,084 317,598 286,971 792,064 2,434,156
	Thrifts & Mortgage Finance 0.0% Hudson City Bancorp, Inc. People s United Financial, Inc. Total Thrifts & Mortgage Finance Tobacco 1.2%	21,626 98,142 119,768
16,400	Altria Group, Inc. Lorillard Inc. Reynolds American Inc. Total Tobacco Trading Companies & Distributors 0.4%	1,893,958 886,912 699,802 3,480,672
4,800	W.W. Grainger, Inc. Total Long-Term Investments (cost \$216,884,343)	1,212,769 289,435,472

Principal					
Amount (000)	Description (1)	Coupon	Maturity	Ratings (3)	Value
	SHORT-TERM INVESTMENTS - 1.6%	•	•	• .,	
	Repurchase Agreements - 0.7%				

\$ 1,992	Repurchase Agreement with State Street Bank, dated 3/31/14, repurchase price \$1,992,304, collateralized by \$2,070,000 U.S. Treasury Notes, 0.625%, due 8/31/17, value \$2,033,645 U.S. Government and Agency Obligations - 0.9%	0.000%	4/01/14	N/A \$	1,992,304
2,500	U.S. Treasury Bills, (4)	0.000%	7/24/14	Aaa	2,499,662
\$ 4,492	Total Short-Term Investments (cost \$4,491,849)				4,491,966
	Total Investments (cost \$221,376,192) - 101.6%				293,927,438
	Other Assets Less Liabilities - (1.6)% (5) Net Assets - 100%			\$	(4,736,377) 289,191,061

Investments in Derivatives as of March 31, 2014

Options Written outstanding:

Number of Contracts	Description	Notional Amount	Expiration Date	Strike Price	Value (5)
(150,447))			
(170)	Custom Basket 1* \$	(15,044,700(6)	4/11/14	\$ 103.0000	\$ (15,045)
(170)	Russell 2000® Index	(20,686,542(7)	4/17/14	1,216.8554	(50,775)
(200)	00 D Mid 400@ lada-	(22.252.202(7)	4/04/4.4	4 440 0400	(45.007)
(150)	S&P Midcap 400® Index	(28,852,800(7)	4/21/14	1,442.6400	(15,997)
` ,	S&P Midcap 400® Index	(21,190,500(7)	4/28/14	1,412.7000	(110,589)
(150)	S&P Midcap 400® Index	(21,297,900(7)	5/02/14	1.419.8600	(83,745)
(151,117)	Total Options Written (premiums	(107,072,442)	-: -	,	\$ (276,151)

^{*} The following table represents the individual common stock holdings comprising the Custom Basket 1 Options Written as of March 31, 2014.

Shares	Description	Value
20,000	Altria Group, Inc.	\$ (735)
40,000	iShares® Core S&P Mid-Cap ETF	(5,493)
20,000	iShares® Russell 2000® Index ETF	(2,361)
20,000	Lorillard Inc.	(1,044)
10,000	Phillip Morris International	(795)
20,000	SPDR® S&P 500® ETF Trust	(3,745)
45,000	Vapor Corp.	(348)
25,000	Vector Group Ltd.	(524)
		\$ (15,045)

Futues Contracts outstanding:

		Number		Notional	Unrealized Appreciation
	Contract	of	Contract		
Description	Position	Contracts	Expiration	Value	(Depreciation)
S&P 500 E-Mini	Long	60	6/14	\$ 5,593,800	\$ 3,120

Fair Value Measurements

Fair value is defined as the price that the Funds would receive upon selling an investment or transferring a liability in an orderly transaction to an independent buyer in the principal or most advantageous market for the investment. A three-tier hierarchy is used to maximize the use of observable market data and minimize the use of unobservable inputs and to establish classification of fair value measurements for disclosure purposes. Observable inputs reflect the assumptions market participants would use in pricing

the asset or liability. Observable inputs are based on market data obtained from sources independent of the reporting entity. Unobservable inputs reflect the reporting entity s own assumptions about the assumptions market participants would use in pricing the asset or liability. Unobservable inputs are based on the best information available in the circumstances. The 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 risks associated with investing in those securities.

The following is a summary of the Fund s fair value measurements as of the end of the reporting period:

	Level 1	Level 2	Level 3	Total
Long-Term Investments:				
Common Stocks	\$ 289,435,472	\$	\$	\$ 289,435,472
Short-Term Investments:				
Repurchase Agreements		1,992,304		1,992,304
U.S. Government and Agency Obligations		2,499,662		2,499,662
Investments in Derivatives:				
Options Written		(276, 151)		(276,151)
Futures Contracts*	3,120			3,120
Total	\$ 289,438,592	\$ 4,215,815	\$	\$ 293,654,407
*Danuaranta mat	 intion)			

^{*}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. 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 March 31, 2014, the cost of investments (excluding investments in derivatives) was \$221,465,617.

Gross unrealized appreciation and gross unrealized depreciation of investments (excluding investments in derivatives) as of March 31, 2014, were as follows:

Gross unrealized:

Appreciation Depreciation	\$ 73,329,800 (867,979)
Net unrealized appreciation (depreciation) of investments	\$ 72,461,821

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

- (1)All percentages shown in the Portfolio of Investments are based on net assets.
- (2) Non-income producing; issuer has not declared a dividend within the past twelve months.
- (3)Ratings: Using the highest of Standard & Poor s Group (Standard & Poor s), Moody s Investors Service, Inc. (Moody s) or Fitch, Inc. (Fitch) rating. Ratings below BBB by Standard & Poor s, Baa by Moody s or BBB by Fitch are considered to be below investment grade. Holdings designated N/R are not rated by any of these national rating agencies.
- (4) Investment, or portion of investment, has been pledged to collateralize the net payment obligations for investments in derivatives.
- (5)Other Assets Less Liabilities includes the Value of certain derivative instruments as listed within Investments in Derivatives as of the end of the reporting period.
- (6) For disclosure purposes, Notional Amount is calculated by multiplying the Number of Contracts by \$100.
- (7)For disclosure purposes, Notional Amount is calculated by multiplying the Number of Contracts by the Strike Price by 100.

N/ANot 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 270.3	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 cause
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: May 30, 2014

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: May 30, 2014

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

Stephen D. Foy

Vice President and Controller (principal financial officer)

Date: May 30, 2014