

NUVEEN MUNICIPAL HIGH INCOME OPPORTUNITY FUND
Form N-Q
March 30, 2012

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 811-21449

Nuveen Municipal High Income Opportunity Fund
(Exact name of registrant as specified in charter)

Nuveen Investments
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)

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

Date of fiscal year end: 10/31

Date of reporting period: 1/31/12

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 Municipal High Income Opportunity Fund (NMZ)
 January 31, 2012

Principal Amount (000)	Description (1)	Optional Call Provisions (2)	Ratings (3)	Value
	Alabama – 1.2% (1.0% of Total Investments)			
\$ 1,000	Adamsville Solid Waste Disposal Authority, Alabama, Solid Waste Disposal Revenue Bonds, Green	8/20 at 100.00	N/R	\$ 985,360
1,000	Mountain Management LLC Project, Series 2010, 8.750%, 8/01/30 Alabama Industrial Development Authority, Solid Waste Disposal Revenue Bonds, Pine City Fiber	7/12 at 100.00	B2	909,620
	Co. Project, Series 1993, 6.450%, 12/01/23 (Alternative Minimum Tax)			
1,915	Bessemer, Alabama, General Obligation Warrants, Series 2007, 6.500%, 2/01/37	2/17 at 102.00	N/R	1,430,275
1,000	Jefferson County, Alabama, Limited Obligation School Warrants, Education Tax Revenue Bonds, Series 2004A, 5.250%, 1/01/14	No Opt. Call	B	980,870
4,915	Total Alabama			4,306,125
	Arizona – 6.1% (5.2% of Total Investments)			
1,420	Arizona Health Facilities Authority, Hospital Revenue Bonds, Banner Health Systems, Tender	1/18 at 100.00	AA–	1,653,562
	Option Bond Trust 3256, 17.765%, 1/01/29 (IF)			
1,760	Arizona Health Facilities Authority, Hospital Revenue Bonds, Banner Health Systems, Tender	1/18 at 100.00	AA–	2,357,238
	Option Bond Trust 4695, 19.114%, 1/01/32 (IF) (4)			
366	Estrella Mountain Ranch Community Facilities District, Goodyear, Arizona, Special Assessment	7/12 at 100.00	N/R	368,826
	Lien Bonds, Series 2001A, 7.875%, 7/01/25			
2,000	Maricopa County Industrial Development Authority, Arizona, Multifamily Housing Revenue Bonds, Privado Park Apartments Project, Series 2006A, 5.000%, 11/01/46 (Mandatory put 11/01/15)	5/12 at 100.00	N/R	1,877,340
6,720	Maricopa County Industrial Development Authority, Arizona, Senior Living Facility Revenue Bonds, Christian Care Mesa II Inc., Series 2004A, 6.625%, 1/01/34 (Alternative Minimum Tax)	1/14 at 100.00	CC	5,100,413
	Phoenix Industrial Development Authority, Arizona, Educational Revenue Bonds, Keystone Montessori School, Series 2004A:			
100	6.375%, 11/01/13	5/12 at 103.00	N/R	100,999
790	7.250%, 11/01/23		N/R	795,056

Edgar Filing: NUVEEN MUNICIPAL HIGH INCOME OPPORTUNITY FUND - Form N-Q

		11/16 at		
		100.00		
		11/16 at		
1,715	7.500%, 11/01/33	100.00	N/R	1,703,801
	Pima County Industrial Development Authority, Arizona, Charter	12/14 at		
550	School Revenue Bonds, Noah	100.00	BBB-	529,997
	Webster Basic Schools Inc., Series 2004, 6.125%, 12/15/34			
	Pima County Industrial Development Authority, Arizona, Charter	No Opt.		
305	School Revenue Bonds, Pointe	Call	AA+ (5)	347,907
	Educational Services Charter School, Series 2004, 6.250%, 7/01/14 (ETM)			
	Pima County Industrial Development Authority, Arizona, Education	1/22 at		
1,500	Revenue Bonds, Carden	100.00	BBB-	1,477,860
	Traditional Schools Project, Series 2012, 7.500%, 1/01/42 (WI/DD, Settling 2/07/12)			
	Pima County Industrial Development Authority, Arizona, Education			
	Revenue Bonds, Paradise			
	Education Center Project, Series 2010:			
		6/19 at		
500	6.000%, 6/01/40	100.00	BBB-	454,025
		6/19 at		
500	6.100%, 6/01/45	100.00	BBB-	454,015
	Pinal County Industrial Development Authority, Arizona, Correctional	10/12 at		
1,150	Facilities Contract	100.00	BBB-	1,154,025
	Revenue Bonds, Florence West Prison LLC, Series 2002A, 5.250%, 10/01/22 – ACA Insured			
	Quechan Indian Tribe of the Fort Yuma Reservation, Arizona,	12/17 at		
1,000	Government Project Bonds, Series	102.00	N/R	950,340
	2008, 7.000%, 12/01/27			
	Surprise Municipal Property Corporation, Arizona, Wastewater	4/14 at		
1,000	System Revenue Bonds, Series	100.00	N/R	1,022,030
	2007, 4.700%, 4/01/22			
	Tucson Industrial Development Authority, Arizona, Charter School	9/14 at		
1,000	Revenue Bonds, Arizona	100.00	BB+	947,110
	Agribusiness and Equine Center Charter School, Series 2004A, 5.850%, 9/01/24			
22,376	Total Arizona			21,294,544
	California – 17.9% (15.2% of Total Investments)			
	California Enterprise Development Authority, Recovery Zone Facility	No Opt.		
1,000	Revenue Bonds, SunPower	Call	N/R	1,067,380
	Cporporation – Headquarters Project, Series 2010, 8.500%, 4/01/31			
	California County Tobacco Securitization Agency, Tobacco	6/15 at		
1,810	Settlement Asset-Backed Bonds, Sonoma	100.00	B-	1,307,037
	County Tobacco Securitization Corporation, Series 2005, 5.125%, 6/01/38			
	California Health Facilities Financing Authority, Hospital Revenue	5/12 at		
545	Bonds, Downey Community	100.00	N/R (5)	508,283
	Hospital, Series 1993, 5.750%, 5/15/15 (Pre-refunded 5/15/12)			
	California Health Facilities Financing Authority, Refunding Revenue	11/21 at		
1,250	Bonds, Stanford Hospital	100.00	Aa3	1,788,150
	and Clinics, Tender Option Bond Trust 3267, 19.051%, 5/15/31 (IF)			

Edgar Filing: NUVEEN MUNICIPAL HIGH INCOME OPPORTUNITY FUND - Form N-Q

3,425	California State University, Systemwide Revenue Bonds, Tender Option Bond Trust 4696, 17.018%, 11/01/35 – AMBAC Insured (IF) (4)	5/15 at 100.00	Aa2	4,017,765
4,000	California Statewide Communities Development Authority, Revenue Bonds, EnerTech Regional Biosolids Project, Series 2007A, 5.500%, 12/01/33 (Alternative Minimum Tax) (6)	No Opt. Call	D	874,080
1,000	California Statewide Communities Development Authority, Statewide Community Infrastructure Program Revenue Bonds, Series 2011A, 8.000%, 9/02/41	9/21 at 100.00	N/R	1,026,100
2,925	California Statewide Community Development Authority, Revenue Bonds, Epidaurus Project, Series 2004A, 7.750%, 3/01/34	3/14 at 102.00	N/R	3,002,542
515	California Statewide Community Development Authority, Revenue Bonds, Sutter Health, Tender Option Bond Trust 3048, 17.356%, 11/15/38 (IF)	5/18 at 100.00	AA–	596,622
745	California Statewide Community Development Authority, Revenue Bonds, Sutter Health, Tender Option Bond Trust 3102: 17.684%, 11/15/38 (IF)	5/18 at 100.00	AA–	863,924
1,000	California Statewide Community Development Authority, Subordinate Lien Multifamily Housing Revenue Bonds, Corona Park Apartments, Series 2004I-S, 7.750%, 1/01/34 (Alternative Minimum Tax)	5/18 at 100.00	AA–	1,218,680
1,005	Fontana Public Financing Authority, California, Tax Allocation Revenue Bonds, North Fontana Redevelopment Project, Tender Option Bonds Trust 1013, 19.371%, 9/01/32 – AMBAC Insured (IF) (4)	1/14 at 100.00	N/R	996,015
500	Goden State Tobacco Securitization Corporation, California, Enhanced Tobacco Settlement Asset-Backed Revenue Bonds, Tender Option Bonds Trust 3107, 17.663%, 6/01/45 – AMBAC Insured (IF)	3/12 at 101.00	A+	513,880
1,000	Golden State Tobacco Securitization Corporation, California, Enhanced Tobacco Settlement Asset-Backed Revenue Bonds, Tender Option Bond Trust 1011: 17.301%, 6/01/45 (IF) (4)	6/15 at 100.00	Aa1	1,029,620
750	Golden State Tobacco Securitization Corporation, California, Tobacco Settlement Asset-Backed Bonds, Series 2007A-1: 17.280%, 6/01/45 (IF) (4)	6/15 at 100.00	A2	760,290
500	Golden State Tobacco Securitization Corporation, California, Tobacco Settlement Asset-Backed Bonds, Series 2007A-1: 5.000%, 6/01/33	6/15 at 100.00	A2	506,850
1,750	5.750%, 6/01/47	6/17 at 100.00	B–	1,311,030
500			B–	378,035

Edgar Filing: NUVEEN MUNICIPAL HIGH INCOME OPPORTUNITY FUND - Form N-Q

		6/17 at		
		100.00		
		6/17 at		
1,000	5.125%, 6/01/47	100.00	B-	681,210
	Golden State Tobacco Securitization Corporation, California, Tobacco	6/22 at		
1,000	Settlement Asset-Backed	100.00	BB-	684,640
	Bonds, Series 2007A-2, 0.000%, 6/01/37			
	Grossmont Healthcare District, California, General Obligation Bonds,	No Opt.		
1,500	Tender Option Bond Trust	Call	Aa2	2,646,600
	3253, 22.584%, 1/15/19 (IF)			
	Lake Elsinore, California, Special Tax Bonds, Community Facilities	9/13 at		
1,200	District 2003-2 Improvement	102.00	N/R	1,202,604
	Area A, Canyon Hills, Series 2004A, 5.950%, 9/01/34			
	Lancaster Redevelopment Agency, California, Tax Allocation Bonds,	8/19 at		
335	Combined Redevelopment	100.00	BBB+	358,624
	Project Areas Housing Programs, Series 2009, 6.875%, 8/01/39			
	Lee Lake Water District, Riverside County, California, Special Tax	9/13 at		
3,400	Bonds, Community Facilities	102.00	N/R	3,464,430
	District 3, Series 2004, 5.950%, 9/01/34			
	Long Beach Bond Finance Authority, California, Natural Gas	No Opt.		
1,000	Purchase Revenue Bonds, Series	Call	A-	1,088,730
	2007A, 5.500%, 11/15/37			
	Los Angeles Department of Airports, California, Revenue Bonds, Los	5/20 at		
1,125	Angeles International	100.00	AA	1,608,480
	Airport, Tender Option Bond Trust 10-27B, 18.745%, 5/15/40 (IF)			
	(4)			
	Los Angeles Regional Airports Improvement Corporation, California,	12/12 at		
3,190	Sublease Revenue Bonds, Los	102.00	N/R	2,876,040
	Angeles International Airport, American Airlines Inc. Terminal 4			
	Project, Series 2002C,			
	7.500%, 12/01/24 (Alternative Minimum Tax)			
	Lynwood Redevelopment Agency, California, Project A Revenue	9/21 at		
1,000	Bonds, Subordinate Lien Series	100.00	A-	1,159,020
	2011A, 7.000%, 9/01/31			
	March Joint Powers Redevelopment Agency, California, March Air			
	Force Base Redevelopment			
	Project Tax Allocation Revenue Bonds, Series 2011A:			
		8/21 at		
1,000	7.000%, 8/01/26	100.00	BBB+	1,173,780
		8/21 at		
1,000	7.500%, 8/01/41	100.00	BBB+	1,158,510
	Moreno Valley Unified School District, Riverside County, California,	9/14 at		
800	Special Tax Bonds,	100.00	N/R	805,960
	Community Facilities District, Series 2004, 5.550%, 9/01/29			
	M-S-R Energy Authority, California, Gas Revenue Bonds, Citigroup	No Opt.		
1,000	Prepay Contracts, Series 2009B,	Call	A-	1,216,580
	6.500%, 11/01/39			
	National City Community Development Commission, San Diego	8/21 at		
500	County, California, Redevelopment	100.00	A-	588,775
	Project Tax Allocation Bonds, Series 2011, 7.000%, 8/01/32			
330			A-	374,606

Edgar Filing: NUVEEN MUNICIPAL HIGH INCOME OPPORTUNITY FUND - Form N-Q

	Novato Redevelopment Agency, California, Tax Allocation Bonds, Hamilton Field Redevelopment Project, Series 2011, 6.750%, 9/01/40	9/21 at 100.00		
1,000	Palomar Pomerado Health Care District, California, Certificates of Participation, Series 2010, 6.000%, 11/01/41	11/20 at 100.00	Baa3	1,024,490
250	Palomar Pomerado Health, California, General Obligation Bonds, Tender Option Bond Trust 4683, 17.068%, 8/01/37 – NPMFG Insured (IF) (4)	8/17 at 100.00	A+	298,760
1,000	River Rock Entertainment Authority, California, Revenue Bonds, Senior Notes Series 2011B, 8.000%, 11/01/18	No Opt. Call	N/R	881,770
1,000	Riverside County Public Financing Authority, California, Tax Allocation Bonds, Multiple Projects, Series 2004, 5.000%, 10/01/35 – SYNCORA GTY Insured	10/14 at 100.00	BBB	920,540
1,200	Riverside County Redevelopment Agency Jurupa Valley Project Area 2011, California, Tax Allocation Bonds Series B, 6.750%, 10/01/30	10/21 at 100.00	A–	1,327,308
750	Sacramento City Financing Authority California, Lease Revenue Bonds, Master Lease Program Facilities Projects, Tender Option Bond Trust 4698: 17.970%, 12/01/30 – AMBAC Insured (IF) (4)	No Opt. Call	Aa3	1,184,520
2,015	San Buenaventura, California, Revenue Bonds, Community Memorial Health System, Series 2011: 18.451%, 12/01/33 – AMBAC Insured (IF) (4)	No Opt. Call	Aa3	3,012,103
960	8.000%, 12/01/26	12/21 at 100.00	BB	1,134,691
1,000	8.000%, 12/01/31	12/21 at 100.00	BB	1,168,730
1,250	San Diego County, California, Certificates of Participation, San Diego-Imperial Counties Developmental Services Foundation Project, Series 2002, 5.500%, 9/01/27	9/12 at 100.00	Baa1	1,255,413
1,000	San Jose, California, Airport Revenue Bonds, Tender Option Bond Trust 3923, 17.931%, 9/01/31 – AMBAC Insured (IF) (4)	3/17 at 100.00	AA–	1,158,880
1,000	Santee Community Development Commission, California, Santee Redevelopment Project Tax Allocation Bonds, Series 2011A, 7.000%, 8/01/41	2/21 at 100.00	A	1,129,220
1,000	Temecula Redevelopment Agency, California, Tax Allocation Revenue Bonds, Redevelopment Project 1, Series 2002, 5.250%, 8/01/36 – NPMFG Insured	2/12 at 100.00	A–	1,000,320
650	Twentynine Palms Redevelopment Agency, California, Tax Allocation Bonds, Four Corners Project Area, Series 2011A, 7.650%, 9/01/42	9/21 at 100.00	BBB+	729,781
3,895	West Patterson Financing Authority, California, Special Tax Bonds, Community Facilities District 2001-1, Series 2004A, 6.125%, 9/01/39	9/13 at 103.00	N/R	3,537,861
61,570	Total California			62,619,259

Edgar Filing: NUVEEN MUNICIPAL HIGH INCOME OPPORTUNITY FUND - Form N-Q

Colorado – 6.3% (5.3% of Total Investments)				
1,015	Bradburn Metropolitan District 3, Westminster, Adams County, Colorado, General Obligation Limited Tax Refunding Bonds, Series 2010, 7.500%, 12/01/39	12/13 at 102.00	N/R	1,040,202
6	Buffalo Ridge Metropolitan District, Colorado, Limited Obligation Assessment Bonds, Series 2003, 7.500%, 12/01/33 (Pre-refunded 12/01/13)	12/13 at 101.00	N/R (5)	6,688
3,500	Colorado Educational and Cultural Facilities Authority, Charter School Revenue Bonds, Cesar Chavez Academy, Series 2003, 8.000%, 5/01/34 (6)	5/14 at 101.00	N/R	2,829,260
1,000	Colorado Educational and Cultural Facilities Authority, Charter School Revenue Bonds, Jefferson County School District R-1 – Compass Montessori Secondary School, Series 2006, 5.625%, 2/15/36	2/16 at 101.00	N/R	833,050
1,000	Confluence Metropolitan District, Colorado, General Obligation Limited Tax Bonds, Series 2007, 5.450%, 12/01/34	12/17 at 100.00	N/R	775,280
3,145	Kit Carson County Health Service District, Colorado, Health Care Facility Revenue Bonds,	No Opt. Call	N/R	3,148,554