

BLACKROCK MUNIHOLDINGS INVESTMENT QUALITY FUND
Form N-Q
January 24, 2013

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM N-Q

QUARTERLY SCHEDULE OF PORTFOLIO HOLDINGS OF REGISTERED

MANAGEMENT INVESTMENT COMPANY

Investment Company Act file number 811-08349

Name of Fund: BlackRock MuniHoldings Investment Quality Fund (MFL)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock MuniHoldings Investment Quality Fund, 55 East 52nd Street, New York, NY 10055

Registrant's telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 08/31/2013

Date of reporting period: 11/30/2012

Item 1 Schedule of Investments

Schedule of Investments November 30, 2012 (Unaudited)

BlackRock MuniHoldings Investment Quality Fund (MFL)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds		
Alabama 5.1%		
Auburn University, Refunding RB, Series A: 5.00%, 6/01/29	\$ 5,665	\$ 6,996,615
5.00%, 6/01/31	3,250	4,001,432
Birmingham Special Care Facilities Financing Authority, RB, Children s Hospital (AGC): 6.13%, 6/01/34	4,980	6,106,376
6.00%, 6/01/39	10,995	13,493,944
Selma IDB, Alabama, RB, International Paper Co., Project, Series A, 5.38%, 12/01/35	1,745	1,945,850
		32,544,217
Arizona 1.5%		
Arizona Board of Regents, Refunding RB, Arizona State University System, Series A: 5.00%, 6/01/42	3,000	3,541,860
5.00%, 7/01/42	5,000	5,891,450
		9,433,310
California 19.9%		
California Educational Facilities Authority, RB, University of Southern California, Series A, 5.25%, 10/01/38	8,920	10,821,209
California Health Facilities Financing Authority, RB: Stanford Hospital and Clinics, Series A, 5.00%, 8/15/42	450	519,552
Stanford Hospital and Clinics, Series A, 5.00%, 8/15/51	4,690	5,381,071
Sutter Health, Series B, 6.00%, 8/15/42	5,370	6,574,598
California State Public Works Board, RB, Various Capital Projects, Series G-1 (AGC), 5.25%, 10/01/24	5,000	5,907,150
City of San Jose California, Refunding ARB, Series A-1, AMT, 5.75%, 3/01/34	4,450	5,270,624
County of Sacramento California, RB, Airport System, Senior Series A (AGC), 5.50%, 7/01/41	5,600	6,617,968
Los Angeles Community College District California, GO: Election of 2001, Series A (NPFGC), 5.00%, 8/01/32	10,000	11,538,700
Election of 2008, Series C, 5.25%, 8/01/39	3,375	4,216,995
Los Angeles Department of Water & Power, RB, Power System, Sub-Series A-1, 5.25%, 7/01/38	5,000	5,953,750
Los Angeles Municipal Improvement Corp., Refunding RB, Real Property, Series B (AGC), 5.50%, 4/01/39	2,980	3,414,246
	Par	
	(000)	Value
Municipal Bonds		
California (concluded)		
Los Angeles Unified School District California, GO, Series D, 5.25%, 7/01/25	\$ 3,485	\$ 4,285,853
Manteca Financing Authority California, RB, Manteca Sewer (AGC): 5.63%, 12/01/33	2,450	2,882,254
5.75%, 12/01/36	3,285	3,865,394
Redondo Beach Unified School District, GO, Election of 2008, Series E, 5.50%, 8/01/34	4,110	5,015,392
San Bernardino Community College District, GO, Election of 2002, Series A, 6.25%, 8/01/33	3,820	4,640,230
San Diego Public Facilities Financing Authority, Refunding RB, Series B (AGC), 5.38%, 8/01/34	4,690	5,608,865
State of California, GO, Various Purpose (AGC), 5.50%, 11/01/39	15,000	17,969,100
State of California, GO, Refunding, Various Purpose, 5.00%, 9/01/41	10,345	11,944,130
University of California, Refunding RB, Limited Project, Series G, 5.00%, 5/15/37	3,020	3,618,655
		126,045,736

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Colorado 1.7%

City & County of Denver Colorado, Refunding RB, Airport System, Series B, 5.00%, 11/15/37	2,800	3,271,072
Colorado Health Facilities Authority, RB, Hospital, NCMC, Inc. Project, Series B (AGM), 6.00%, 5/15/26	5,925	7,178,197
		10,449,269

District of Columbia 0.2%

District of Columbia Water & Sewer Authority, Refunding RB, Series A (NPFGC), 5.00%, 10/01/38	1,000	1,154,700
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Florida 5.7%

City of Jacksonville Florida, Refunding RB, Sales Tax Revenue, Better Jacksonville, Series A, 5.00%, 10/01/30	3,500	4,197,900
County of Lee Florida, Refunding ARB, Series A, AMT, 5.38%, 10/01/32	4,600	5,210,972
County of Miami-Dade Florida, RB, Miami International Airport, Series A, AMT (NPFGC), 6.00%, 10/01/29	8,000	8,020,480
County of Miami-Dade Florida, Refunding RB, Miami International Airport, Series A, AMT (AGM), 5.50%, 10/01/41	3,500	3,889,865
Florida Housing Finance Corp., RB, Waverly Apartments, Series C-1, AMT (AGM), 6.30%, 7/01/30	2,055	2,059,315

BLACKROCK MUNIHOLDINGS INVESTMENT QUALITY FUND

NOVEMBER 30, 2012

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Schedule of Investments (continued)

BlackRock MuniHoldings Investment Quality Fund (MFL)

(Percentages shown are based on Net Assets)

	Par	
	(000)	Value
Municipal Bonds		
Florida (concluded)		
Florida Housing Finance Corp., Refunding RB, AMT (NPFGC) Homeowner Mortgage, Series 2: 5.75%, 7/01/14	\$ 260	\$ 260,793
5.90%, 7/01/29	5,225	5,283,311
Jacksonville Florida Port Authority, Refunding RB, AMT, 5.00%, 11/01/38	3,880	4,315,957
Manatee County Housing Finance Authority, RB, Series A, AMT (Ginnie Mae), 5.90%, 9/01/40	725	795,369
Miami-Dade County Housing Finance Authority Florida, RB, Marbrisa Apartments Project, Series 2A, AMT (AGM), 6.00%, 8/01/26	2,185	2,189,632
		36,223,594
Illinois 17.2%		
Chicago Illinois Board of Education, GO, Series A: 5.50%, 12/01/39	6,370	7,640,496
5.00%, 12/01/42	8,750	9,896,950
Chicago Illinois Board of Education, GO, Refunding, Chicago School Reform Board (NPFGC), 5.50%, 12/01/26	1,620	2,087,451
Chicago Transit Authority, RB: Federal Transit Administration Section 5309, Series A (AGC), 6.00%, 6/01/26	6,315	7,494,768
Sales Tax Receipts Revenue, 5.25%, 12/01/36	1,960	2,307,371
Sales Tax Receipts Revenue, 5.25%, 12/01/40	5,515	6,482,883
City of Chicago Illinois, ARB, O Hare International Airport, General, Third Lien: Series A, 5.75%, 1/01/39	7,395	8,921,994
Series C, 6.50%, 1/01/41	16,800	22,007,832
City of Chicago Illinois, Refunding RB, Sales Tax Revenue, Series A, 5.25%, 1/01/38	2,445	2,907,447
Cook County Forest Preserve District, GO: Series C, 5.00%, 12/15/32	1,790	2,114,438
Refunding, Limited Tax Project, Series B, 5.00%, 12/15/32	840	992,250
Illinois Finance Authority, RB: Carle Foundation, Series A, 6.00%, 8/15/41	4,000	4,903,120
University of Chicago, Series B, 5.50%, 7/01/37	10,000	12,255,800
	Par	
	(000)	Value
Municipal Bonds		
Illinois (concluded)		
Metropolitan Pier & Exposition Authority, Refunding RB, McCormick Place Expansion Project, Series B, 5.00%, 12/15/28	\$ 4,645	\$ 5,594,670
Railsplitter Tobacco Settlement Authority, RB: 5.50%, 6/01/23	4,365	5,329,796
6.00%, 6/01/28	1,245	1,531,885
State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/26	5,625	6,708,881
		109,178,032
Indiana 3.3%		
Indiana Finance Authority Waste Water Utility, RB, First Lien, CWA Authority, Series A, 5.00%, 10/01/41	4,080	4,729,699
Indianapolis Local Public Improvement Bond Bank, Refunding RB, Waterworks Project, Series A (AGC), 5.50%, 1/01/38	14,105	16,298,892
		21,028,591
Kansas 1.4%		
Kansas Development Finance Authority, Refunding RB, Adventist Health Sunbelt Obligation Group, Series A, 5.00%, 11/15/32	7,290	8,634,495
Louisiana 0.2%		

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New Orleans Aviation Board Louisiana, Refunding GARB, Restructuring (AGC):		
Series A-1, 6.00%, 1/01/23	500	607,345
Series A-2, 6.00%, 1/01/23	720	874,577
		1,481,922
Massachusetts 0.4%		
Massachusetts Development Finance Agency, RB, Wellesley College, Series J, 5.00%, 7/01/42	2,090	2,517,071
Michigan 5.9%		
City of Detroit Michigan, RB, Second Lien, Series B (AGM), 6.25%, 7/01/36	6,320	7,489,263
City of Detroit Michigan, Refunding RB, Sewage Disposal System, Senior Lien (AGM): Series B, 7.50%, 7/01/33	2,780	3,545,417
Series C-1, 7.00%, 7/01/27	9,055	11,477,212
Hudsonville Public Schools, GO, School Building & Site (Q-SBLF), 5.25%, 5/01/41	6,015	6,986,062
Royal Oak Hospital Finance Authority Michigan, Refunding RB, William Beaumont Hospital, 8.25%, 9/01/39	5,780	7,528,508
		37,026,462

BLACKROCK MUNIHOLDINGS INVESTMENT QUALITY FUND

NOVEMBER 30, 2012

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Schedule of Investments (continued)

BlackRock MuniHoldings Investment Quality Fund (MFL)

(Percentages shown are based on Net Assets)

	Par		Value
	(000)		
Municipal Bonds			
Minnesota 2.0%			
City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series B (AGC), 6.50%, 11/15/38	\$ 9,900	\$	12,447,567
Mississippi 2.2%			
Medical Center Educational Building Corp., RB, University of Mississippi Medical Center Facilities Expansion & Renovation Project, Series A, 5.00%, 6/01/41	2,830		3,307,732
Mississippi Development Bank, Refunding RB, City of Jacksonville Mississippi Water & Sewer System Project, Special Obligation, Series A (AGM), 5.00%, 9/01/30	9,030		10,817,128 14,124,860
Nevada 4.0%			
Clark County Water Reclamation District, GO, Series A, 5.25%, 7/01/34	5,850		7,220,772
County of Clark Nevada, RB: Las Vegas-McCarran International Airport, Series A (AGC), 5.25%, 7/01/39	11,175		12,853,709
Subordinate Lien, Series A-2 (NPFGC), 5.00%, 7/01/36	4,965		5,223,875 25,298,356
New Jersey 3.6%			
New Jersey Health Care Facilities Financing Authority, RB, Virtua Health (AGC), 5.50%, 7/01/38	6,500		7,393,685
New Jersey Higher Education Student Assistance Authority, Refunding RB, Series 1, AMT, 5.75%, 12/01/28	4,475		5,183,124
New Jersey Transportation Trust Fund Authority, RB, Transportation System: Series A, 5.50%, 6/15/41	5,410		6,531,060
Series B, 5.25%, 6/15/36	2,960		3,519,884 22,627,753
New York 11.6%			
Metropolitan Transportation Authority, Refunding RB, Transportation, Series C, 5.00%, 11/15/28	5,500		6,673,040
New York City Municipal Water Finance Authority, Refunding RB, Second General Resolution: Fiscal 2009, Series EE, 5.25%, 6/15/40	7,500		8,943,450
Series FF-2, 5.50%, 6/15/40	4,000		4,931,680
	Par		
	(000)		Value
Municipal Bonds			
New York (concluded)			
New York City Municipal Water Finance Authority, Refunding RB, Second General Resolution (concluded): Water & Sewer System, Fiscal 2011, Series EE, 5.38%, 6/15/43	\$ 3,475	\$	4,277,690
New York City Transitional Finance Authority, RB: Fiscal 2009, Series S-4 (AGC), 5.50%, 1/15/29	4,000		4,857,160
Future Tax Secured, Sub-Series E-1, 5.00%, 2/01/42	7,210		8,555,170
Sub-Series S-2A, 5.00%, 7/15/30	7,110		8,573,024
New York State Dormitory Authority, RB, General Purpose, Series B: 5.00%, 3/15/37	9,900		11,804,661
5.00%, 3/15/42	9,655		11,477,478
New York State Thruway Authority, Refunding RB, General, Series I, 5.00%, 1/01/37	2,890		3,404,507 73,497,860
North Carolina 1.2%			
	6,305		7,513,290

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North Carolina Medical Care Commission, RB, Health Care Facilities, Duke University Health System,
Series A, 5.00%, 6/01/32

Pennsylvania 4.6%

Berks County Municipal Authority, Refunding RB, Reading Hospital & Medical Center, Series A,
5.00%, 11/01/40

Pennsylvania Higher Educational Facilities Authority, RB, 5.00%, 4/01/42

Pennsylvania Turnpike Commission, RB:

Motor License Fund- Enhanced Subordinate Special,
5.00%, 12/01/42

Sub-Series A, 6.00%, 12/01/41

Puerto Rico 1.2%

Puerto Rico Sales Tax Financing Corp., RB, First Sub-Series A, 6.38%, 8/01/39

Texas 19.3%

City of Houston Texas, Refunding RB, Combined First Lien, Series A (AGC):

6.00%, 11/15/35

6.00%, 11/15/36

	4,425	5,041,181
	9,325	10,849,917
	6,480	7,537,990
	4,945	5,661,728
		29,090,816
	6,610	7,705,607
	12,700	15,833,090
	9,435	11,827,716

BLACKROCK MUNIHOLDINGS INVESTMENT QUALITY FUND

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Schedule of Investments (continued)

BlackRock MuniHoldings Investment Quality Fund (MFL)

(Percentages shown are based on Net Assets)

	Par	
	(000)	Value
Municipal Bonds		
Texas (concluded)		
City of Houston Texas, Refunding RB, Combined First Lien, Series A (AGC) (concluded):		
5.38%, 11/15/38	\$ 5,000	\$ 6,027,650
Dallas Area Rapid Transit, Refunding RB, Senior Lien, 5.25%, 12/01/38	9,110	10,805,189
Dallas/Fort Worth International Airport, Joint RB, Series H,		
5.00%, 11/01/42 (a)	10,425	11,546,522
Dallas/Fort Worth International Airport, Joint Refunding RB, Series F, AMT, 5.00%, 11/01/35	10,000	11,153,900
Harris County Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, Series B, 7.25%, 12/01/35	1,500	1,901,565
Katy ISD Texas, GO, Refunding, School Building, Series A, (PSF-GTD), 5.00%, 2/15/42	3,505	4,180,273
North Texas Tollway Authority, RB, Special Projects System, Series A, 5.50%, 9/01/41	3,500	4,268,390
North Texas Tollway Authority System, First Tier, Refunding RB::		
(AGM), 6.00%, 1/01/43	5,555	6,819,651
Series B, 5.00%, 1/01/42	2,600	2,979,652
Series K-1 (AGC),		
5.75%, 1/01/38	12,150	14,135,188
Tarrant County Cultural Education Facilities Finance Corp., Refunding RB, Christus Health, Series A (AGC), 6.50%, 7/01/37	1,770	2,140,691
Texas State Turnpike Authority, RB, Central Texas Turnpike System, First Tier, Series A (AMBAC), 5.00%, 8/15/42	4,165	4,181,410
Texas Tech University, Refunding RB, Improvement Bonds, 14th Series A, 5.00%, 8/15/32	1,500	1,816,590
Texas Transportation Commission, Refunding RB, Central Texas Turnpike System, First Tier, Series A, 5.00%, 8/15/41	2,070	2,345,476
University of Texas System, Refunding RB, Financing System, Series B, 5.00%, 8/15/43	8,495	10,339,859
		122,302,812
Utah 1.8%		
Utah Transit Authority, Refunding RB, Subordinated Sales Tax,		
5.00%, 6/15/42	9,910	11,517,105
Virginia 2.5%		
Fairfax County IDA, RB, Health Care, Inova Health System Project,		
Series A, 5.00%, 5/15/40	3,230	3,744,087
	Par	
	(000)	Value
Municipal Bonds		
Virginia (concluded)		
Virginia Public School Authority, RB, School Financing, 6.50%, 12/01/35	\$ 4,300	\$ 5,436,662
Virginia Resources Authority, RB,		
Series A-1, 5.00%, 11/01/42	5,770	6,940,271
		16,121,020
Washington 1.8%		
City of Seattle Washington, Refunding RB, Series A, 5.25%, 2/01/36	4,200	5,034,792
State of Washington, GO, Various Purpose, Series B, 5.25%, 2/01/36	3,290	4,011,727
Washington Higher Education Facilities Authority, Refunding RB, The University of Puget Sound Project, Series A, 5.00%, 10/01/42	2,000	2,294,380
		11,340,899
Wisconsin 1.3%		
Wisconsin Health & Educational Facilities Authority, RB, Ascension Health, Series D, 5.00%, 11/15/41	5,800	6,636,650
Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert Health, Inc., Series A, 5.00%, 4/01/42	1,470	1,693,058
		8,329,708
Total Municipal Bonds 119.6%		757,635,052

Municipal Bonds Transferred to

Tender Option Bond (TOB) Trusts (b)

Alabama 1.1%

Mobile Board of Water & Sewer Commissioners, RB (NPFGC),
5.00%, 1/01/31

6,500

7,115,420

California 1.9%

California State University, Refunding RB, Systemwide, Series A (AGM),
5.00%, 11/01/32

7,960

9,126,140

Los Angeles Unified School District California, GO, Series I,
5.00%, 1/01/34

2,400

2,799,816

11,925,956

District of Columbia 0.7%

District of Columbia Water & Sewer Authority, Refunding RB, Series A,
6.00%, 10/01/35 (c)

3,381

4,197,465

Florida 3.0%

County of Miami-Dade Florida, Refunding RB, Transit System, Sales Surtax, 5.00%, 7/01/42

3,060

3,558,199

Schedule of Investments (continued)

BlackRock MuniHoldings Investment Quality Fund (MFL)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Municipal Bonds Transferred to		
Tender Option Bond (TOB) Trusts (b)		
Florida (concluded)		
Hillsborough County Aviation Authority, RB, Series A, AMT (AGC), 5.50%, 10/01/38	\$ 10,657	\$ 11,838,367
Lee County Housing Finance Authority, RB, Multi-County Program, Series A-2, AMT (Ginnie Mae), 6.00%, 9/01/40	3,120	3,311,131 18,707,697
Illinois 2.2%		
Chicago Transit Authority, Refunding RB, Federal Transit Administration Section 5309 (AGM), 5.00%, 6/01/28	7,737	8,731,811
City of Chicago Illinois, Refunding RB, Second Lien, Water Project, 5.00%, 11/01/42	4,358	5,117,436 13,849,247
Indiana 1.7%		
Indiana Health & Educational Facilities Financing Authority, Refunding RB, St. Francis, Series E (AGM), 5.25%, 5/15/41	9,850	10,816,285
Kentucky 0.1%		
Kentucky State Property & Building Commission, Refunding RB, Project No. 93 (AGC), 5.25%, 2/01/27	404	476,133
Massachusetts 1.8%		
Massachusetts School Building Authority, Sales Tax RB, Senior-Series B, 5.00%, 10/15/41	9,440	11,291,090
Nevada 2.5%		
Clark County Water Reclamation District, GO: Limited Tax, 6.00%, 7/01/38	8,000	9,897,840
Series B, 5.50%, 7/01/29	5,008	6,257,061 16,154,901
New Jersey 3.6%		
New Jersey EDA, RB, School Facilities Construction, Series Z (AGC), 6.00%, 12/15/34	4,350	5,310,611
New Jersey State Housing & Mortgage Finance Agency, RB, S/F Housing, Series CC, 5.25%, 10/01/29	7,402	8,319,679
New Jersey Transportation Trust Fund Authority, RB, Transportation System, Series A (AGM), 5.00%, 12/15/32	8,000	9,229,440 22,859,730
New York 13.7%		
Hudson New York Yards Infrastructure Corp., RB, Series A, 5.75%, 2/15/47	9,249	11,235,193
	Par	
	(000)	Value
Municipal Bonds Transferred to		
Tender Option Bond (TOB) Trusts (b)		
New York (concluded)		
New York City Municipal Water Finance Authority, Refunding RB: Series FF, 5.00%, 6/15/45	\$ 11,236	\$ 13,252,516
Series FF-2, 5.50%, 6/15/40	4,994	6,157,050
New York City Transitional Finance Authority, RB: Fiscal 2009, Series S-3, 5.25%, 1/15/39	5,619	6,446,420
Future Tax Secured, Sub-Series E1, 5.00%, 2/01/42	5,439	6,453,680
New York Liberty Development Corp., RB, World Trade Center Port Authority, Series 1, 5.25%, 12/15/43	13,950	16,576,985

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New York Liberty Development Corp., Refunding RB, 4 World Trade Center Project, 5.75%, 11/15/51	8,200	10,031,962
New York State Dormitory Authority, ERB, Short Term Personal Income, Tax Revenue Education, Series B, 5.25%, 3/15/38	13,500	16,546,545 86,700,351
Puerto Rico 1.0%		
Puerto Rico Sales Tax Financing Corp., Sales Tax, Refunding RB, Series C, 5.25%, 8/01/40	5,590	6,289,253
Texas 6.3%		
City of San Antonio Texas, Refunding RB, Series A, 5.25%, 2/01/31 (c)	12,027	14,643,509
North Texas Tollway Authority, RB, Special Projects System, Series A, 5.50%, 9/01/41	9,640	11,756,366
Waco Educational Finance Corp., Refunding RB, Baylor University, 5.00%, 3/01/43	11,250	13,274,775 39,674,650
Utah 1.1%		
City of Riverton Utah Hospital, RB, IHC Health Services, Inc., 5.00%, 8/15/41	6,373	7,113,777
Washington 1.6%		
University of Washington, Refunding RB, Series A, 5.00%, 7/01/41	8,698	10,459,285
Total Municipal Bonds Transferred to Tender		
Option Bond (TOB) Trusts 42.3%		267,631,240
Total Long-Term Investments		
(Cost \$907,880,254) 161.9%		1,025,266,292

BLACKROCK MUNIHOLDINGS INVESTMENT QUALITY FUND

NOVEMBER 30, 2012

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Schedule of Investments (continued)

BlackRock MuniHoldings Investment Quality Fund (MFL)

(Percentages shown are based on Net Assets)

	Par (000)	Value
Short-Term Securities		
Alabama 0.00%		
Eutaw Industrial Development Board, Refunding RB, VRDN, Alabama Power Co. Project, 0.17%, 1/08/13 (d)	\$ 200	\$ 200,000
Money Market Funds 2.1%		
FFI Institutional Tax-Exempt Fund, 0.01%(e)(f)	13,397,263	13,397,263
Total Short-Term Securities		
(Cost \$13,597,263) 2.1%		13,597,263
Total Investments		
(Cost - \$921,477,517*) 164.0%		1,038,863,555
Other Assets Less Liabilities 0.1%		531,808
Liability for TOB Trust Certificates, Including Interest Expense and Fees Payable (20.7)%		(131,421,793)
VRDP Shares, at Liquidation Value (43.4)%		(274,600,000)
Net Assets Applicable to Common Shares 100.0%		\$ 633,373,570

* As of November 30, 2012, gross unrealized appreciation and gross unrealized depreciation based on cost for federal income tax purposes were as follows:

Tax cost	\$ 791,313,443
Gross unrealized appreciation	\$ 117,386,044
Gross unrealized depreciation	(1,158,631)
Net unrealized appreciation	\$ 116,227,413

(a) When-issued security. Unsettled when-issued transactions were as follows:

Counterparty	Value	Unrealized Appreciation
Merill Lynch Pierce	\$ 11,546,522	\$ 93,304

- (b) Securities represent bonds transferred to a TOB in exchange for which the Fund acquired residual interest certificates. These securities serve as collateral in a financing transaction.
- (c) All or a portion of security is subject to a recourse agreement which may require the Fund to pay the Liquidity Provider in the event there is a shortfall between the TOB Trust Certificates and proceeds received from the sale of the security contributed to the TOB trust. In the case of a shortfall, the aggregate maximum potential amount the Fund could ultimately be required to pay under the agreements is \$9,707,818.
- (d) Variable rate security. Rate shown is as of report date and maturity shown is the date the principal owed can be recovered through demand.
- (e) Investments in issuers considered to be an affiliate of the Fund during the period ended November 30, 2012, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

Affiliate	Shares Held at August 31, 2012	Net Activity	Shares	
			Held at November 30, 2012	Income
FFI Institutional Tax-Exempt Fund	687,432	12,709,831	13,397,263	\$ 779

(f) Represents the current yield as of report date.

Portfolio Abbreviations

To simplify the listings of portfolio holdings in the Schedule of Investments, the names and descriptions of many of the securities have been abbreviated according to the following list:

AGC	Assured Guaranty Corp.
AGM	Assured Guaranty Municipal Corp.
AMBAC	American Municipal Bond Assurance Corp.
AMT	Alternative Minimum Tax (subject to)
ARB	Airport Revenue Bonds
EDA	Economic Development Authority
ERB	Education Revenue Bonds
GARB	General Airport Revenue Bonds
Ginnie Mae	Government National Mortgage Association
GO	General Obligation Bonds
IDA	Industrial Development Authority
IDB	Industrial Development Board
ISD	Independent School District
NPFGC	National Public Finance Guarantee Corp.
PSF-GTD	Permanent School Fund Guaranteed
Q-SBLF	Qualified School Bond Loan Fund
RB	Revenue Bonds
S/F	Single-Family
VRDN	Variable Rate Demand Notes

Schedule of Investments (concluded)

BlackRock MuniHoldings Investment Quality Fund (MFL)

Fair Value Measurements - Various inputs are used in determining the fair value of investments. These inputs to valuation techniques are categorized into a disclosure hierarchy consisting of three broad levels for financial reporting purposes as follows:

Level 1 unadjusted price quotations in active markets/exchanges for identical assets and liabilities that the Fund has the ability to access

Level 2 other observable inputs (including, but not limited to: quoted prices for similar assets or liabilities in markets that are active, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the assets or liabilities (such as interest rates, yield curves, volatilities, prepayment speeds, loss severities, credit risks and default rates) or other market-corroborated inputs)

Level 3 unobservable inputs based on the best information available in the circumstances, to the extent observable inputs are not available (including the Fund's own assumptions used in determining the fair value of investments)

The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). Accordingly, the degree of judgment exercised in determining fair value is greatest for instruments categorized in Level 3. The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the level in the fair value hierarchy within which the fair value measurement falls in its entirety is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

Changes in valuation techniques may result in transfers into or out of an assigned level within the disclosure hierarchy. In accordance with the Fund's policy, transfers between different levels of the fair value disclosure hierarchy are deemed to have occurred as of the beginning of the reporting period. The categorization of a value determined for investments is based on the pricing transparency of the investment and is not necessarily an indication of the risks associated with investing in those securities. For information about the Fund's policy regarding valuation of investments and other significant accounting policies, please refer to the Fund's most recent financial statements as contained in its annual report.

The following table summarizes the Fund's investments categorized in the disclosure hierarchy as of November 30, 2012:

	Level 1	Level 2	Level 3	Total
Assets:				
Investments:				
Long-Term Investments ¹		\$ 1,025,266,292		\$ 1,025,266,292
Short-Term Securities	\$ 13,397,263	200,000		13,597,263
Total	\$ 13,397,263	\$ 1,025,466,292		\$ 1,038,863,555

¹ See above Schedule of Investments for values in each state or political sub-division.

Certain of the Fund's liabilities are held at carrying amount, which approximates fair value for financial reporting purposes. As of November 30, 2012, such liabilities are categorized within the disclosure hierarchy as follows:

	Level 1	Level 2	Level 3	Total
Liabilities:				
TOB trust certificates		\$ (131,322,699)		\$ (131,322,699)
VRDP Shares		(274,600,000)		(274,600,000)
Total		\$ (405,922,699)		\$ (405,922,699)

There were no transfers between levels during the period ended November 30, 2012.

Item 2 Controls and Procedures

2(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)) are effective as of a date within 90 days of the filing of this report based on the evaluation of these controls and procedures required by Rule 30a-3(b) under the 1940 Act and Rule 13a-15(b) under the Securities Exchange Act of 1934, as amended.

2(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) 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

Certifications Attached hereto

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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.

BlackRock MuniHoldings Investment Quality Fund

By: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock MuniHoldings Investment Quality Fund

Date: January 23, 2013

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: /s/ John M. Perlowski
John M. Perlowski
Chief Executive Officer (principal executive officer) of
BlackRock MuniHoldings Investment Quality Fund

Date: January 23, 2013

By: /s/ Neal J. Andrews
Neal J. Andrews
Chief Financial Officer (principal financial officer) of
BlackRock MuniHoldings Investment Quality Fund

Date: January 23, 2013