| BLACKROCK MUNIHOLDINGS QUALITY FUND, INC.<br>Form N-Q<br>March 27, 2012   |
|---|
| 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 811-08707  |
| Name of Fund: BlackRock MuniHoldings Quality Fund, Inc. (MUS)   |
| Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809  |
| Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock MuniHoldings Quality Fund, Inc., 55 East 52 Street, New York, NY 10055 |
| Registrant's telephone number, including area code: (800) 882-0052, Option 4  |
| Date of fiscal year end: 04/30/2012   |
| Date of reporting period: 01/31/2012  |
| Item 1 – Schedule of Investments  |
|   |

Schedule of Investments January 31, 2012 (Unaudited)

BlackRock MuniHoldings Quality Fund, Inc. (MUS) (Percentages shown are based on Net Assets)

|   |    | Par   |    |                      |
|---|----|-------|----|----------------------|
| Municipal Bonds                             | (( | 000)  |    | Value                |
| Alabama 2.8%                                |    |       |    |                      |
| Birmingham Special Care Facilities          |    |       |    |                      |
| Financing Authority, RB, Children s         | ф  | 2 220 | Φ. | 2 (52 255            |
| Hospital (AGC), 6.00%, 6/01/39              | \$ | 2,330 | \$ | 2,672,277            |
| County of Jefferson Alabama, RB, Series     |    | 2.170 |    | 1 000 000            |
| A, 5.50%, 1/01/22                           |    | 2,170 |    | 1,988,089            |
| Selma Industrial Development Board, RB,     |    |       |    |                      |
| International Paper Company Project,        |    | 565   |    | 500 640              |
| Series A, 5.38%, 12/01/35                   |    | 303   |    | 590,640<br>5,251,006 |
| California 15.9%                            |    |       |    | 3,231,000            |
| California Health Facilities Financing      |    |       |    |                      |
| Authority, RB, Scripps Health, Series A,    |    |       |    |                      |
| 5.00%, 11/15/40 (a)                         |    | 240   |    | 257,858              |
| California Health Facilities Financing      |    | 240   |    | 237,030              |
| Authority, Refunding RB, Sutter Health,     |    |       |    |                      |
| Series B, 6.00%, 8/15/42                    |    | 1,730 |    | 1,993,029            |
| California State Educational Facilities     |    | 1,750 |    | 1,555,025            |
| Authority, RB, University of Southern       |    |       |    |                      |
| California, Series A, 5.25%, 10/01/38       |    | 2,895 |    | 3,256,036            |
| Central Unified School District, GO,        |    | 2,073 |    | 3,230,030            |
| Election of 2008, Series A (AGC),           |    |       |    |                      |
| 5.63%, 8/01/33                              |    | 1,325 |    | 1,514,952            |
| City of San Jose California, ARB,           |    | -,    |    | -,,                  |
| Series A-1, AMT:                            |    |       |    |                      |
| 5.50%, 3/01/30                              |    | 2,400 |    | 2,608,944            |
| 5.75%, 3/01/34                              |    | 2,180 |    | 2,408,638            |
| City of Sunnyvale California, Refunding RB, |    |       |    |                      |
| 5.25%, 4/01/40                              |    | 1,605 |    | 1,818,786            |
| County of Sacramento California, RB,        |    |       |    |                      |
| Senior Series A (AGC), 5.50%, 7/01/41       |    | 2,100 |    | 2,285,325            |
| Los Angeles Community College District      |    |       |    |                      |
| California, GO, Election of 2008, Series    |    |       |    |                      |
| C, 5.25%, 8/01/39                           |    | 1,500 |    | 1,718,850            |
| Los Angeles Department of Water & Power,    |    |       |    |                      |
| RB, Power System, Sub-Series A-1,           |    |       |    |                      |
| 5.25%, 7/01/38                              |    | 1,575 |    | 1,746,455            |
| Oceanside Unified School District           |    |       |    |                      |
| California, GO, Series A (AGC), 5.25%,      |    |       |    |                      |
| 8/01/33                                     |    | 1,825 |    | 2,031,663            |
| Redondo Beach Unified School District,      |    |       |    |                      |
| GO, Election of 2008, Series E, 5.50%,      |    |       |    |                      |
| 8/01/34                                     |    | 1,335 |    | 1,560,975            |
| San Bernardino Community College            |    |       |    |                      |
| District, GO, Election of 2002, Series A,   |    | 1.250 |    | 1 405 636            |
| 6.25%, 8/01/33                              |    | 1,250 |    | 1,495,638            |
| San Pablo Joint Powers Financing            |    |       |    |                      |
| Authority California, Tax Allocation        |    |       |    |                      |
| Bonds, Refunding, CAB (NPFGC) (b):          |    | 0.625 |    | 1.010.000            |
| 5.66%, 12/01/24                             |    | 2,635 |    | 1,319,002            |
| 5.66%, 12/01/25                             |    | 2,355 |    | 1,108,781            |
| 5.66%, 12/01/26                             |    | 2,355 |    | 1,041,428            |

|   | Par     |                 |
|---|---------|-----------------|
| Municipal Bonds   | (000)   | Value           |
| California (concluded)  |         |                 |
| Ventura County Community College  |         |                 |
| District, GO, Election of 2002, Series C,                                       | Φ 1.05  | 0 6 2116505     |
| 5.50%, 8/01/33  | \$ 1,85 |                 |
| Colorado 1.4%   |         | 30,282,945      |
| Colorado Health Facilities Authority, RB,                                       |         |                 |
| Hospital, NCMC, Inc. Project, Series B  |         |                 |
| (AGM), 6.00%, 5/15/26   | 1,90    | 0 2,246,845     |
| Regional Transportation District, COP,  | 1,50    | 2,2 10,0 13     |
| Series A, 5.00%, 6/01/25  | 45.     | 5 514,332       |
|   |         | 2,761,177       |
| District of Columbia 1.2%   |         | ,, , , , , ,    |
| District of Columbia Water & Sewer  |         |                 |
| Authority, Public Utility, RB, Series A,  |         |                 |
| 5.50%, 10/01/39   | 2,00    | 0 2,266,400     |
| Florida 9.5%  |         |                 |
| City of Gainesville Florida, Refunding RB,                                      |         |                 |
| Series C, 5.25%, 10/01/34   | 2,50    | 0 2,838,500     |
| County of Lee Florida, Refunding ARB,   | 4.50    |                 |
| Series A, AMT, 5.38%, 10/01/32  | 1,50    | 0 1,620,180     |
| Jacksonville Port Authority, RB, AMT  | 2.21    | 5 2 2 4 0 4 0 2 |
| (AGC), 6.00%, 11/01/38  | 2,21    | 5 2,248,402     |
| Orange County Health Facilities Authority,  P.P. The Nemoure Foundation Project |         |                 |
| RB, The Nemours Foundation Project,<br>Series 2009A, 5.00%, 1/01/29             | 1,46    | 5 1,609,302     |
| Orange County School Board, COP, Series   | 1,40    | 3 1,009,302     |
| A (AGC), 5.50%, 8/01/34   | 4,64    | 5 5,172,161     |
| Tohopekaliga Water Authority, Refunding   | 7,07    | 5,172,101       |
| RB, Series A, 5.25%, 10/01/36   | 3,99    | 5 4,528,932     |
| ,   | 2,55    | 18,017,477      |
| Illinois 18.6%  |         | -,,             |
| Chicago Board of Education Illinois, GO,  |         |                 |
| Series A:   |         |                 |
| 5.50%, 12/01/39   | 2,00    | , ,             |
| 5.00%, 12/01/41   | 4,33    | 0 4,635,655     |
| City of Chicago Illinois, RB, Series A,   |         |                 |
| 5.25%, 1/01/38  | 79.     | 5 896,490       |
| City of Chicago Illinois, RB, O Hare  |         |                 |
| International Airport:  |         |                 |
| General Third Lien, Series A, 5.75%, 1/01/39                                    | 1 1 4   | 5 1,306,903     |
| General Third Lien, Series C,   | 1,14    | 3 1,300,903     |
| 6.50%, 1/01/41  | 5,22    | 5 6,314,099     |
| General Third Lien, Series C (AGC),   | 3,22    | 0,517,077       |
| 5.25%, 1/01/35  | 1,25    | 5 1,380,174     |
| Series A (AGM), 5.00%, 1/01/33  | 8,00    | , ,             |
|   |         | 5,5 .5, . 10    |

BLACKROCK MUNIHOLDINGS QUALITY FUND, INC.

JANUARY 31, 2012

## Schedule of Investments (continued)

# BlackRock MuniHoldings Quality Fund, Inc. (MUS) (Percentages shown are based on Net Assets)

|   | Par   |       |              |  |
|---|-------|-------|--------------|--|
| Municipal Bonds   | (000) |       | Value        |  |
| Illinois (concluded)  |       |       |              |  |
| City of Chicago Illinois, Transit Authority,<br>RB:                 |       |       |              |  |
| Federal Transit Administration Section                              |       |       |              |  |
| 5309, Series A (AGC), 6.00%,  |       |       |              |  |
| 6/01/26   | \$    | 2,000 | \$ 2,372,060 |  |
| Sales Tax Receipts, 5.25%,  |       | 625   | 700.020      |  |
| 12/01/36<br>Sales Tax Receipts, 5.25%,                              |       | 635   | 709,930      |  |
| 12/01/40  |       | 1,810 | 2,018,856    |  |
| Railsplitter Tobacco Settlement Authority,                          |       | 1,010 | 2,010,000    |  |
| RB:   |       |       |              |  |
| 5.50%, 6/01/23  |       | 1,405 | 1,602,992    |  |
| 6.00%, 6/01/28  |       | 400   | 448,528      |  |
| State of Illinois, RB, Build Illinois, Series B,                    |       |       |              |  |
| 5.25%, 6/15/28  |       | 2,500 | 2,844,650    |  |
| I. 1' 0 Act   |       |       | 35,339,937   |  |
| Indiana 8.4% Indiana Finance Authority Wastewater                   |       |       |              |  |
| Utility, RB, First Lien, CWA Authority                              |       |       |              |  |
| Project, Series A, 5.25%, 10/01/31                                  |       | 2,720 | 3,138,771    |  |
| Indiana Municipal Power Agency, RB,                                 |       | _,    | 2,223,772    |  |
| Series A (NPFGC), 5.00%, 1/01/42                                    |       | 5,000 | 5,271,200    |  |
| Indianapolis Local Public Improvement                               |       |       |              |  |
| Bond Bank, RB:  |       |       |              |  |
| Series 2011F, 5.25%, 2/01/36  |       | 3,055 | 3,469,747    |  |
| Series 2011K, 5.00%, 6/01/25  |       | 2,140 | 2,464,638    |  |
| Indianapolis Local Public Improvement                               |       |       |              |  |
| Bond Bank, Refunding RB, Waterworks Project, Series A (AGC), 5.50%, |       |       |              |  |
| 1/01/38   |       | 1,430 | 1,603,373    |  |
|   |       | -,    | 15,947,729   |  |
| Iowa 0.6%   |       |       |              |  |
| Iowa Finance Authority, Refunding RB,                               |       |       |              |  |
| Iowa Health System (AGC), 5.25%,                                    |       |       |              |  |
| 2/15/29   |       | 1,080 | 1,194,156    |  |
| Massachusetts 1.3%  |       |       |              |  |
| Massachusetts HFA, RB, Rental Mortgage,                             |       | 2,440 | 2,444,441    |  |
| Series C, AMT (AGM), 5.50%, 7/01/32<br>Michigan 8.2%                |       | 2,440 | 2,444,441    |  |
| City of Detroit Michigan, RB:                                       |       |       |              |  |
| Second Lien, Series B (FGIC), 5.50%,                                |       |       |              |  |
| 7/01/29   |       | 2,410 | 2,709,611    |  |
| Senior Lien, Series B (AGM), 7.50%,                                 |       |       |              |  |
| 7/01/33   |       | 750   | 946,688      |  |
| City of Detroit Michigan, Refunding RB:                             |       |       |              |  |
| Senior Lien, Series C-1 (AGM), 7.00%,                               |       | 4.010 | 5.058.003    |  |
| 7/01/27   |       | 4,810 | 5,957,906    |  |
| Senior Lien, Series C-2 (BHAC),<br>5.25%, 7/01/29                   |       | 1,910 | 2,127,243    |  |
| 5.25 10, 1101127  |       | 1,910 | 2,127,243    |  |

Michigan State Building Authority, Refunding RB, Facilities Program, Series I (AGC):

5.25%, 10/15/24 875 1,017,415

|   | ]  | Par   |                               |
|---|----|-------|-------------------------------|
| Municipal Bonds   | (  | 000)  | Value                         |
| Michigan (concluded)  |    |       |                               |
| Michigan State Building Authority,  |    |       |                               |
| Refunding RB, Facilities Program,   |    |       |                               |
| Series I (AGC) (concluded):   |    |       | <b>* ** ** ** ** ** ** **</b> |
| 5.25%, 10/15/25   | \$ | 455   | \$ 526,672                    |
| Royal Oak Hospital Finance Authority  |    |       |                               |
| Michigan, Refunding RB, William   |    | 1.010 | 0.061.044                     |
| Beaumont Hospital, 8.25%, 9/01/39   |    | 1,910 | 2,361,944                     |
| Minnesota 0.8%  |    |       | 15,647,479                    |
|   |    |       |                               |
| City of Minneapolis Minnesota, Fairview  Health Services Refunding RR, Series R |    |       |                               |
| Health Services, Refunding RB, Series B (AGC), 6.50%, 11/15/38                  |    | 1,325 | 1,564,136                     |
| Nevada 6.0%   |    | 1,323 | 1,304,130                     |
| Clark County Water Reclamation District,  |    |       |                               |
| GO, Series A, 5.25%, 7/01/34  |    | 2,000 | 2,246,280                     |
| County of Clark Nevada, RB:   |    | 2,000 | 2,240,200                     |
| Las Vegas-McCarran International  |    |       |                               |
| Airport, Series A (AGC), 5.25%,   |    |       |                               |
| 7/01/39   |    | 2,510 | 2,737,030                     |
| Las Vegas-McCarran, International   |    | 2,310 | 2,737,030                     |
| Airport, Series A-1 AMT (AGM),  |    |       |                               |
| 5.00%, 7/01/23  |    | 1,750 | 1,878,450                     |
| Subordinate Lien, Series A-2 (NPFGC),   |    | 1,750 | 1,070,430                     |
| 5.00%, 7/01/36  |    | 4,440 | 4,556,594                     |
| 3.00%, 1101130  |    | 7,770 | 11,418,354                    |
| New Jersey 8.8%   |    |       | 11,110,00                     |
| New Jersey EDA, RB, Motor Vehicle   |    |       |                               |
| Surcharge, Series A (NPFGC), 5.25%,   |    |       |                               |
| 7/01/33   |    | 6,700 | 7,188,095                     |
| New Jersey Health Care Facilities   |    |       |                               |
| Financing Authority, RB, Virtua Health  |    |       |                               |
| (AGC), 5.50%, 7/01/38   |    | 2,100 | 2,298,954                     |
| New Jersey Transportation Trust Fund  |    |       |                               |
| Authority, RB, Transportation System:   |    |       |                               |
| Series A, 5.50%, 6/15/41  |    | 1,780 | 2,042,354                     |
| Series A (AGC), 5.63%, 12/15/28   |    | 3,500 | 4,040,750                     |
| Series B 5.25%, 6/15/36   |    | 1,000 | 1,125,150                     |
|   |    |       | 16,695,303                    |
| New York 7.7%   |    |       |                               |
| Hudson New York Yards Infrastructure  |    |       |                               |
| Corp., RB, Series A, 5.75%, 2/15/47   |    | 2,510 | 2,836,325                     |
| New York City Municipal Water and Sewer   |    |       |                               |
| Finance Authority, RB, Second General   |    |       |                               |
| Resolution:   |    |       |                               |
| Fiscal 2009, Series EE, 5.25%,  |    |       |                               |
| 6/15/40   |    | 3,410 | 3,801,706                     |
| Fiscal 2012, Series BB, 5.00%,  |    |       |                               |
| 6/15/44   |    | 1,500 | 1,670,490                     |
| Series EE, 5.38%, 6/15/43   |    | 1,305 | 1,492,320                     |
| New York City Transitional Finance  |    |       |                               |
| Authority, RB, Fiscal 2009, Series S-3,   |    |       |                               |
| 5.25%, 1/15/39  |    | 1,400 | 1,548,246                     |
|   |    |       |                               |

BLACKROCK MUNIHOLDINGS QUALITY FUND, INC.

JANUARY 31, 2012

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## Schedule of Investments (continued)

# BlackRock MuniHoldings Quality Fund, Inc. (MUS) (Percentages shown are based on Net Assets)

|   | Par      |              |
|---|----------|--------------|
| Municipal Bonds                                 | (000)    | Value        |
| New York (concluded)                            |          |              |
| New York State Dormitory Authority, RB,         |          |              |
| General Purpose, Series C, 5.00%, 3/15/41       | \$ 3,025 | \$ 3,396,712 |
| 3/13/41   | \$ 3,023 | 14,745,799   |
| Pennsylvania 1.7%                               |          | 14,743,733   |
| Delaware River Port Authority, RB, Series       |          |              |
| D (AGC), 5.00%, 1/01/40                         | 1,720    | 1,858,701    |
| Philadelphia Hospitals & Higher Education       | 1,720    | 1,030,701    |
| Facilities Authority, RB, The Children s        |          |              |
| Hospital of Philadelphia Project, Series        |          |              |
| D, 5.00%, 7/01/32                               | 1,215    | 1,345,710    |
| ,,  | , ,      | 3,204,411    |
| Puerto Rico 1.3%                                |          |              |
| Puerto Rico Sales Tax Financing Corp.,          |          |              |
| RB, First Sub-Series A, 6.38%, 8/01/39          | 2,115    | 2,469,030    |
| Texas 22.9%                                     |          |              |
| Austin Community College District, RB,          |          |              |
| Educational Facilities Project, Round           |          |              |
| Rock Campus, 5.25%, 8/01/33                     | 2,500    | 2,747,800    |
| City of Austin Texas, Refunding RB,             |          |              |
| Series A (AGM):                                 |          |              |
| 5.00%, 11/15/28                                 | 1,080    | 1,242,140    |
| 5.00%, 11/15/29                                 | 1,365    | 1,554,121    |
| City of Houston Texas, Refunding RB,            |          |              |
| Combined First Lien, Series A (AGC),            | 4.000    | 4 020 000    |
| 6.00%, 11/15/35                                 | 4,000    | 4,820,880    |
| Clifton Higher Education Finance Corp.,         |          |              |
| Refunding RB, Baylor University, 5.25%, 3/01/32 | 1,840    | 2,121,134    |
| Dallas Area Rapid Transit, Refunding RB,        | 1,040    | 2,121,134    |
| Senior Lien, 5.25%, 12/01/38                    | 3,175    | 3,534,410    |
| Harris County Cultural Education Facilities     | 5,175    | 3,334,410    |
| Finance Corp., RB, Texas Children s             |          |              |
| Hospital Project, Series 2009, 5.25%,           |          |              |
| 10/01/29  | 1,200    | 1,372,164    |
| Harris County Health Facilities                 | ,        |              |
| Development Corp., Refunding RB,                |          |              |
| Memorial Hermann Healthcare System,             |          |              |
| Series B, 7.25%, 12/01/35                       | 600      | 713,964      |
| Lubbock Cooper ISD Texas, GO, School            |          |              |
| Building (AGC), 5.75%, 2/15/42                  | 775      | 875,727      |
| North Texas Tollway Authority, RB, Special      |          |              |
| Projects System, Series A, 5.50%,               |          |              |
| 9/01/41   | 4,550    | 5,261,256    |
| North Texas Tollway Authority, Refunding        |          |              |
| RB, First Tier System (NPFGC):                  |          |              |
| 5.75%, 1/01/40                                  | 4,885    | 5,299,150    |
| Series A, 5.63%, 1/01/33                        | 6,585    | 7,241,854    |
| Series B, 5.75%, 1/01/40                        | 6,275    | 6,806,994    |
|   |          | 43,591,594   |

|  |    | Par   |              |
|--|----|-------|--------------|
| Municipal Bonds  |    | (000) | Value        |
| Utah 0.6%  |    |       |              |
| City of Riverton Utah, RB, IHC Health                              | Φ. | 1.000 | Φ 1.056.650  |
| Services Inc., 5.00%, 8/15/41                                      | \$ | 1,000 | \$ 1,076,650 |
| Virginia 0.9%  |    |       |              |
| Virginia Public School Authority, RB,                              |    | 1.500 | 1.554.205    |
| School Financing, 6.50%, 12/01/35                                  |    | 1,500 | 1,774,305    |
| Washington 1.5%  |    |       |              |
| City of Seattle Washington, Refunding RB,                          |    |       |              |
| Series A, 5.25%, 2/01/36   |    | 1,375 | 1,581,154    |
| State of Washington, GO, Various                                   |    |       | 4 2 42 422   |
| Purpose, Series B, 5.25%, 2/01/36                                  |    | 1,075 | 1,243,420    |
| m . 135 . 4 . 10 . 1 . 400 4 %                                     |    |       | 2,824,574    |
| Total Municipal Bonds 120.1%                                       |    |       | 228,516,903  |
|  |    |       |              |
| Municipal Dands Transformed to                                     |    |       |              |
| Municipal Bonds Transferred to Tender Option Bond (TOB) Trusts (c) |    |       |              |
| Alabama 1.2%   |    |       |              |
| Mobile Board of Water & Sewer                                      |    |       |              |
| Commissioners, RB (NPFGC), 5.00%,                                  |    |       |              |
| 1/01/31  |    | 2,120 | 2,248,938    |
| California 2.5%  |    | 2,120 | 2,240,936    |
| City of San Jose California, GO, Libraries,                        |    |       |              |
| Parks, and Public Safety Project                                   |    |       |              |
| (NPFGC), 5.00%, 9/01/30  |    | 1,258 | 1,323,790    |
| Sequoia Union High School District                                 |    | 1,236 | 1,323,790    |
| California, GO, Refunding, Election of                             |    |       |              |
| 2004, Series B (AGM), 5.50%, 7/01/35                               |    | 3,149 | 3,431,957    |
| 2004, Selies B (AGM), 5.50 %, 7/01/55                              |    | 3,149 | 4,755,747    |
| Colorado 3.1%  |    |       | 4,755,747    |
| Colorado Health Facilities Authority, RB,                          |    |       |              |
| Catholic Health, Series C-3 (AGM),                                 |    |       |              |
| 5.10%, 10/01/41  |    | 5,610 | 5,903,347    |
| District of Columbia 0.7%  |    | 3,010 | 3,903,347    |
| District of Columbia Water & Sewer                                 |    |       |              |
| Authority, RB, Senior Lien, Series A,                              |    |       |              |
| 6.00%, 10/01/35  |    | 1,040 | 1,299,245    |
| Florida 7.4%   |    | 1,010 | 1,277,213    |
| City of St. Petersburg Florida, Refunding                          |    |       |              |
| RB (NPFGC), 5.00%, 10/01/35  |    | 4,302 | 4,506,843    |
| County of Miami-Dade Florida, GO,                                  |    | 7,302 | 4,500,045    |
| Building Better Communities Program,                               |    |       |              |
| Series B-1, 6.00%, 7/01/38   |    | 7,500 | 8,615,475    |
| Lee County Housing Finance Authority,                              |    | 7,500 | 0,015,775    |
| RB, Multi-County Program, Series A-2,                              |    |       |              |
| AMT (Ginnie Mae), 6.00%, 9/01/40                                   |    | 960   | 1,026,115    |
| 11111 (Online Mac), 0.00 /0, 7/01/70                               |    | 200   | 14,148,433   |
|  |    |       | 1 1,170,733  |

BLACKROCK MUNIHOLDINGS QUALITY FUND, INC.

JANUARY 31, 2012

## Schedule of Investments (continued)

#### BlackRock MuniHoldings Quality Fund, Inc. (MUS) (Percentages shown are based on Net Assets)

| Municipal Bonds Transferred to<br>Tender Option Bond (TOB) Trusts (c) | Par (000) | ı     | Value           |
|---|-----------|-------|-----------------|
| Georgia 2.3%  |           |       |                 |
| Augusta-Richmond County Georgia, RB,                                  |           |       |                 |
| Water & Sewer (AGM), 5.25%,   |           |       |                 |
| 10/01/34  | \$        | 4,000 | \$<br>4,342,360 |
| Illinois 1.4%   |           |       |                 |
| City of Chicago Illinois, Refunding RB,                               |           |       |                 |
| Second Lien (AGM), 5.25%, 11/01/33                                    |           | 2,509 | 2,725,507       |
| Kentucky 0.8%   |           |       |                 |
| Kentucky State Property & Building                                    |           |       |                 |
| Commission, Refunding RB,   |           |       |                 |
| Project No. 93 (AGC), 5.25%, 2/01/27                                  |           | 1,406 | 1,621,692       |
| Massachusetts 6.5%  |           |       |                 |
| Massachusetts School Building Authority,                              |           |       |                 |
| Sales Tax Revenue RB:   |           |       |                 |
| Senior, Series B, 5.00%,  |           |       |                 |
| 10/15/41  |           | 3,060 | 3,469,826       |
| Series A (AGM), 5.00%, 8/15/30  |           | 8,008 | 8,941,710       |
| 56165 11 (116111), 5.00 %, 6/15/50                                    |           | 0,000 | 12,411,536      |
| Nevada 5.4%   |           |       | 12,111,330      |
| Clark County Water Reclamation  |           |       |                 |
| District, GO:   |           |       |                 |
| Limited Tax, 6.00%, 7/01/38   |           | 5,000 | 5,850,400       |
| Series B, 5.50%, 7/01/29  |           | 3,749 | 4,408,854       |
| Series B, 3.30 %, 7/01/29   |           | 3,149 | 10,259,254      |
| New Jersey 1.4%   |           |       | 10,239,234      |
|   |           |       |                 |
| New Jersey State Housing & Mortgage                                   |           |       |                 |
| Finance Agency, RB, S/F Housing,                                      |           | 2 401 | 2 575 059       |
| Series CC, 5.25%, 10/01/29  |           | 2,401 | 2,575,058       |
| New York 4.3%   |           |       |                 |
| New York Liberty Development Corp., RB:                               |           |       |                 |
| 1 World Trade Center Port   |           |       |                 |
| Authority Construction, 5.25%,  |           | 4.500 | 5.1.46.016      |
| 12/15/43  |           | 4,530 | 5,146,216       |
| 4 World Trade Center Project,   |           |       |                 |
| 5.75%, 11/15/51   |           | 2,660 | 3,026,894       |
|   |           |       | 8,173,110       |
| Puerto Rico 1.1%  |           |       |                 |
| Puerto Rico Sales Tax Financing Corp.,                                |           |       |                 |
| RB, Series C, 5.25%, 8/01/40  |           | 1,820 | 2,021,128       |
| Washington 2.3%   |           |       |                 |
| City of Bellevue Washington, GO,                                      |           |       |                 |
| Refunding (NPFGC), 5.50%, 12/01/39                                    |           | 4,002 | 4,462,878       |
| Total Municipal Bonds Transferred to                                  |           |       |                 |
| Tender Option Bond (TOB) Trusts 40.4%                                 |           |       | 76,948,233      |
| Total Long-Term Investments   |           |       |                 |
| (Cost \$279,505,187) 160.5%   |           |       | 305,465,136     |
|   |           |       |                 |

| Short-Term Securities              | Shares       | Value     |
|------------------------------------|--------------|-----------|
| FFI Institutional Tax-Exempt Fund, |              |           |
| 0.01% (d)(e)                       | 6.534.429 \$ | 6,534,429 |

| Total Short-Term Securities                              |                |
|--|----------------|
| (Cost \$6,534,429) 3.4%                                  | 6,534,429      |
| Total Investments (Cost - \$286,039,616*) 163.9%         | 311,999,565    |
| Other Assets Less Liabilities 2.0%                       | 3,779,472      |
| Liability for TOB Trust Certificates, Including Interest |                |
| Expense and Fees Payable (20.2)%                         | (38,401,214)   |
| Preferred Shares, at Redemption Value (45.7)%            | (87,000,000)   |
| Net Assets 100.0%  | \$ 190,377,823 |

\* As of January 31, 2012, gross unrealized appreciation and gross unrealized depreciation based on cost for federal income tax purposes were as follows:

| Tax Cost                      | \$<br>247,698,173 |
|-------------------------------|-------------------|
| Gross unrealized appreciation | \$<br>26,196,474  |
| Gross unrealized depreciation | (280,496)         |
| Net unrealized appreciation   | \$<br>25,915,978  |

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

|                     |    |         | Unrealized   |
|---------------------|----|---------|--------------|
| Counterparty        | Va | lue     | Appreciation |
| JPMorgan Securities | \$ | 257,858 | \$ 2,594     |

- (b) Represents a zero-coupon bond. Rate shown reflects the current yield as of report date.
- (c) 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.
- (d) Investments in companies considered to be an affiliate of the Fund during the period, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

|                                   | Shares    |           | Shares      |             |
|-----------------------------------|-----------|-----------|-------------|-------------|
|                                   | Held at   |           | Held at     |             |
|                                   | April 30, | Net       | January 31, |             |
| Affiliate                         | 2011      | Activity  | 2012        | Income      |
| FFI Institutional Tax-Exempt Fund | 6,952,084 | (417,655) | 6,534,429   | \$<br>1,885 |

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

Financial futures contracts sold as of January 31, 2012 were as follows:

| Contracts | <b>Issue</b><br>10-Year | Exchange | Expiration | Notional<br>Value |    | Unrealized<br>Depreciation |  |
|-----------|-------------------------|----------|------------|-------------------|----|----------------------------|--|
|           | US                      | Chicago  |            |                   |    |                            |  |
|           | Treasury                | Board    | March      |                   |    |                            |  |
| 64        | Note                    | of Trade | 2012       | \$<br>8,464,000   | \$ | (112,122)                  |  |

BLACKROCK MUNIHOLDINGS QUALITY FUND, INC.

JANUARY 31, 2012

4

Schedule of Investments (concluded)

BlackRock MuniHoldings Quality Fund, Inc. (MUS)

#### **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.
AMT Alternative Minimum Tax (subject to)

ARB Airport Revenue Bonds

BHAC Berkshire Hathaway Assurance Corp.

CAB Capital Appreciation Bonds
COP Certificates of Participation
EDA Economic Development Authority
FGIC Financial Guaranty Insurance Co.

Ginnie Mae Government National Mortgage Association

GO General Obligation Bonds HFA Housing Finance Agency ISD Independent School District

NPFGC National Public Finance Guarantee Corp.

RB Revenue Bonds S/F Single-Family

Fair Value Measurements - Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs 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

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 and derivative financial instruments)

Changes in valuation techniques may result in transfers in or out of an assigned level within the disclosure hierarchy. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investment and derivative financial instrument and does not necessarily correspond to the Fund s perceived risk of investing in those securities. For information about the Fund s policy regarding valuation of investments and derivative financial instruments and other significant accounting policies, please refer to the Fund s most recent financial statements as contained in its semi-annual report.

The following tables summarize the inputs used as of January 31, 2012 in determining the fair valuation of the Fund s investments and derivative financial instruments:

| Valuation Inputs                   | Level 1         | Level 2           | Level 3 | Total             |
|------------------------------------|-----------------|-------------------|---------|-------------------|
| Assets:                            |                 |                   |         |                   |
| Investments:                       |                 |                   |         |                   |
| Long-Term Investments <sup>1</sup> |                 | \$<br>305,465,136 |         | \$<br>305,465,136 |
| Short-Term Securities              | \$<br>6,534,429 |                   |         | 6,534,429         |

**Total** \$ 6,534,429 \$ 305,465,136 \$ 311,999,565

See above Schedule of Investments for values in each state or political subdivision.

| Valuation Inputs                              | L  | evel 1    | Level 2 | Level 3 | Total           |
|---|----|-----------|---------|---------|-----------------|
| Derivative Financial Instruments <sup>2</sup> |    |           |         |         |                 |
| Liabilities:                                  |    |           |         |         |                 |
| Interest rate contracts                       | \$ | (112,122) |         |         | \$<br>(112,122) |

Derivative financial instruments are financial futures contracts, which are valued at the unrealized appreciation/depreciation on the instrument.

BLACKROCK MUNIHOLDINGS QUALITY FUND, INC.

JANUARY 31, 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

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 Quality Fund, Inc.

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

Date: March 23, 2012

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 Quality Fund, Inc.

Date: March 23, 2012

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

Date: March 23, 2012