

BLACKROCK MUNIHOLDINGS FUND, INC.
Form N-Q
March 25, 2015

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: 811-08081

Name of Fund: BlackRock MuniHoldings Fund, Inc. (MHD)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock MuniHoldings Fund, Inc., 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: 04/30/2015

Date of reporting period: 01/31/2015

Item 1 Schedule of Investments

Schedule of Investments January 31, 2015 (Unaudited)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

| | Par | |
|--|------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| Alabama 3.7% | | |
| County of Jefferson Alabama, RB, Limited Obligation School, Series A, 5.00%, 1/01/24 | \$ 4,550 | \$ 4,606,875 |
| County of Jefferson Alabama Sewer, Refunding RB: | | |
| Senior Lien, Series A (AGM), 5.00%, 10/01/44 | 570 | 639,586 |
| Senior Lien, Series A (AGM), 5.25%, 10/01/48 | 1,090 | 1,237,106 |
| Sub-Lien, Series D, 7.00%, 10/01/51 | 1,545 | 1,870,871 |
| County of Jefferson Alabama Sewer Revenue, Refunding RB, Sub-Lien, Series D, 6.00%, 10/01/42 | 1,000 | 1,130,700 |
| | | 9,485,138 |
| Alaska 0.5% | | |
| Northern Tobacco Securitization Corp., Refunding RB, Tobacco Settlement, Asset-Backed, Series A, 5.00%, 6/01/46 | 1,660 | 1,360,934 |
| Arizona 2.7% | | |
| County of Maricopa Arizona IDA, RB, Arizona Charter Schools Project, Series A, 6.75%, 7/01/29 | 1,715 | 1,646,331 |
| Salt Verde Financial Corp., RB, Senior: | | |
| 5.00%, 12/01/32 | 2,000 | 2,392,480 |
| 5.00%, 12/01/37 | 2,360 | 2,850,621 |
| | | 6,889,432 |
| California 12.6% | | |
| California Health Facilities Financing Authority, RB: | | |
| St. Joseph Health System, Series A, 5.75%, 7/01/39 | 1,530 | 1,797,750 |
| Sutter Health, Series B, 6.00%, 8/15/42 | 2,200 | 2,664,728 |
| California Health Facilities Financing Authority, Refunding RB, St. Joseph Health System, Series A, 5.00%, 7/01/33 | 875 | 1,035,764 |
| California Municipal Finance Authority, RB, Senior, Caritas Affordable Housing, Inc. Projects, S/F Housing, Series A: | | |
| 5.25%, 8/15/39 | 105 | 118,794 |
| 5.25%, 8/15/49 | 265 | 298,098 |
| | Par | |
| Municipal Bonds (000) Value | | |
| California (concluded) | | |
| California Pollution Control Financing Authority, RB (a): | | |
| County of San Diego California Water Authority Desalination Project Pipeline, 5.00%, 11/21/45 | \$ 865 | \$ 897,065 |
| Poseidon Resources (Channel Side) LP Desalination Project, AMT, 5.00%, 11/21/45 | 1,025 | 1,124,671 |
| California Statewide Communities Development Authority, RB, John Muir Health, Series A, 5.13%, 7/01/39 | 1,510 | 1,710,664 |
| City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles International Airport, Series A, 5.25%, 5/15/39 | 555 | 640,525 |
| City of Stockton California Public Financing Authority, RB, Delta Water Supply Project, Series A, 6.25%, 10/01/38 | 255 | 304,926 |
| Montebello Unified School District, GO, CAB (NPFGC), 0.00%, 8/01/22 (b) | 2,405 | 2,016,953 |
| San Diego Unified School District California, GO, CAB, Election of 2008, Series A, 0.00%, 7/01/29 (b) | 3,475 | 2,195,505 |
| Sequoia Union High School District, GO, Refunding, Election of 2004, Series B, 5.50%, 7/01/16 (c) | 3,490 | 3,749,447 |
| State of California, GO, Various Purposes, 6.50%, 4/01/33 | 8,370 | 10,322,470 |
| State of California Public Works Board, LRB, Various Capital Projects: | | |
| Series I, 5.00%, 11/01/38 | 550 | 642,400 |
| Sub-Series I-1, 6.38%, 11/01/34 | 820 | 1,019,736 |
| Tobacco Securitization Authority of Southern California, Refunding RB, Tobacco Settlement, Asset-Backed, Senior Series A-1, 4.75%, 6/01/25 | 2,040 | 2,040,286 |
| | | 32,579,782 |
| Colorado 2.5% | | |
| Colorado Educational & Cultural Facilities Authority, RB, Charter School, Colorado Springs, 5.50%, 7/01/40 | 1,455 | 1,597,474 |

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

| | Par | |
|--|------------|------------|
| | (000) | Value |
| Municipal Bonds | | |
| Colorado (concluded) | | |
| Colorado Health Facilities Authority, Refunding RB, Evangelical Lutheran Good Samaritan Society Project, 5.00%, 12/01/42 | \$ 730 | \$ 799,781 |
| Regional Transportation District, COP, Refunding, Series A, 5.38%, 6/01/31 | 710 | 831,375 |
| Regional Transportation District, RB, Denver Transit Partners Eagle P3 Project, 6.00%, 1/15/34 | 1,425 | 1,648,055 |
| University of Colorado, RB, Series A, 5.38%, 6/01/19 (c) | 1,250 | 1,460,912 |
| | | 6,337,597 |
| Connecticut 1.1% | | |
| Connecticut State Health & Educational Facility Authority, Refunding RB, Wesleyan University, Series G, 5.00%, 7/01/35 | 2,515 | 2,913,980 |
| Delaware 1.4% | | |
| County of Sussex Delaware, RB, NRG Energy, Inc., Indian River Power LLC Project, 6.00%, 10/01/40 | 790 | 909,653 |
| Delaware State EDA, RB, Exempt Facilities, Indian River Power LLC Project, 5.38%, 10/01/45 | 2,430 | 2,686,025 |
| | | 3,595,678 |
| District of Columbia 3.7% | | |
| District of Columbia, Tax Allocation Bonds, City Market at O Street Project, 5.13%, 6/01/41 | 1,520 | 1,665,540 |
| Metropolitan Washington Airports Authority, Dulles Toll Road, Refunding RB: | | |
| 1st Senior Lien, Series A, 5.00%, 10/01/39 | 505 | 571,700 |
| 1st Senior Lien, Series A, 5.25%, 10/01/44 | 1,470 | 1,675,771 |
| CAB, 2nd Senior Lien, Series B (AGC), 0.00%, 10/01/35 (b) | 13,485 | 5,724,113 |
| | | 9,637,124 |
| Florida 4.6% | | |
| City of Clearwater Florida Water & Sewer Revenue, RB, Series A, 5.25%, 12/01/39 | 2,375 | 2,730,799 |
| | Par | |
| Municipal Bonds | | |
| Florida (concluded) | | |
| County of Broward Florida Water & Sewer Utility, Refunding RB, Series A, 5.25%, 10/01/34 | \$ 750 | \$ 849,960 |
| County of Miami-Dade Florida, RB, CAB, Series A (NPFGC), 0.00%, 10/01/37 (b) | 910 | 283,529 |
| County of Miami-Dade Florida Aviation, Refunding ARB, Miami International Airport, Series A-1, 5.38%, 10/01/41 | 2,620 | 3,046,981 |
| Mid-Bay Bridge Authority, RB, Springing Lien, Series A, 7.25%, 10/01/40 | 2,095 | 2,605,091 |
| Palm Coast Park Community Development District, Special Assessment Bonds, 5.70%, 5/01/37 | 620 | 532,797 |
| Village Community Development District No. 10, Special Assessment Bonds, 5.13%, 5/01/43 | 1,525 | 1,733,040 |
| | | 11,782,197 |
| Georgia 1.5% | | |
| County of Gainesville Georgia & Hall Hospital Authority, Refunding RB, Northeast Georgia Health System, Inc. Project, Series A, 5.50%, 8/15/54 | 370 | 442,586 |
| DeKalb Private Hospital Authority, Refunding RB, Children's Healthcare, 5.25%, 11/15/39 | 585 | 674,704 |
| Metropolitan Atlanta Rapid Transit Authority, RB, Sales Tax, 3rd Indenture, Series A, 5.00%, 7/01/39 | 2,410 | 2,759,402 |
| | | 3,876,692 |
| Hawaii 0.4% | | |
| State of Hawaii Harbor System, RB, Series A, 5.25%, 7/01/30 | 945 | 1,092,798 |
| Illinois 17.7% | | |
| City of Chicago Illinois, GARB, O'Hare International Airport, 3rd Lien: | | |
| Series A, 5.75%, 1/01/39 | 2,000 | 2,366,420 |
| Series C, 6.50%, 1/01/41 | 4,055 | 4,962,225 |
| City of Chicago Illinois, GO, Project, 5.00%, 1/01/34 | 2,230 | 2,351,156 |
| City of Chicago Illinois, GO, Refunding, Series A: | | |
| Project, 5.25%, 1/01/32 | 2,195 | 2,395,623 |

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

| | Par (000) | Value |
|--|--------------|--------------|
| Municipal Bonds | | |
| Illinois (continued) | | |
| City of Chicago Illinois, GO, Refunding, Series A (concluded): | | |
| 5.00%, 1/01/35 | \$ 2,000 | \$ 2,131,740 |
| City of Chicago Illinois, Refunding RB, Sales Tax, Series A, 5.25%, 1/01/38 | 570 | 641,997 |
| City of Chicago Illinois, Special Assessment Bonds, Lake Shore East, 6.75%, 12/01/32 | 900 | 904,023 |
| City of Chicago Illinois Board of Education, GO, Series A, 5.25%, 12/01/41 | 3,210 | 3,433,866 |
| City of Chicago Illinois Transit Authority, RB, Sales Tax Receipts, 5.25%, 12/01/40 | 730 | 843,493 |
| City of Chicago Illinois Waterworks, Refunding RB, 2nd Lien Project, 5.00%, 11/01/42 | 1,000 | 1,121,940 |
| County of Cook Illinois Community College District No. 508, GO, City College of Chicago, 5.50%, 12/01/38 | 560 | 666,019 |
| Illinois Finance Authority, Refunding RB, Central Dupage Health, Series B, 5.50%, 11/01/39 | 1,115 | 1,297,113 |
| Illinois State Toll Highway Authority, RB, Senior: | | |
| Series A, 5.00%, 1/01/38 | 1,610 | 1,853,818 |
| Series C, 5.00%, 1/01/36 | 2,340 | 2,741,100 |
| Series C, 5.00%, 1/01/37 | 2,000 | 2,340,940 |
| Metropolitan Pier & Exposition Authority, Refunding RB, McCormick Place Expansion Project: | | |
| CAB, Series B (AGM), 0.00%, 6/15/47 (b) | 13,220 | 3,120,052 |
| Series B (AGM), 5.00%, 6/15/50 | 3,070 | 3,310,043 |
| Series B-2, 5.00%, 6/15/50 | 1,740 | 1,872,101 |
| Railsplitter Tobacco Settlement Authority, RB: | | |
| 5.50%, 6/01/23 | 315 | 376,863 |
| 6.00%, 6/01/28 | 800 | 958,088 |
| State of Illinois, GO: | | |
| 5.00%, 2/01/39 | 1,100 | 1,191,124 |
| Series A, 5.00%, 4/01/38 | 2,625 | 2,827,125 |
| State of Illinois, RB, Build Illinois, Series B, 5.25%, 6/15/34 | 440 | 500,566 |
| University of Illinois, RB, Auxiliary Facilities System, Series A: | | |
| 5.00%, 4/01/39 | 580 | 669,349 |
| | Par | |
| | (000) | Value |
| Municipal Bonds | | |
| Illinois (concluded) | | |
| University of Illinois, RB, Auxiliary Facilities System, Series A (concluded): | | |
| 5.00%, 4/01/44 | \$ 705 | \$ 811,779 |
| | | 45,688,563 |
| Indiana 4.1% | | |
| City of Valparaiso Indiana, RB, Exempt Facilities, Pratt Paper LLC Project, AMT: | | |
| 6.75%, 1/01/34 | 560 | 693,633 |
| 7.00%, 1/01/44 | 1,355 | 1,688,520 |
| Indiana Finance Authority, RB, Series A: | | |
| CWA Authority Project, 1st Lien, 5.25%, 10/01/38 | 2,275 | 2,680,291 |
| Private Activity Bond, Ohio River Bridges East End Crossing Project, AMT, 5.00%, 7/01/44 | 310 | 339,388 |
| Private Activity Bond, Ohio River Bridges East End Crossing Project, AMT, 5.00%, 7/01/48 | 1,030 | 1,126,078 |
| Sisters of St. Francis Health Services, 5.25%, 11/01/39 | 585 | 662,536 |
| Indiana Finance Authority, Refunding RB, Parkview Health System, Series A, 5.75%, 5/01/31 | 1,300 | 1,489,748 |
| Indiana Municipal Power Agency, RB, Series B, 6.00%, 1/01/39 | 775 | 896,047 |
| Indianapolis Local Public Improvement Bond Bank, RB, Series A, 5.00%, 1/15/40 | 880 | 1,010,478 |
| | | 10,586,719 |
| Iowa 2.1% | | |
| Iowa Finance Authority, Refunding RB, Midwestern Disaster Area, Iowa Fertilizer Co. Project: | | |
| 5.00%, 12/01/19 | 665 | 712,355 |
| 5.50%, 12/01/22 | 1,630 | 1,733,945 |
| 5.25%, 12/01/25 | 320 | 353,523 |
| Iowa Student Loan Liquidity Corp., Refunding RB, Student Loan, Senior Series A-1, AMT, 5.15%, 12/01/22 | 960 | 1,020,518 |

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

| | Par | Value |
|---|--------------|--------------|
| | (000) | |
| Municipal Bonds | | |
| Iowa (concluded) | | |
| Iowa Tobacco Settlement Authority, Refunding RB, Asset-Backed, Series C, 5.63%, 6/01/46 | \$ 1,730 | \$ 1,564,491 |
| | | 5,384,832 |
| Kansas 0.7% | | |
| Kansas Development Finance Authority, Refunding RB, Adventist Health, Series C, 5.75%, 11/15/38 | 1,520 | 1,801,322 |
| Kentucky 0.6% | | |
| Kentucky Economic Development Finance Authority, RB, Catholic Health Initiatives, Series A, 5.25%, 1/01/45 | 705 | 813,373 |
| Kentucky Public Transportation Infrastructure Authority, RB, Downtown Crossing Project, Convertible CAB, 1st Tier, Series C, 0.00%, 7/01/43 (d) | 865 | 641,484 |
| | | 1,454,857 |
| Louisiana 3.4% | | |
| East Baton Rouge Sewerage Commission, RB, Series A, 5.25%, 2/01/19 (c) | 570 | 668,490 |
| Louisiana Local Government Environmental Facilities & Community Development Authority, RB, Westlake Chemical Corp. Project, 6.75%, 11/01/32 | 3,500 | 4,023,320 |
| New Orleans Aviation Board, RB, Passenger Facility Charge, Series A, 5.25%, 1/01/41 | 430 | 467,982 |
| Tobacco Settlement Financing Corp., Refunding RB, Asset-Backed, Series A: 5.50%, 5/15/30 | 700 | 787,227 |
| 5.25%, 5/15/31 | 600 | 671,922 |
| 5.25%, 5/15/32 | 765 | 867,036 |
| 5.25%, 5/15/33 | 830 | 936,671 |
| 5.25%, 5/15/35 | 350 | 394,940 |
| | | 8,817,588 |
| Maine 0.1% | | |
| Maine Health & Higher Educational Facilities Authority, RB, Series A, 5.00%, 7/01/39 | 210 | 236,998 |
| | Par | |
| Municipal Bonds (000) Value | | |
| Maryland 1.2% | | |
| Maryland EDC, RB, Transportation Facilities Project, Series A, 5.75%, 6/01/35 | \$ 300 | \$ 327,393 |
| Maryland EDC, Refunding RB, CNX Marine Terminals, Inc., 5.75%, 9/01/25 | 820 | 922,459 |
| Maryland Health & Higher Educational Facilities Authority, Refunding RB, Charlestown Community Project, 6.25%, 1/01/41 | 1,520 | 1,752,210 |
| | | 3,002,062 |
| Massachusetts 2.4% | | |
| Massachusetts Development Finance Agency, Refunding RB: | | |
| Boston University, Series P, 5.45%, 5/15/59 | 1,165 | 1,448,934 |
| Covanta Energy Project, Series C, AMT, 5.25%, 11/01/42 (a) | 1,575 | 1,640,347 |
| Massachusetts Health & Educational Facilities Authority, Refunding RB, Partners Healthcare System, Series J1, 5.00%, 7/01/39 | 255 | 291,151 |
| Massachusetts HFA, RB, M/F Housing, Series A, AMT, 5.25%, 12/01/48 | 2,900 | 2,910,150 |
| | | 6,290,582 |
| Michigan 2.9% | | |
| City of Detroit Michigan Sewage Disposal System, Refunding RB, Senior Lien, Series A, 5.25%, 7/01/39 | 3,085 | 3,396,894 |
| Kalamazoo Hospital Finance Authority, Refunding RB, Bronson Methodist Hospital, 5.50%, 5/15/36 | 955 | 1,100,236 |
| Michigan Finance Authority, Refunding RB, Detroit Water & Sewage Department Project, Senior Lien, Series C-1, 5.00%, 7/01/44 | 630 | 681,421 |

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

| | Par | |
|--|------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| Michigan (concluded) | | |
| State of Michigan Hospital Finance Authority, Refunding RB, Henry Ford Health, 5.75%, 11/15/39 | \$ 2,105 | \$ 2,419,234 |
| | | 7,597,785 |
| Minnesota 1.0% | | |
| City of Minneapolis Minnesota, Refunding RB, Fairview Health Services, Series A, 6.75%, 11/15/32 | 2,135 | 2,551,282 |
| Mississippi 0.3% | | |
| University of Southern Mississippi, RB, Campus Facilities Improvements Project, 5.38%, 9/01/36 | 675 | 770,519 |
| Missouri 0.2% | | |
| Bi-State Development Agency of the Missouri-Illinois Metropolitan District, Refunding RB, Combined Lien, Series A, 5.00%, 10/01/44 | 175 | 201,400 |
| State of Missouri Health & Educational Facilities Authority, Refunding RB, St. Louis College of Pharmacy Project, 5.50%, 5/01/43 | 175 | 198,548 |
| | | 399,948 |
| Nebraska 1.0% | | |
| Central Plains Energy Project Nebraska, RB, Gas Project No. 3, 5.25%, 9/01/37 | 575 | 651,751 |
| County of Hall Nebraska School District No. 2, GO, Grand Island Public Schools, 5.00%, 12/15/39 | 1,690 | 1,988,031 |
| | | 2,639,782 |
| New Hampshire 1.4% | | |
| New Hampshire Health & Education Facilities Authority, Refunding RB, Dartmouth-Hitchcock, 6.00%, 8/01/38 | 3,035 | 3,558,113 |
| New Jersey 5.7% | | |
| New Jersey EDA, RB, Continental Airlines, Inc. Project, AMT: 5.13%, 9/15/23 | 1,410 | 1,541,313 |
| 5.25%, 9/15/29 | 1,365 | 1,478,896 |
| New Jersey EDA, Refunding, Special Assessment Bonds, Kapkowski Road Landfill Project, 5.75%, 4/01/31 | 1,550 | 1,848,034 |
| | Par | |
| Municipal Bonds | | |
| New Jersey (concluded) | | |
| New Jersey State Turnpike Authority, RB, Series A, 5.00%, 1/01/43 | \$ 1,925 | \$ 2,183,450 |
| New Jersey Transportation Trust Fund Authority, RB: | | |
| Transportation Program, Series AA, 5.00%, 6/15/44 | 2,505 | 2,779,748 |
| Transportation System, Series A, 5.50%, 6/15/41 | 1,575 | 1,815,692 |
| Transportation System, Series B, 5.25%, 6/15/36 | 1,705 | 1,908,185 |
| Tobacco Settlement Financing Corp. New Jersey, Refunding RB, Series 1A, 4.50%, 6/01/23 | 1,215 | 1,220,492 |
| | | 14,775,810 |
| New York 9.5% | | |
| City of New York New York Industrial Development Agency, ARB, British Airways PLC Project, AMT, 7.63%, 12/01/32 | 1,500 | 1,508,610 |
| City of New York New York Transitional Finance Authority, RB: | | |
| Future Tax Secured Bonds, Fiscal 2012, Sub-Series E-1, 5.00%, 2/01/42 | 1,560 | 1,800,443 |
| Future Tax Secured Revenue, Fiscal 2015, Series B-1, 5.00%, 8/01/39 | 2,090 | 2,477,068 |
| County of Dutchess New York Industrial Development Agency, Refunding RB, Bard College Civic Facility, 5.00%, 8/01/46 | 3,800 | 3,843,586 |
| County of Westchester New York Healthcare Corp., RB, Senior Lien, Series A, 5.00%, 11/01/44 | 264 | 303,238 |
| Long Island Power Authority, Refunding RB, Electric System, Series A, 5.75%, 4/01/39 | 1,450 | 1,668,036 |
| Metropolitan Transportation Authority, RB, Series B, 5.25%, 11/15/38 | 1,715 | 2,055,033 |
| Metropolitan Transportation Authority, Refunding RB, Dedicated Tax Fund, Series B, 5.00%, 11/15/34 | 1,740 | 1,994,719 |
| New York Liberty Development Corp., Refunding RB: | | |
| 2nd Priority, Bank of America Tower at One Bryant Park Project, Class 3, 6.38%, 7/15/49 | 850 | 971,142 |

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

| | Par | |
|--|--------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| New York (concluded) | | |
| New York Liberty Development Corp., Refunding RB (concluded): | | |
| 3 World Trade Center Project, Class 1, 5.00%, 11/15/44 (a) | \$ 2,930 | \$ 3,133,430 |
| 3 World Trade Center Project, Class 2, 5.15%, 11/15/34 (a) | 245 | 274,373 |
| 3 World Trade Center Project, Class 2, 5.38%, 11/15/40 (a) | 605 | 682,797 |
| Port Authority of New York & New Jersey, ARB, Special Project, JFK International Air Terminal LLC Project, Series 8: | | |
| 6.00%, 12/01/36 | 900 | 1,072,728 |
| 6.00%, 12/01/42 | 875 | 1,040,314 |
| Westchester Tobacco Asset Securitization, Refunding RB, 5.13%, 6/01/45 | 1,700 | 1,611,107 |
| | | 24,436,624 |
| North Carolina 0.6% | | |
| North Carolina Medical Care Commission, RB, Health Care Facilities, Duke University Health System, Series A, 5.00%, 6/01/42 | | |
| | 970 | 1,106,964 |
| North Carolina Medical Care Commission, Refunding RB, 1st Mortgage, Retirement Facilities Whitestone Project, Series A, 7.75%, 3/01/41 | | |
| | 415 | 475,395 |
| | | 1,582,359 |
| Ohio 0.2% | | |
| County of Franklin Ohio, RB, Health Care Facilities Improvement, OPRS Communities Obligation Group, Series A, 6.13%, 7/01/40 | | |
| | 470 | 525,559 |
| Oklahoma 0.3% | | |
| County of Epworth Oklahoma Finance Authority, Refunding RB, Epworth Villa Project, Series A, 5.13%, 4/01/42 | | |
| | 975 | 784,163 |
| | Par | |
| | (000) | Value |
| Municipal Bonds | | |
| Pennsylvania 2.3% | | |
| City of Philadelphia Pennsylvania Hospitals & Higher Education Facilities Authority, RB, Temple University Health System, Series A, 5.63%, 7/01/42 | | |
| | \$ 885 | \$ 955,862 |
| Pennsylvania Economic Development Financing Authority, RB, American Water Co. Project, 6.20%, 4/01/39 | | |
| | 2,520 | 2,970,677 |
| Pennsylvania Economic Development Financing Authority, Refunding RB, National Gypson Co., AMT, 5.50%, 11/01/44 | | |
| | 1,105 | 1,143,266 |
| Pennsylvania Turnpike Commission, RB, Series A, 5.00%, 12/01/44 | | |
| | 795 | 925,849 |
| | | 5,995,654 |
| South Carolina 2.3% | | |
| South Carolina State Ports Authority, RB, 5.25%, 7/01/40 | | |
| | 2,285 | 2,614,063 |
| State of South Carolina Public Service Authority, RB, Santee Cooper, Series A, 5.50%, 12/01/54 | | |
| | 2,790 | 3,329,084 |
| | | 5,943,147 |
| Tennessee 1.9% | | |
| City of Chattanooga Tennessee Health Educational & Housing Facility Board, RB, Catholic Health Initiatives, Series A, 5.25%, 1/01/45 | | |
| | 980 | 1,130,646 |
| County of Hardeman Tennessee Correctional Facilities Corp., RB, 7.75%, 8/01/17 | | |
| | 1,460 | 1,460,088 |
| County of Shelby Health Educational & Housing Facilities Board, Refunding RB, St. Jude s Childrens Research Hospital, 5.00%, 7/01/31 | | |
| | 2,250 | 2,374,222 |
| | | 4,964,956 |
| Texas 8.6% | | |
| Central Texas Regional Mobility Authority, Refunding RB: | | |
| Senior Lien, 6.25%, 1/01/46 | 1,480 | 1,743,455 |
| Sub-Lien, 5.00%, 1/01/33 | 250 | 276,100 |
| City of Austin Texas Airport System, RB, AMT, 5.00%, 11/15/39 | 440 | 508,908 |

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

| | Par | |
|---|------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| Texas (concluded) | | |
| City of Austin Texas Electric Utility Revenue, Refunding RB, Series A, 5.00%, 11/15/37 | \$ 1,500 | \$ 1,736,340 |
| City of Dallas Texas Waterworks & Sewer System, Refunding RB, 5.00%, 10/01/35 | 1,050 | 1,227,670 |
| City of Houston Texas Airport System, Refunding ARB, Senior Lien, Series A, 5.50%, 7/01/39 | 1,070 | 1,217,318 |
| County of Harris Texas Cultural Education Facilities Finance Corp., RB, 1st Mortgage, Brazos Presbyterian Homes, Inc. Project, Series B, 7.00%, 1/01/48 | 325 | 380,738 |
| County of Harris Texas Health Facilities Development Corp., Refunding RB, Memorial Hermann Healthcare System, Series B, 7.25%, 12/01/18 (c) | 1,910 | 2,370,348 |
| La Vernia Higher Education Finance Corp., RB, Kipp, Inc., Series A, 6.38%, 8/15/44 | 450 | 518,157 |
| North Texas Tollway Authority, RB, CAB, Special Project System, Series B, 0.00%, 9/01/37 (b) | 1,400 | 492,212 |
| North Texas Tollway Authority, Refunding RB, 2nd Tier System, Series F, 6.13%, 1/01/16 (c) | 4,190 | 4,415,506 |
| San Antonio Energy Acquisition Public Facility Corp., RB, Gas Supply: | | |
| 5.50%, 8/01/24 | 1,100 | 1,345,377 |
| 5.50%, 8/01/25 | 1,120 | 1,380,893 |
| Texas Private Activity Bond Surface Transportation Corp., RB, Senior Lien: | | |
| LBJ Infrastructure Group LLC, LBJ Freeway Managed Lanes Project, 7.00%, 6/30/40 | 2,000 | 2,449,820 |
| NTE Mobility Partners LLC, North Tarrant Express Managed Lanes Project, 6.88%, 12/31/39 | 1,700 | 2,039,422 |
| | | 22,102,264 |
| Vermont 0.2% | | |
| Vermont Educational & Health Buildings Financing Agency, RB, Developmental & Mental Health, Series A, 6.00%, 6/15/17 | 375 | 382,447 |
| | Par | |
| Municipal Bonds | | |
| | (000) | Value |
| Virginia 2.7% | | |
| County of Fairfax Virginia EDA, Refunding RB, Goodwin House, Inc., 5.13%, 10/01/42 | \$ 1,000 | \$ 1,043,360 |
| County of Hanover Virginia EDA, Refunding RB, Covenant Woods, Series A: | | |
| 5.00%, 7/01/42 | 625 | 649,700 |
| Residential Care Facility, 5.00%, 7/01/47 | 970 | 1,006,239 |
| Virginia Small Business Financing Authority, RB, Senior Lien, Elizabeth River Crossings OpCo LLC Project, AMT: | | |
| 5.25%, 1/01/32 | 550 | 608,614 |
| 6.00%, 1/01/37 | 3,180 | 3,719,423 |
| | | 7,027,336 |
| Washington 0.8% | | |
| Washington Health Care Facilities Authority, RB, Catholic Health Initiatives, Series A, 5.75%, 1/01/45 | 1,625 | 1,960,774 |
| Wisconsin 3.1% | | |
| State of Wisconsin, Refunding RB, Series A, 6.00%, 5/01/36 | 4,980 | 5,954,486 |
| State of Wisconsin Health & Educational Facilities Authority, RB, Ascension Health Senior Credit Group, Series E, 5.00%, 11/15/33 | 1,710 | 1,955,009 |
| | | 7,909,495 |
| Wyoming 0.1% | | |
| Wyoming Municipal Power Agency, Inc., RB, Series A, 5.00%, 1/01/42 | 210 | 232,588 |
| Total Municipal Bonds 112.1% | | 288,955,480 |

Municipal Bonds Transferred to**Tender Option Bond Trusts (e)**

| | | |
|---|-------|-----------|
| California 7.7% | | |
| Bay Area Toll Authority, Refunding RB, San Francisco Bay Area, Series F-1, 5.63%, 4/01/44 (c) | 2,270 | 2,715,029 |
| California Educational Facilities Authority, RB, University of Southern California, Series B, 5.25%, 10/01/39 (f) | 1,845 | 2,100,827 |

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

| Municipal Bonds Transferred to | Par | |
|--|--------------|--------------|
| Tender Option Bond Trusts (e) | (000) | Value |
| California (concluded) | | |
| City & County of San Francisco California Public Utilities Commission, RB, Water Revenue, Series B, 5.00%, 11/01/39 | \$ 6,600 | \$ 7,612,968 |
| City of Los Angeles California Department of Airports, Refunding ARB, Los Angeles International Airport, Senior Series A, 5.00%, 5/15/40 | 4,122 | 4,745,697 |
| Los Angeles Community College District California, GO, Election of 2001, Series A (AGM), 5.00%, 8/01/32 | 1,620 | 1,799,577 |
| San Diego Community College District California, GO, Election of 2002, 5.25%, 8/01/33 | 748 | 873,936 |
| | | 19,848,034 |
| Colorado 2.4% | | |
| Colorado Health Facilities Authority, RB, Catholic Health (AGM): | | |
| Series C-3, 5.10%, 10/01/41 | 2,580 | 2,766,173 |
| Series C-7, 5.00%, 9/01/36 | 1,650 | 1,772,149 |
| Colorado Health Facilities Authority, Refunding RB, Catholic Health Initiatives, Series A, 5.50%, 7/01/34 (f) | 1,490 | 1,726,821 |
| | | 6,265,143 |
| Connecticut 2.7% | | |
| Connecticut State Health & Educational Facility Authority, RB, Yale University: | | |
| Series T-1, 4.70%, 7/01/29 | 3,179 | 3,451,780 |
| Series X-3, 4.85%, 7/01/37 | 3,262 | 3,539,152 |
| | | 6,990,932 |
| Florida 1.8% | | |
| County of Miami-Dade Florida, RB, Water & Sewer System, 5.00%, 10/01/34 | 3,939 | 4,576,097 |
| Georgia 1.0% | | |
| Private Colleges & Universities Authority, Refunding RB, Emory University, Series C, 5.00%, 9/01/38 | 2,259 | 2,536,614 |
| Massachusetts 2.0% | | |
| Massachusetts School Building Authority, RB, Senior, Series B, 5.00%, 10/15/41 | 4,502 | 5,276,826 |
| Municipal Bonds Transferred to | | |
| Tender Option Bond Trusts (e) | (000) | Value |
| New Hampshire 0.6% | | |
| New Hampshire Health & Education Facilities Authority, RB, Dartmouth College, 5.25%, 6/01/39 (f) | \$ 1,409 | \$ 1,630,087 |
| New York 6.5% | | |
| City of New York New York Municipal Water Finance Authority, Refunding RB, Water & Sewer System, 2nd General Resolution, Series FF-2, 5.50%, 6/15/40 | 1,110 | 1,301,168 |
| Hudson Yards Infrastructure Corp., RB, Fiscal 2012, Series A, 5.75%, 2/15/47 (f) | 1,110 | 1,304,935 |
| New York Liberty Development Corp., RB, 1 World Trade Center Port Authority Consolidated, 5.25%, 12/15/43 | 7,440 | 8,755,615 |
| New York Liberty Development Corp., Refunding RB, 4 World Trade Center Project, 5.75%, 11/15/51 (f) | 4,460 | 5,323,188 |
| | | 16,684,906 |
| North Carolina 0.5% | | |
| North Carolina Capital Facilities Finance Agency, Refunding RB, Wake Forest University, 5.00%, 1/01/38 | 1,080 | 1,224,234 |
| Ohio 4.3% | | |
| State of Ohio, Refunding RB, Cleveland Clinic Health System Obligated Group, Series A, 5.50%, 1/01/39 | 9,644 | 10,991,757 |
| Texas 4.8% | | |
| City of San Antonio Texas Public Service Board, RB, Electric & Gas Systems, Junior Lien, 5.00%, 2/01/43 | 1,720 | 1,984,278 |
| County of Harris Texas, RB, Senior Lien, Toll Road, Series A, 5.00%, 8/15/38 (f) | 4,624 | 5,259,347 |
| County of Harris Texas Metropolitan Transit Authority, Refunding RB, Series A, 5.00%, 11/01/41 | 2,350 | 2,733,731 |

Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

(Percentages shown are based on Net Assets)

| Municipal Bonds Transferred to | Par | Value |
|--|-----------|----------------|
| Tender Option Bond Trusts (e) | (000) | Value |
| Texas (concluded) | | |
| University of Texas, Refunding RB, Financing System, Series B, 5.00%, 8/15/43 | \$ 2,040 | \$ 2,387,490 |
| | | 12,364,846 |
| Utah 1.1% | | |
| City of Riverton Utah, RB, IHC Health Services, Inc., 5.00%, 8/15/41 | 2,518 | 2,833,284 |
| Virginia 2.5% | | |
| University of Virginia, Refunding RB, General, 5.00%, 6/01/40 | 3,749 | 4,208,955 |
| Virginia Small Business Financing Authority, Refunding RB, Sentara Healthcare, 5.00%, 11/01/40 | 2,095 | 2,383,913 |
| | | 6,592,868 |
| Washington 0.8% | | |
| Central Puget Sound Regional Transit Authority, RB, Series A (AGM), 5.00%, 11/01/32 | 1,860 | 2,045,607 |
| Wisconsin 1.7% | | |
| Wisconsin Health & Educational Facilities Authority, Refunding RB, Froedtert & Community Health, Inc., Obligated Group, Series C, 5.25%, 4/01/39 (f) | 3,959 | 4,425,391 |
| | | Value |
| Total Municipal Bonds Transferred to | | |
| Tender Option Bond Trusts 40.4% | | \$ 104,286,626 |
| Total Long-Term Investments | | |
| (Cost \$345,931,417) 152.5% | | 393,242,106 |
| Short-Term Securities | | |
| | Shares | Value |
| FFI Institutional Tax-Exempt Fund, 0.03% (g)(h) | 4,060,198 | 4,060,198 |
| Total Short-Term Securities | | |
| (Cost \$4,060,198) 1.6% | | 4,060,198 |
| Total Investments | | |
| (Cost \$349,991,615*) 154.1% | | 397,302,304 |
| Other Assets Less Liabilities 0.4% | | 955,536 |
| Liability for TOB Trust Certificates, Including Interest Expense and Fees Payable (22.0%) | | (56,794,889) |
| VMTP Shares, at Liquidation Value (32.5%) | | (83,700,000) |
| Net Assets Applicable to Common Shares 100.0% | | \$ 257,762,951 |

* As of January 31, 2015, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

| | |
|-------------------------------|----------------|
| Tax cost | \$ 293,850,671 |
| Gross unrealized appreciation | \$ 47,650,335 |
| Gross unrealized depreciation | (982,402) |
| Net unrealized appreciation | \$ 46,667,933 |

Notes to Schedule of Investments

- (a) Security exempt from registration pursuant to Rule 144A under the Securities Act of 1933, as amended. These securities may be resold in transactions exempt from registration to qualified institutional investors.
- (b) Zero-coupon bond.
- (c) U.S. government securities, held in escrow, are used to pay interest on this security, as well as to retire the bond in full at the date indicated, typically at a premium to par.
- (d) Represents a step-up bond that pays an initial coupon rate for the first period and then a higher coupon rate for the following periods. Rate shown is as of report date.
- (e) Represent bonds transferred to a TOB. In exchange for which the Fund received cash and residual interest certificates. These bonds serve as collateral in a financing transaction.
- (f) 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 agreement, which expire from October 1, 2016 to February 15, 2031 is 11,665,091.
- (g) During the period ended January 31, 2015, investments in issuers considered to be an affiliate of the Fund for purposes of Section 2(a)(3) of the Investment Company Act of 1940, as amended, were as follows:

BLACKROCK MUNIHOLDINGS FUND, INC.

JANUARY 31, 2015

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Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

| Affiliate | Shares Held at April 30, 2014 | Net Activity | Shares Held at January 31, 2015 | Income |
|-----------------------------------|-------------------------------------|-----------------|---------------------------------------|----------|
| FFI Institutional Tax-Exempt Fund | 804,766 | 3,255,432 | 4,060,198 | \$ 1,073 |

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

Portfolio Abbreviations

| | |
|--------------|---|
| AGC | Assured Guarantee Corp. |
| AGM | Assured Guaranty Municipal Corp. |
| AMT | Alternative Minimum Tax (subject to) |
| ARB | Airport Revenue Bonds |
| CAB | Capital Appreciation Bonds |
| COP | Certificates of Participation |
| EDA | Economic Development Authority |
| GARB | General Airport Revenue Bonds |
| GO | General Obligation Bonds |
| HFA | Housing Finance Agency |
| IDA | Industrial Development Authority |
| LRB | Lease Revenue Bonds |
| M/F | Multi-Family |
| NPFGC | National Public Finance Guarantee Corp. |
| RB | Revenue Bonds |
| S/F | Single-Family |

As of January 31, 2015, financial futures contracts outstanding were as follows:

| Contracts Short | Issue | Exchange | Expiration | Notional Value | Unrealized Depreciation |
|--------------------|----------------------------|------------------------|------------|-------------------|----------------------------|
| (315) | 10-Year U.S. Treasury Note | Chicago Board of Trade | March 2015 | \$ 41,225,625 | \$ (1,081,986) |

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Schedule of Investments (continued)

BlackRock MuniHoldings Fund, Inc. (MHD)

Fair Value Measurements Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a disclosure hierarchy consisting of three broad levels for financial reporting purposes. 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 fair value hierarchy classification is determined based on the lowest level input that is significant to the fair value measurement in its entirety. 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 is not necessarily an indication of the risks associated with investing in those securities. The three levels of the fair value hierarchy are as follows:

Level 1 unadjusted quoted prices in active markets/exchanges for identical assets or 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 and derivative financial instruments)

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. For information about the Fund's policy regarding valuation of investments and derivative financial instruments, please refer to the Fund's most recent financial statements as contained in its semi-annual report.

As of January 31, 2015, the following tables summarize the Fund's investments and derivative financial instruments categorized in the disclosure hierarchy:

| | Level 1 | Level 2 | Level 3 | Total |
|------------------------------------|--------------|----------------|---------|----------------|
| Assets: | | | | |
| Investments: | | | | |
| Long-Term Investments ¹ | | \$ 393,242,106 | | \$ 393,242,106 |
| Short-Term Securities | \$ 4,060,198 | | | 4,060,198 |
| Total | \$ 4,060,198 | \$ 393,242,106 | | \$ 397,302,304 |

¹ See above Schedule of Investments for values in each state or political subdivision.

| | Level 1 | Level 2 | Level 3 | Total |
|---|----------------|---------|---------|----------------|
| Derivative Financial Instruments² | | | | |
| Liabilities: | | | | |
| Interest rate contracts | \$ (1,081,986) | | | \$ (1,081,986) |

² Derivative financial instruments are financial futures contracts, which are valued at the unrealized appreciation/depreciation on the instrument.

Schedule of Investments (concluded)

BlackRock MuniHoldings Fund, Inc. (MHD)

The Fund may hold assets and/or liabilities in which the fair value approximates the carrying amount for financial reporting purposes. As of January 31, 2015, such assets and/or liabilities are categorized within the disclosure hierarchy as follows:

| | Level 1 | Level 2 | Level 3 | Total |
|--|------------|------------------|---------|------------------|
| Assets: | | | | |
| Cash pledged for financial futures contracts | \$ 428,000 | | | \$ 428,000 |
| Liabilities: | | | | |
| TOB trust certificates | | \$ (56,783,700) | | (56,783,700) |
| VMTP Shares | | (83,700,000) | | (83,700,000) |
| Total | \$ 428,000 | \$ (140,483,700) | | \$ (140,055,700) |

During the period ended January 31, 2015, there were no transfers between levels.

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 Fund, Inc.

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

Date: March 25, 2015

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 Fund, Inc.

Date: March 25, 2015

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

Date: March 25, 2015