

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

Form N-Q

September 26, 2016

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: 811-21348

Name of Fund: BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: John M. Perlowski, Chief Executive Officer, BlackRock Muni Intermediate Duration 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: 04/30/2017

Date of reporting period: 07/31/2016

Item 1 Schedule of Investments

Schedule of Investments July 31, 2016 (Unaudited)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

(Percentages shown are based on Net Assets)

| | Par | |
|---|------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| Alabama 2.8% | | |
| City of Birmingham Alabama Special Care Facilities Financing Authority, RB, Children s Hospital (AGC), 6.00%, 6/01/19 (a) | \$ 4,615 | \$ 5,289,528 |
| County of Jefferson Alabama, RB, Limited Obligation School, Series A: | | |
| 5.50%, 1/01/21 | 5,500 | 5,532,065 |
| 5.25%, 1/01/23 | 6,500 | 6,537,895 |
| | | 17,359,488 |
| Arizona 3.5% | | |
| Arizona Board of Regents, Univesity of Arizona, RB, 5.00%, 8/01/28 | 2,000 | 2,336,800 |
| Arizona Health Facilities Authority, Refunding RB, Phoenix Children s Hospital, Series A, 5.00%, 2/01/30 | 2,685 | 3,083,319 |
| Arizona State University, RB, Series D, 5.00%, 7/01/32 | 1,350 | 1,680,669 |
| City of Phoenix Arizona IDA, RB, Facility, Legacy Traditional Schools Project, Series A, 5.75%, 7/01/24 (b) | 750 | 867,255 |
| City of Tucson Arizona, COP, Refunding, (AGC), 4.00%, 7/01/20 | 2,325 | 2,588,818 |
| County of Pinal Arizona Electric District No. 3, Refunding RB, 5.00%, 7/01/25 | 1,600 | 1,866,016 |
| Glendale Union School District No. 205, GO, Series C: | | |
| 5.00%, 7/01/24 | 1,945 | 2,383,831 |
| 5.00%, 7/01/27 | 500 | 601,710 |
| Phoenix-Mesa Gateway Airport Authority, RB, Mesa Project, AMT: | | |
| 5.00%, 7/01/27 | 700 | 812,490 |
| 5.00%, 7/01/32 | 1,925 | 2,195,174 |
| Scottsdale IDA, Refunding RB, Scottsdale Healthcare, Series C (AGM), 5.00%, 9/01/35 | 2,050 | 2,303,134 |
| State of Arizona, COP, Department of Administration, Series A (AGM), 4.25%, 10/01/23 | 1,000 | 1,085,590 |
| | | 21,804,806 |
| Arkansas 1.0% | | |
| Arkansas State University, RB, 5.00%, 12/01/33 | 480 | 572,045 |
| City of Benton, RB, 5.00%, 6/01/29 | 1,055 | 1,285,549 |
| | Par | |
| Municipal Bonds | | |
| Arkansas (continued) | | |
| University of Arkansas, Refunding RB: | | |
| 5.00%, 3/01/31 | \$ 2,315 | \$ 2,862,590 |
| 5.00%, 3/01/34 | 1,270 | 1,554,683 |
| | | 6,274,867 |
| California 3.9% | | |
| California Health Facilities Financing Authority, RB, Sutter Health, Series B, 5.00%, 8/15/22 | 2,135 | 2,522,631 |
| California Health Facilities Financing Authority, Refunding RB, 5.00%, 11/15/29 | 1,930 | 2,445,966 |
| California Infrastructure & Economic Development Bank, Refunding RB, 4.00%, 11/01/31 | 1,335 | 1,504,839 |
| California Pollution Control Financing Authority, RB, Mandatory Put Bonds, Republic Services, Inc. Project, Series B, AMT, 5.25%, 6/01/23 (c) | 605 | 637,851 |
| California Pollution Control Financing Authority, Refunding RB, Pacific Gas, Series C, AMT (NPFGC), 4.75%, 12/01/23 | 5,000 | 5,162,500 |
| City of San Jose California, Refunding ARB, Series A-1, AMT, 5.00%, 3/01/25 | 2,000 | 2,286,060 |
| State of California, GO: | | |
| 5.50%, 4/01/28 | 15 | 15,063 |
| 5.00%, 11/01/32 | 2,000 | 2,105,740 |
| Various Purposes, 5.75%, 4/01/31 | 7,000 | 7,908,250 |
| | | 24,588,900 |
| Colorado 1.0% | | |
| Denver Urban Renewal Authority, Refunding, Tax Allocation Bond, Stapleton, Senior-Series A-1, 5.00%, 12/01/23 | 2,500 | 3,016,650 |
| Park Creek Metropolitan District, Refunding, Tax Allocation Bonds, 5.00%, 12/01/34 | 500 | 592,085 |

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

JULY 31, 2016

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Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

| | Par | |
|--|------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| Colorado (continued) | | |
| University of Northern Colorado, Refunding RB, Series A, 5.00%, 6/01/31 | \$ 2,000 | \$ 2,430,020 |
| | | 6,038,755 |
| Connecticut 3.4% | | |
| Connecticut State Health & Educational Facility Authority, Refunding RB: | | |
| 5.00%, 12/01/33 | 4,015 | 5,004,577 |
| Lawrence & Memorial Hospital, Series F, 5.00%, 7/01/31 | 4,530 | 5,109,568 |
| University of Connecticut, RB, Series A: | | |
| 5.00%, 3/15/31 | 5,025 | 6,234,719 |
| 5.00%, 3/15/32 | 4,000 | 4,943,440 |
| | | 21,292,304 |
| Florida 6.7% | | |
| County of Broward Florida School Board, COP, Refunding, Series A (AGM), 5.00%, 7/01/24 | 10,000 | 11,636,600 |
| County of Lee Florida, Refunding ARB, Series A, AMT: | | |
| 5.50%, 10/01/23 | 1,000 | 1,187,170 |
| (AGM), 5.00%, 10/01/27 | 1,635 | 1,886,136 |
| County of Miami-Dade Florida, RB, AMT, Series B: | | |
| 6.00%, 10/01/28 | 3,470 | 4,379,105 |
| 6.00%, 10/01/29 | 3,480 | 4,379,162 |
| County of Miami-Dade Florida Transit System Sales Surtax Revenue, Refunding RB, 5.00%, 7/01/32 | 1,500 | 1,772,190 |
| County of Miami-Dade Florida Water & Sewer System Revenue, Refunding RB, Series C (BHAC), 5.00%, 10/01/18 (a) | 8,000 | 8,750,240 |
| Miami-Dade County Educational Facilities Authority, Refunding RB, Series A, 5.00%, 4/01/32 | 5,020 | 6,075,556 |
| Midtown Miami Community Development District, Refunding, Special Assessment Bonds, Series A, 4.25%, 5/01/24 | 1,665 | 1,817,964 |
| | Par | |
| Municipal Bonds | | |
| Florida (continued) | | |
| Sterling Hill Community Development District, Refunding RB, Special Assessment Bonds, Series B, 5.50%, 11/01/10 (d)(e) | \$ 150 | \$ 104,991 |
| | | 41,989,114 |
| Georgia 2.0% | | |
| City of Atlanta Georgia Water & Wastewater Revenue RB, Refunding RB, 5.00%, 11/01/32 | 10,000 | 12,362,100 |
| Hawaii 0.9% | | |
| State of Hawaii Airports System, Refunding ARB, Series A, 5.25%, 7/01/29 | 5,000 | 5,796,500 |
| Idaho 0.5% | | |
| Boise State University, Refunding RB, Series A: | | |
| 5.00%, 4/01/32 | 1,300 | 1,627,106 |
| 5.00%, 4/01/33 | 1,000 | 1,246,670 |
| | | 2,873,776 |
| Illinois 17.4% | | |
| City of Chicago Illinois Midway International Airport, Refunding ARB, 2nd Lien, Series A: | | |
| 5.00%, 1/01/32 | 5,000 | 5,819,800 |
| AMT, 5.50%, 1/01/32 | 1,500 | 1,783,065 |
| City of Chicago Illinois O Hare International Airport, Refunding GARB, AMT, Series C: | | |
| 5.25%, 1/01/28 | 1,350 | 1,614,074 |
| 5.25%, 1/01/29 | 3,020 | 3,596,699 |
| City of Chicago Illinois O Hare International Airport, RB, Refunding GARB, 5.00%, 1/01/32 | 3,745 | 4,502,426 |
| City of Chicago Illinois O Hare International Airport, Refunding GARB, Senior Lien, Series A, AMT, | | |
| 5.00%, 1/01/23 | 13,000 | 15,555,670 |
| City of Chicago Illinois Transit Authority, RB, 5.25%, 12/01/31 | 3,700 | 4,160,169 |
| Illinois State Toll Highway Authority, Refunding RB, Senior, Series A, 5.00%, 12/01/32 | 5,690 | 7,011,787 |
| Madison-Macoupin Etc. Counties Community College District No. 536, GO, Refunding, Lewis & Clark Community College: | | |

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| | | |
|----------------|-----|---------|
| 5.00%, 5/01/30 | 475 | 536,413 |
| 5.00%, 5/01/31 | 500 | 564,645 |

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Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

| | Par | |
|---|------------|-------------|
| | (000) | Value |
| Municipal Bonds | | |
| Illinois (continued) | | |
| Madison-Macoupin Etc. Counties Community College District No. 536, GO, Refunding, Lewis & Clark Community College (continued): | | |
| 5.00%, 5/01/32 | \$ 500 | \$ 563,145 |
| McHenry County Conservation District, GO, 5.13%, 2/01/17 (a) | 12,695 | 12,991,047 |
| Railsplitter Tobacco Settlement Authority, RB: | | |
| 5.50%, 6/01/23 | 3,500 | 4,122,825 |
| 6.25%, 6/01/24 | 11,750 | 11,804,638 |
| State of Illinois, GO: | | |
| 5.25%, 2/01/30 | 5,000 | 5,566,200 |
| 5.00%, 5/01/30 | 10,000 | 11,017,700 |
| State of Illinois Toll Highway Authority, RB, Series A, 5.00%, 1/01/34 | 9,140 | 10,664,826 |
| Village of Hodgkins Illinois, RB, MBM Project, AMT, 5.90%, 11/01/17 | 6,000 | 6,013,080 |
| Village of Wheeling Illinois, Tax Allocation Bonds, North Milwaukee/Lake-Cook TIF Project, 6.00%, 1/01/25 | 1,210 | 1,211,089 |
| | | 109,099,298 |
| Indiana 5.9% | | |
| City of Whiting Indiana, RB, BP Products North America, Inc. Project, 5.25%, 1/01/21 | 4,800 | 5,556,192 |
| County of Jasper Indiana, Refunding RB, Northern Indiana Public Service Co., Series C (NPFGC), 5.85%, 4/01/19 | 2,000 | 2,225,740 |
| Indiana Finance Authority, RB, Wastewater, 1st Lien, Series A, 5.25%, 10/01/31 | 10,000 | 11,952,900 |
| Indiana Finance Authority, Refunding RB, US Steel Corp. Project, 6.00%, 12/01/19 | 5,000 | 5,001,450 |
| Indiana Municipal Power Agency, Refunding RB, Series A, 5.00%, 1/01/33 | 10,000 | 12,343,000 |
| | | 37,079,282 |
| Iowa 1.2% | | |
| Iowa Higher Education Loan Authority, RB, Private College Facility: | | |
| 5.25%, 4/01/23 | 695 | 823,825 |
| 5.25%, 4/01/24 | 730 | 863,853 |
| 5.25%, 4/01/25 | 520 | 613,787 |
| | Par | |
| Municipal Bonds | | |
| Iowa (continued) | | |
| Iowa Higher Education Loan Authority, RB, Private College Facility (continued): | | |
| 5.25%, 4/01/26 | \$ 360 | \$ 423,677 |
| Iowa Higher Education Loan Authority, Refunding RB: | | |
| Drake University Project, 4.00%, 4/01/27 | 620 | 726,324 |
| Drake University Project, 4.00%, 4/01/28 | 750 | 869,685 |
| Private College Facility, 5.00%, 9/01/22 | 2,315 | 2,454,317 |
| Private College Facility, Upper Iowa University Project, 5.00%, 9/01/20 | 1,000 | 1,070,030 |
| | | 7,845,498 |
| Kansas 1.4% | | |
| Kansas Development Finance Authority, Refunding RB, Adventist Health System/Sunbelt Obligated Group, Series C, 5.00%, 11/15/23 | | |
| | 1,500 | 1,687,125 |
| Seward County Unified School District No. 480 Liberal, GO, Refunding, 5.00%, 9/01/33 | 6,000 | 7,072,140 |
| | | 8,759,265 |
| Louisiana 3.9% | | |
| City of Bossier City Louisiana Utilities, Refunding RB, 5.00%, 10/01/32 | 2,000 | 2,425,040 |
| City of New Orleans Louisiana Aviation Board, Refunding GARB, Restructuring, Series A-2 (AGC), 6.00%, 1/01/23 | 850 | 948,626 |
| Louisiana Local Government Environmental Facilities & Community Development Authority, Refunding RB, BRCC Facilities Corp. Project: | | |
| 5.00%, 12/01/27 | 3,445 | 4,015,285 |
| 5.00%, 12/01/28 | 3,715 | 4,329,981 |
| New Orleans Aviation Board, RB, Series A: | | |

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| | | |
|---|-------|-----------|
| 5.00%, 1/01/32 | 1,000 | 1,193,810 |
| 5.00%, 1/01/33 | 1,000 | 1,190,460 |
| State of Louisiana Gasoline & Fuels Tax Revenue, Refunding RB, 4.00%, 5/01/34 | 5,750 | 6,365,537 |

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

JULY 31, 2016

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Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

| | Par | |
|--|------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| Louisiana (continued) | | |
| Terrebonne Levee & Conservation District, RB, Sales Tax, 5.00%, 7/01/28 | \$ 3,660 | \$ 4,276,271 |
| | | 24,745,010 |
| Maine 0.3% | | |
| Portland Housing Development Corp., Refunding RB, Senior Living, Retirement Facilities, Series A, 6.00%, 2/01/34 | 1,965 | 1,968,478 |
| Maryland 0.8% | | |
| Maryland EDC, RB, Transportation Facilities Project, Series A, 5.13%, 6/01/20 | 1,615 | 1,775,418 |
| Maryland Health & Higher Educational Facilities Authority, RB, Johns Hopkins Health System, Series B, 5.00%, 7/01/33 | 1,140 | 1,341,928 |
| Maryland Health & Higher Educational Facilities Authority, Refunding RB, 5.00%, 7/01/33 | 1,500 | 1,795,365 |
| | | 4,912,711 |
| Massachusetts 0.8% | | |
| Massachusetts Development Finance Agency, RB, Dana-Farber Cancer Institute Issue, Series N, 5.00%, 12/01/33 | 1,300 | 1,611,844 |
| Massachusetts Development Finance Agency, Refunding RB, 5.00%, 1/01/31 | 1,730 | 2,056,607 |
| Massachusetts Health & Educational Facilities Authority, Refunding RB, Winchester Hospital, 5.00%, 7/01/25 | 1,060 | 1,197,121 |
| | | 4,865,572 |
| Michigan 3.0% | | |
| Manistee Area Public Schools, GO, Refunding, (Q-SBLF), 5.00%, 5/01/25 | 1,000 | 1,162,400 |
| Michigan Finance Authority, Refunding RB, Senior Lien, Detroit Water and Sewer, Series C-3 (AGM), 5.00%, 7/01/31 | 4,000 | 4,771,640 |
| Michigan State Building Authority, Refunding RB, Facilities Program, Series II-A, 5.00%, 10/15/24 | 2,500 | 2,935,250 |
| | Par | |
| Municipal Bonds | | |
| Michigan (continued) | | |
| Michigan State Hospital Finance Authority, Refunding RB, Henry Ford Health System, 5.25%, 11/15/24 | \$ 4,900 | \$ 5,496,575 |
| State of Michigan, Refunding RB, 5.00%, 3/15/27 (f) | 3,750 | 4,819,762 |
| | | 19,185,627 |
| Minnesota 1.2% | | |
| City of Minneapolis, RB, YMCA of the Greater Twin Cities Project: | | |
| 4.00%, 6/01/30 | 150 | 168,401 |
| 4.00%, 6/01/31 | 50 | 55,765 |
| Minnesota Higher Education Facilities Authority, Refunding RB, University of St. Thomas, Series 8-L, 5.00%, 4/01/35 | 500 | 606,310 |
| University of Minnesota, RB, Biomedical Science Research Facilities Funding Program: | | |
| Series B, 5.00%, 8/01/36 | 1,000 | 1,168,520 |
| Series C, 5.00%, 8/01/27 | 1,390 | 1,710,395 |
| Series C, 5.00%, 8/01/28 | 740 | 907,669 |
| Series C, 5.00%, 8/01/29 | 1,555 | 1,903,864 |
| Series C, 5.00%, 8/01/30 | 835 | 1,020,579 |
| | | 7,541,503 |
| Montana 0.5% | | |
| Gallatin County School District No 7 Bozeman, GO: | | |
| 4.00%, 12/01/31 | 340 | 396,158 |
| 4.00%, 12/01/32 | 305 | 353,324 |
| 4.00%, 12/01/33 | 255 | 293,696 |
| 4.00%, 12/01/34 | 360 | 412,920 |
| Montana State Board of Regents, RB, 5.00%, 11/15/30 | 1,000 | 1,231,630 |
| Yellowstone County School District No. 2 Billings, GO, 5.00%, 6/15/30 | 500 | 614,955 |

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| | | |
|--|-------|-----------|
| | | 3,302,683 |
| Nebraska 1.0% | | |
| Douglas County Hospital Authority No. 3, Refunding RB, 5.00%, 11/01/30 | 800 | 959,920 |
| Lancaster County Hospital Authority No. 1, Refunding RB, Immanuel Obligation Group, 5.50%, 1/01/30 | 1,000 | 1,138,680 |
| Nebraska Public Power District, Refunding RB: | | |
| Series A, 5.00%, 1/01/30 | 1,000 | 1,185,040 |
| Series A, 5.00%, 1/01/32 | 2,000 | 2,352,940 |

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

| | Par | |
|---|------------|---------------|
| | (000) | Value |
| Municipal Bonds | | |
| Nebraska (continued) | | |
| Nebraska Public Power District, Refunding RB (continued): | | |
| Series A-1, 3.00%, 1/01/33 | \$ 900 | \$ 947,979 |
| | | 6,584,559 |
| Nevada 1.6% | | |
| Clark County Department of Aviation, Refunding RB, 5.00%, 7/01/33 | 5,000 | 6,045,000 |
| County of Humboldt Nevada, Refunding RB, Idaho Power Co. Project, 5.15%, 12/01/24 | 3,800 | 4,220,204 |
| | | 10,265,204 |
| New Jersey 20.9% | | |
| County of Essex New Jersey Improvement Authority, LRB, Newark Project, Series A (AGM), 5.00%, 11/01/20 | 2,000 | 2,230,800 |
| New Jersey EDA, RB, AMT: | | |
| Continental Airlines, Inc. Project, 5.13%, 9/15/23 | 6,040 | 6,810,825 |
| Goethals Bridge Replacement Project, Private Activity Bond, 5.50%, 1/01/26 | 1,500 | 1,801,965 |
| Goethals Bridge Replacement Project, Private Activity Bond, 5.50%, 1/01/27 | 1,000 | 1,199,810 |
| New Jersey EDA, Refunding RB: | | |
| New Jersey American Water Co., Series E, AMT, 4.70%, 12/01/25 | 3,000 | 3,310,830 |
| School Facilities Construction, Series AA, 4.25%, 12/15/24 | 3,850 | 4,023,096 |
| School Facilities Construction, Series EE, 5.00%, 9/01/23 | 3,465 | 3,821,375 |
| New Jersey Educational Facilities Authority, RB, Higher Education Facilities Trust Fund, 5.00%, 6/15/28 | 10,000 | 11,290,900 |
| New Jersey Educational Facilities Authority, Refunding RB, 5.00%, 7/01/30 | 5,000 | 6,011,750 |
| New Jersey Higher Education Student Assistance Authority, Refunding RB: | | |
| Series 1, AMT, 5.50%, 12/01/26 | 1,340 | 1,524,853 |
| Student Loan, Series 1A, 4.75%, 12/01/21 | 1,555 | 1,660,631 |
| | Par | |
| | (000) | Value |
| Municipal Bonds | | |
| New Jersey (continued) | | |
| New Jersey State Turnpike Authority, 5.00%, 1/01/32 | \$ 12,000 | \$ 14,477,880 |
| New Jersey State Turnpike Authority, Refunding RB, Series B, 5.00%, 1/01/29 | 10,000 | 11,992,800 |
| New Jersey Transportation Trust Fund Authority, RB: | | |
| Series B, 5.25%, 6/15/26 | 3,500 | 3,900,015 |
| Transportation Program, Series AA, 5.25%, 6/15/31 | 12,000 | 13,499,640 |
| Transportation Program, Series AA, 5.25%, 6/15/32 | 2,250 | 2,562,885 |
| Transportation System, Series A, 5.25%, 6/15/24 | 3,185 | 3,586,469 |
| Transportation System, Series B, 5.50%, 6/15/31 | 13,970 | 15,841,700 |
| Transportation System, Series C, 5.25%, 6/15/32 | 10,000 | 11,464,100 |
| Newark Housing Authority, RB, Series A: | | |
| 5.00%, 12/01/23 | 1,230 | 1,482,298 |
| 5.00%, 12/01/25 | 1,345 | 1,610,557 |
| South Jersey Port Corp., RB, Marine Terminal, Series O-1 (AGC), 4.63%, 1/01/23 | 1,375 | 1,478,180 |
| State of New Jersey, GO, Various Purposes, 5.00%, 6/01/28 | 5,000 | 6,060,350 |
| | | 131,643,709 |
| New Mexico 1.3% | | |
| Albuquerque Bernalillo County Water Utility Authority, Refunding RB, 4.00%, 7/01/33 | 4,510 | 5,098,014 |
| New Mexico Hospital Equipment Loan Council, Refunding RB, 5.00%, 8/01/31 | 2,500 | 3,080,525 |
| | | 8,178,539 |
| New York 19.4% | | |
| Build NYC Resource Corp., Refunding RB, 5.00%, 7/01/33 | 3,085 | 3,700,149 |
| City of New York New York, GO, Refunding, Series A, 5.00%, 8/01/29 | 6,125 | 7,751,616 |
| City of New York New York, GO: | | |
| Sub-Series B-1, 5.25%, 9/01/22 | 4,250 | 4,661,485 |
| Sub-Series-D- 1, 5.13%, 12/01/17 (a) | 2,730 | 2,893,008 |
| Sub-Series-D- 1, 5.13%, 12/01/26 | 1,885 | 1,999,174 |

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Sub-Series I-1, 5.50%, 4/01/21

5,000

5,627,500

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

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Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

| | Par | |
|---|--------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| New York (continued) | | |
| City of New York New York Transitional Finance Authority, BARB, Fiscal 2009, Series S-3, 5.00%, 1/15/23 | \$ 3,560 | \$ 3,941,846 |
| County of Nassau New York, GO, Series A: 5.00%, 1/01/32 | 1,000 | 1,224,690 |
| 5.00%, 1/01/33 | 3,110 | 3,799,954 |
| County of Westchester New York Healthcare Corp., Refunding RB, Senior Lien, Remarketing, Series A: 5.00%, 11/01/24 | 5,470 | 6,377,145 |
| 5.00%, 11/01/30 | 655 | 748,737 |
| Long Island Power Authority, Refunding RB, Electric System, Series A, 5.50%, 4/01/19 (a) | 1,000 | 1,126,850 |
| Metropolitan Transportation Authority, RB: Sub-Series B-1, 5.00%, 11/15/24 | 2,300 | 2,763,542 |
| Sub-Series B-4, 5.00%, 11/15/24 | 1,500 | 1,802,310 |
| Monroe County Industrial Development Corp., Refunding RB, Series A, 5.00%, 7/01/29 | 5,695 | 6,909,117 |
| New York City Trust for Cultural Resources, Refunding RB, Carnegie Hall, Series A, 5.00%, 12/01/29 | 2,750 | 3,105,025 |
| New York State Dormitory Authority, RB (a): Education, Series D, 5.00%, 9/15/16 | 5 | 5,029 |
| North Shore-Long Island Jewish Health System, Series A, 5.50%, 5/01/19 | 1,495 | 1,692,534 |
| New York State Dormitory Authority, Refunding RB: 4.25%, 9/01/19 (a) | 480 | 529,080 |
| 5.00%, 7/01/30 | 1,555 | 1,931,574 |
| New York State Thruway Authority, RB, Junior Lien, Series A: 5.00%, 1/01/33 | 4,500 | 5,528,205 |
| 5.00%, 1/01/34 | 2,000 | 2,447,480 |
| Port Authority of New York & New Jersey, ARB, JFK International Air Terminal LLC Project, 5.00%, 12/01/20 | 2,475 | 2,828,009 |
| | Par | |
| | (000) | Value |
| Municipal Bonds | | |
| New York (continued) | | |
| Port Authority of New York & New Jersey, Refunding ARB, Consolidated, 152nd Series, AMT, 5.00%, 11/01/23 | \$ 1,000 | \$ 1,066,160 |
| Port Authority of New York & New Jersey, Refunding RB, 5.00%, 11/01/28 | 6,185 | 7,832,931 |
| State of New York Dormitory Authority, RB: Fordham University, Series A, 5.25%, 7/01/25 | 900 | 1,056,528 |
| Icahn School of Medicine at Mount Sinai, Series A, 5.00%, 7/01/32 | 9,000 | 10,982,340 |
| Mental Health Services (AGM), 5.00%, 8/15/18 (a) | 10 | 10,898 |
| Mental Health Services (AGM), 5.00%, 8/15/18 (a) | 30 | 32,693 |
| Mental Health Services (AGM), 5.00%, 2/15/22 | 3,950 | 4,300,207 |
| Mental Health Services, 2nd Series (AGM), 5.00%, 8/15/18 (a) | 10 | 10,898 |
| Municipal Health Facilities Lease, Sub-Series 2-4, 5.00%, 1/15/27 | 6,900 | 7,331,457 |
| New York University Hospitals Center, Series A, 5.00%, 7/01/20 (a) | 1,725 | 2,008,556 |
| New York University Hospitals Center, Series A, 5.13%, 7/01/20 | 1,670 | 1,952,564 |
| State of New York Dormitory Authority, Refunding RB, North Shore-Long Island Jewish Obligated Group, Series A, 5.00%, 5/01/32 | 3,060 | 3,738,861 |
| State of New York Urban Development Corp., RB, Service Contract, Series B, 5.00%, 1/01/21 | 6,500 | 7,047,755 |
| State of New York Urban Development Corp., Refunding RB, State Personal Income Tax, Series A, 4.00%, 3/15/37 | 1,000 | 1,125,800 |
| | | 121,891,707 |
| North Carolina 0.3% | | |
| North Carolina Medical Care Commission, Refunding RB, WakeMed, Series A, 5.00%, 10/01/31 | 1,500 | 1,759,785 |

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

| | Par | |
|--|------------|--------------|
| | (000) | Value |
| Municipal Bonds | | |
| Ohio 1.2% | | |
| State of Ohio Turnpike Commission, RB, Junior Lien, Infrastructure Projects, Series A-1, 5.25%, 2/15/31 | \$ 6,000 | \$ 7,326,360 |
| Oklahoma 0.8% | | |
| Oklahoma City Public Property Authority, Refunding RB: | | |
| 5.00%, 10/01/27 | 1,190 | 1,475,398 |
| 5.00%, 10/01/28 | 1,265 | 1,557,999 |
| 5.00%, 10/01/29 | 1,400 | 1,714,818 |
| | | 4,748,215 |
| Oregon 2.5% | | |
| County of Yamhill School District No. 40 McMinnville, GO, 4.00%, 6/15/33 (f) | 1,380 | 1,577,795 |
| Klamath County School District, GO: | | |
| 5.00%, 6/15/30 | 1,000 | 1,219,130 |
| 5.00%, 6/15/31 | 1,000 | 1,217,680 |
| Klamath Falls Intercommunity Hospital Authority, Refunding RB, Sky Lakes Medical Center Project: | | |
| 5.00%, 9/01/30 | 400 | 495,520 |
| 5.00%, 9/01/31 | 300 | 370,122 |
| 5.00%, 9/01/32 | 540 | 664,043 |
| Oregon Health & Science University, Refunding RB, Series B, 5.00%, 7/01/33 | 2,500 | 3,143,725 |
| Oregon State Facilities Authority, Refunding RB, Reed College Project, Series A, 5.00%, 7/01/29 | 1,835 | 2,096,066 |
| State of Oregon, GO, Series H, 5.00%, 5/01/36 | 2,000 | 2,366,380 |
| Umatilla County School District No. 16R Pendleton, GO, Series A, 5.00%, 6/15/32 | 2,000 | 2,451,600 |
| | | 15,602,061 |
| Pennsylvania 5.7% | | |
| City of Philadelphia Pennsylvania, ARB, Series A, AMT, 5.00%, 6/15/20 | 2,895 | 3,003,910 |
| City of Pittsburgh Pennsylvania, GO, Refunding, Series B (AGM), 5.25%, 9/01/17 | 9,630 | 9,670,831 |
| County of Allegheny Pennsylvania, GO, Refunding, Series C-68, 5.00%, 11/01/25 | 2,515 | 2,962,569 |
| | Par | |
| | (000) | Value |
| Municipal Bonds | | |
| Pennsylvania (continued) | | |
| County of Allegheny Pennsylvania, GO, Series C-67: | | |
| 5.00%, 11/01/25 | \$ 2,700 | \$ 3,190,995 |
| 5.00%, 11/01/26 | 2,375 | 2,779,296 |
| Pennsylvania Turnpike Commission, RB: | | |
| Series B, 5.00%, 12/01/32 | 1,500 | 1,828,710 |
| Sub-Series B, 5.25%, 12/01/31 | 4,000 | 4,681,600 |
| South Fork Municipal Authority, Refunding RB, Conemaugh Valley Memorial Hospital, Series A (AGC), 6.00%, 7/01/20 (a) | 6,225 | 7,461,721 |
| | | 35,579,632 |
| Puerto Rico 1.5% | | |
| Puerto Rico Housing Finance Authority, Refunding RB, M/F Housing, Subordinate, Capital Fund Modernization, 5.13%, 12/01/27 | 9,000 | 9,683,190 |
| Rhode Island 1.8% | | |
| Narragansett Bay Commission, Refunding RB, Series B, 5.00%, 9/01/32 | 4,150 | 5,092,880 |
| Providence Redevelopment Agency, Refunding RB, Series A, 5.00%, 4/01/29 | 1,000 | 1,159,970 |
| Rhode Island Health & Educational Building Corp., RB, City of Newport Issue Financing Program, Series C, 5.00%, 5/15/30 | 2,305 | 2,707,684 |
| Rhode Island Health & Educational Building Corp., Refunding RB, 5.00%, 9/01/32 | 2,000 | 2,424,120 |
| | | 11,384,654 |
| South Carolina 1.9% | | |
| South Carolina State Public Service Authority, Refunding RB, Series A, 5.00%, 12/01/34 | 10,000 | 12,236,700 |
| South Dakota 0.2% | | |
| South Dakota Health & Educational Facilities Authority, Refunding RB, Regional Health, 5.00%, 9/01/25 | 1,000 | 1,141,140 |

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

JULY 31, 2016

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Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

| | Par | |
|--|--------------|--------------------|
| | (000) | Value |
| Municipal Bonds | | |
| Tennessee 2.0% | | |
| County of Memphis-Shelby Tennessee Sports Authority, Inc., Refunding RB, Memphis Arena Project: | | |
| Series A, 5.00%, 11/01/23 | \$ 2,695 | \$ 3,022,955 |
| Series B, 5.00%, 11/01/22 | 1,000 | 1,123,740 |
| Knox County Health Educational & Housing Facility Board Tennessee, Refunding RB, Eastowne Village Project, 4.00%, 6/01/31 (c) | 3,275 | 3,488,399 |
| Metropolitan Government Nashville & Davidson County Health & Educational Facs Bd, RB, Vanderbilt University Medical Center, Series A, 5.00%, 7/01/35 | 4,000 | 4,866,000 |
| | | 12,501,094 |
| Texas 7.1% | | |
| City of Grapevine Texas, GO, 5.00%, 2/15/33 | 5,685 | 6,850,084 |
| City of Houston Texas, Refunding ARB, Subordinate Lien, Series A, AMT: 5.00%, 7/01/25 | 1,500 | 1,720,935 |
| 5.00%, 7/01/32 | 1,010 | 1,148,168 |
| Dallas/Fort Worth International Airport, Refunding RB, AMT: | | |
| Series E, 5.00%, 11/01/26 | 2,185 | 2,508,161 |
| Series E, 5.00%, 11/01/27 | 4,960 | 5,686,937 |
| Series F, 5.00%, 11/01/31 | 6,345 | 7,216,232 |
| Love Field Airport Modernization Corp., RB, Southwest Airlines Co. Project, AMT, 5.00%, 11/01/28 | 1,000 | 1,148,900 |
| North Texas Tollway Authority, Refunding RB, Series A, 5.00%, 1/01/33 | 2,500 | 3,085,525 |
| Red River Education Financing Corp., RB, 5.00%, 3/15/33 | 1,340 | 1,612,315 |
| San Jacinto River Authority, RB, Special Project (AGM), 5.25%, 10/01/25 | 2,910 | 3,259,986 |
| Socorro ISD, GO, Refunding, School Building (PSF-GTD), 5.00%, 8/15/32 | 2,500 | 2,882,675 |
| Via Metropolitan Transit Authority, Refunding RB: | | |
| 5.25%, 8/01/28 | 1,585 | 1,918,928 |
| 5.25%, 8/01/29 | 1,720 | 2,040,866 |
| | Par | |
| | (000) | Value |
| Municipal Bonds | | |
| Texas (continued) | | |
| Via Metropolitan Transit Authority, Refunding RB (continued): | | |
| 5.25%, 8/01/33 | \$ 3,000 | \$ 3,588,900 |
| | | 44,668,612 |
| U.S. Virgin Islands 0.9% | | |
| Virgin Islands Public Finance Authority, Refunding RB, Series A, 5.25%, 10/01/24 | 5,000 | 5,805,850 |
| Vermont 1.0% | | |
| University of Vermont & State Agricultural College, Refunding RB, 4.00%, 10/01/30 | 5,565 | 6,355,063 |
| West Virginia 1.0% | | |
| West Virginia Hospital Finance Authority, Refunding RB, Charleston Area Medical Center, Inc., Series A, 5.13%, 9/01/23 | 4,000 | 4,418,960 |
| West Virginia University, RB, West Virginia University Project, Series B, 5.00%, 10/01/30 | 1,500 | 1,760,310 |
| | | 6,179,270 |
| Wisconsin 1.6% | | |
| Public Finance Authority, Refunding RB, AMT: | | |
| National Gypsum Co., 5.25%, 4/01/30 | 2,410 | 2,702,646 |
| Wisconsin Airport Facilities, Senior Obligated Group, Series B, 5.25%, 7/01/28 | 4,765 | 5,364,675 |
| Wisconsin Health & Educational Facilities Authority, Refunding RB, The Monroe Clinic, Inc. (f): | | |
| 4.00%, 2/15/31 | 450 | 495,086 |
| 4.00%, 2/15/33 | 1,100 | 1,201,915 |
| | | 9,764,322 |
| Total Municipal Bonds 135.8% | | 852,985,203 |

Municipal Bonds Transferred to

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Tender Option Bond Trusts (g)

Connecticut 2.0%

| | | |
|--|--------|------------|
| Connecticut State Health & Educational Facility Authority, Refunding RB, 5.00%, 12/01/33 | 10,000 | 12,464,699 |
|--|--------|------------|

8 BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC. JULY 31, 2016

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

| Municipal Bonds Transferred to | Par | |
|---|---------------|----------------|
| | (000) | Value |
| Tender Option Bond Trusts (g) | | |
| Illinois 1.4% | | |
| Du Page & Will Counties Community School District No. 204, GO, School Building, Series A (NPFGC), 5.25%, 12/30/22 | \$ 8,650 | \$ 9,001,852 |
| Louisiana 2.3% | | |
| State of Louisiana, GO, Series A, 5.00%, 8/01/24 | 12,000 | 14,366,040 |
| Massachusetts 1.9% | | |
| Massachusetts Development Finance Agency, Refunding RB, Partners Healthcare, Series L, 5.00%, 7/01/31 | 10,175 | 11,985,630 |
| Minnesota 1.8% | | |
| State of Minnesota, GO, State Various Purposes, Series A, 4.00%, 8/01/29 | 10,525 | 11,610,431 |
| New York 9.3% | | |
| City of New York New York, GO, Refunding, Series E, 5.00%, 8/01/27 | 3,507 | 3,933,003 |
| City of New York New York, GO, Series I, 5.00%, 3/01/32 | 7,009 | 8,516,039 |
| City of New York New York Municipal Water Finance Authority, Refunding RB, Water & Sewer System, Series A: | | |
| 4.75%, 6/15/17 (a) | 1,508 | 1,562,801 |
| 4.75%, 6/15/30 | 6,492 | 6,727,919 |
| Metropolitan Transportation Authority, RB, Series B, 5.25%, 11/15/19 (a) | 4,001 | 4,598,935 |
| Port Authority of New York & New Jersey, ARB, Consolidated, 169th Series, AMT, 5.00%, 10/15/26 | 5,530 | 6,412,643 |
| Port Authority of New York & New Jersey, RB, 178th Series, AMT, 5.00%, 12/01/32 | 4,009 | 4,762,817 |
| Municipal Bonds Transferred to | Par | |
| | (000) | Value |
| Tender Option Bond Trusts (g) | | |
| New York (continued) | | |
| Sales Tax Asset Receivable Corp., Refunding RB, Fiscal 2015, Series A, 5.00%, 10/15/31 | \$ 5,010 | \$ 6,280,636 |
| State of New York Dormitory Authority, Refunding RB, Series E, 5.25%, 3/15/33 | 7,000 | 8,882,580 |
| State of New York Urban Development Corp., RB, Personal Income Tax, Series A-1, 5.00%, 3/15/32 | 5,501 | 6,649,633 |
| | | 58,327,006 |
| Total Municipal Bonds Transferred to | | |
| Tender Option Bond Trusts 18.7% | | 117,755,658 |
| Total Long-Term Investments | | |
| (Cost \$889,697,580) 154.5% | | 970,740,861 |
| Short-Term Securities | Shares | |
| BlackRock Liquidity Funds, MuniCash, Institutional Class, 0.26% (h)(i) | 9,082,048 | 9,082,048 |
| Total Short-Term Securities | | |
| (Cost \$9,082,048) 1.4% | | 9,082,048 |
| Total Investments(Cost \$898,779,628*) 155.9% | | 979,822,909 |
| Liabilities in Excess of Other Assets (0.2)% | | (1,227,422) |
| Liability for TOB Trust Certificates, Including Interest Expense and Fees Payable (10.0)% | | (63,172,394) |
| VMTP Shares, at Liquidation Value (45.7)% | | (287,100,000) |
| Net Assets Applicable to Common Shares 100.0% | | \$ 628,323,093 |

* As of July 31, 2016, gross unrealized appreciation and depreciation based on cost for federal income tax purposes were as follows:

| | |
|----------|----------------|
| Tax cost | \$ 837,302,705 |
|----------|----------------|

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| | | |
|-------------------------------|----|-------------|
| Gross unrealized appreciation | \$ | 81,088,290 |
| Gross unrealized depreciation | | (1,669,934) |
| Net unrealized appreciation | \$ | 79,418,356 |

Notes to Schedule of Investments

* Cost for federal income tax purposes.

(a) 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.

(b) 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.

(c) Variable rate security. Rate as of period end.

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

JULY 31, 2016

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Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

- (d) Non-income producing security.
- (e) Issuer filed for bankruptcy and/or is in default of interest payments.
- (f) When-issued security.
- (g) Represent bonds transferred to a TOB Trust in exchange of cash and residual certificates received by the Fund. These bonds serve as collateral in a secured borrowing.
- (h) Current yield as of period end.
- (i) During the period ended July 31, 2016, 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:

| Affiliate | Shares Held at April 30, 2016 | Net Activity | Shares Held at July 31, 2016 | Value at July 31, 2016 | Income |
|--|-------------------------------------|-----------------|------------------------------------|---------------------------|----------|
| BlackRock Liquidity Funds, MuniCash, Institutional Class | 12,303,103 | (3,221,055) | 9,082,048 | \$ 9,082,048 | \$ 3,650 |

Portfolio Abbreviations

| | |
|--------------|---|
| AGC | Assured Guarantee Corp. |
| AGM | Assured Guaranty Municipal Corp. |
| AMT | Alternative Minimum Tax (subject to) |
| ARB | Airport Revenue Bonds |
| BARB | Building Aid Revenue Bonds |
| BHAC | Berkshire Hathaway Assurance Corp. |
| COP | Certificates of Participation |
| EDA | Economic Development Authority |
| EDC | Economic Development Corp. |
| GARB | General Airport Revenue Bonds |
| GO | General Obligation Bonds |
| GTD | Guaranteed |
| IDA | Industrial Development Authority |
| ISD | Independent School District |
| LRB | Lease Revenue Bonds |
| M/F | Multi-Family |
| NPFGC | National Public Finance Guarantee Corp. |
| PSF | Permanent School Fund |
| RB | Revenue Bonds |

Derivative Financial Instruments Outstanding as of Period End

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Futures Contracts

| Contracts | | | | Notional Value | Unrealized Appreciation |
|--------------|----------------------------|----------------|----------------|----------------|-------------------------|
| Short | Issue | Expiration | Notional Value | (Depreciation) | |
| (92) | 5-Year U.S. Treasury Note | September 2016 | \$ 11,225,438 | \$ 5,405 | |
| (233) | 10-Year U.S. Treasury Note | September 2016 | \$ 30,999,922 | (123,180) | |
| (57) | Long U.S. Treasury Bond | September 2016 | \$ 9,942,937 | (270,703) | |
| Total | | | | \$ (388,478) | |

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BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

JULY 31, 2016

Schedule of Investments (continued)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

Fair Value Hierarchy as of Period End

Various inputs are used in determining the fair value of investments and derivative financial instruments. These inputs to valuation techniques are categorized into a fair value hierarchy consisting of three broad levels for financial reporting purposes as follows:

Level 1 unadjusted price quotations 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)

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 significant unobservable inputs used by the Global Valuation Committee in determining the price for Fair Valued Investments are typically categorized as Level 3.

Changes in valuation techniques may result in transfers into or out of an assigned level within the hierarchy. In accordance with the Fund's policy, transfers between different levels of the fair value hierarchy are deemed to have occurred as of the beginning of the reporting period. The categorization of a value determined for investments and derivative financial instruments is based on the pricing transparency of the investments and derivative financial instruments 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 derivative financial instruments, refer to the Fund's most recent financial statements as contained in its annual report.

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 | | \$ 970,740,861 | | \$ 970,740,861 |
| Short-Term Securities | \$ 9,082,048 | | | 9,082,048 |
| Total | \$ 9,082,048 | \$ 970,740,861 | | \$ 979,822,909 |
| Derivative Financial Instruments² | | | | |
| Assets: | | | | |
| Interest rate contracts | \$ 5,405 | | | \$ 5,405 |
| Liabilities: | | | | |
| Interest rate contracts | (393,883) | | | (393,883) |
| Total | \$ (388,478) | | | \$ (388,478) |

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

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

BLACKROCK MUNI INTERMEDIATE DURATION FUND, INC.

JULY 31, 2016

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Schedule of Investments (concluded)

BlackRock Muni Intermediate Duration Fund, Inc. (MUI)

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

| | Level 1 | Level 2 | Level 3 | Total |
|------------------------------------|------------|------------------|---------|------------------|
| Assets: | | | | |
| Cash | \$ 10,010 | | | \$ 10,010 |
| Cash pledged for futures contracts | 611,900 | | | 611,900 |
| Liabilities: | | | | |
| TOB Trust Certificates | | \$ (63,101,848) | | (63,101,848) |
| VMTP Shares | | (287,100,000) | | (287,100,000) |
| Total | \$ 621,910 | \$ (350,201,848) | | \$ (349,579,938) |

During the period ended July 31, 2016, 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 Muni Intermediate Duration Fund, Inc.

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

Date: September 21, 2016

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 Muni Intermediate Duration Fund, Inc.

Date: September 21, 2016

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

Date: September 21, 2016