

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

BLACKROCK MUNIVEST FUND INC
 Form N-Q
 January 29, 2007

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 811-5611

Name of Fund: BlackRock MuniVest Fund, Inc.

Fund Address: P.O. Box 9011
 Princeton, NJ 08543-9011

Name and address of agent for service: Robert C. Doll, Jr., Chief Executive
 Officer, BlackRock MuniVest Fund, Inc., 800 Scudders Mill Road,
 Plainsboro, NJ 08536. Mailing address: P.O. Box 9011, Princeton, NJ
 08543-9011

Registrant's telephone number, including area code: (609) 282-2800

Date of fiscal year end: 08/31/2007

Date of reporting period: 09/01/06 - 11/30/06

Item 1 - Schedule of Investments

BlackRock MuniVest Fund, Inc.
 Schedule of Investments as of November 30, 2006 (in Thousands)

| State | Face Amount | Municipal Bonds |
|----------------|-------------|---|
| Alabama - 4.5% | \$ 9,700 | Birmingham, Alabama, Special Care Facilities Financing Authority Bonds (Ascension Health Credit), Series C-2, 5% due 11/15/2036 |
| | 2,550 | Camden, Alabama, IDB, Exempt Facilities Revenue Bonds (Weyerhae A, 6.125% due 12/01/2024 |
| | 3,500 | Huntsville, Alabama, Health Care Authority Revenue Bonds, Serie 6/01/2031 |
| | 5,000 | Huntsville, Alabama, Health Care Authority Revenue Bonds, Serie 6/01/2032 |
| | 5,000 | Selma, Alabama, IDB, Environmental Improvement Revenue Refundin Paper Company Project), Series B, 5.50% due 5/01/2020 |
| Alaska - 1.3% | 7,405 | Anchorage, Alaska, Lease Revenue Bonds (Correctional Facility), (a) (i) |
| Arizona - 1.6% | 4,100 | Maricopa County, Arizona, IDA, Education Revenue Bonds (Arizona Project 1), Series A, 6.75% due 7/01/2029 |
| | 2,100 | Pima County, Arizona, IDA, Education Revenue Bonds (Arizona Cha Series E, 7.25% due 7/01/2031 |

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

| | | |
|--------------------|--------|--|
| | 500 | Pima County, Arizona, IDA, Education Revenue Bonds (Arizona Cha Series I, 6.10% due 7/01/2024 |
| | 1,000 | Pima County, Arizona, IDA, Education Revenue Bonds (Arizona Cha Series I, 6.30% due 7/01/2031 |
| | 1,565 | Pima County, Arizona, IDA, Education Revenue Refunding Bonds (A Project II), Series A, 6.75% due 7/01/2021 |
| ----- | | |
| California - 18.3% | 18,850 | California Health Facilities Financing Authority Revenue Bonds Series A, 5.25% due 4/01/2039 |
| | 1,360 | California State, GO, 5.50% due 4/01/2014 (a) |
| | 12,210 | California State, GO, 5.50% due 4/01/2030 |
| | 5,000 | California State Public Works Board, Lease Revenue Bonds (Depar Series C, 5.50% due 6/01/2022 |
| | 6,000 | California State Public Works Board, Lease Revenue Bonds (Depar Series C, 5.50% due 6/01/2023 |
| ----- | | |

Portfolio Abbreviations

To simplify the listings of BlackRock MuniVest Fund, Inc.'s portfolio holdings in the Schedule of Investments, we have abbreviated the names of many of the securities according to the list below.

| | |
|---------|--|
| AMT | Alternative Minimum Tax (subject to) |
| DRIVERS | Derivative Inverse Tax-Exempt Receipts |
| EDA | Economic Development Authority |
| GO | General Obligation Bonds |
| HDA | Housing Development Authority |
| HFA | Housing Finance Agency |
| IDA | Industrial Development Authority |
| IDB | Industrial Development Board |
| IDR | Industrial Development Revenue Bonds |
| M/F | Multi-Family |
| PCR | Pollution Control Revenue Bonds |
| RIB | Residual Interest Bonds |
| S/F | Single-Family |
| VRDN | Variable Rate Demand Notes |

BlackRock MuniVest Fund, Inc.

Schedule of Investments as of November 30, 2006

(in Thousands)

| State | Face Amount | Municipal Bonds |
|-------|-------------|--|
| ----- | | |
| | \$ 11,075 | California State Public Works Board, Lease Revenue Bonds (Depar - Coalinga State Hospital), Series A, 5.125% due 6/01/2029 |
| | 11,250 | California State, Various Purpose, GO, 5.50% due 11/01/2033 |
| | 5,240 | California Statewide Communities Development Authority, Health (Memorial Health Services), Series A, 6% due 10/01/2023 |
| | 1,250 | Chula Vista, California, IDR (San Diego Gas and Electric Compan due 12/01/2027 |
| | 10,725 | Golden State Tobacco Securitization Corporation of California, Revenue Bonds, Series A-3, 7.875% due 6/01/2042 |
| | 3,750 | Golden State Tobacco Securitization Corporation of California, Revenue Bonds, Series A-4, 7.80% due 6/01/2042 |
| | 1,425 | Golden State Tobacco Securitization Corporation of California, |

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

| | | |
|--------------------|--------|--|
| | 13,900 | Revenue Bonds, Series A-5, 7.875% due 6/01/2042 Golden State Tobacco Securitization Corporation of California, Revenue Bonds, Series B, 5.375% due 6/01/2010 (a) |
| Colorado - 0.6% | 625 | Colorado HFA, Revenue Refunding Bonds (S/F Program), AMT, Senior due 5/01/2028 |
| | 225 | Colorado HFA, Revenue Refunding Bonds (S/F Program), AMT, Senior due 4/01/2031 |
| | 3,000 | Colorado Health Facilities Authority Revenue Bonds (Lutheran Me A, 5.25% due 6/01/2034 |
| Connecticut - 0.5% | 2,810 | Mohegan Tribe Indians Gaming Authority, Connecticut, Public Imp Refunding Bonds (Priority Distribution), 6.25% due 1/01/2031 |
| Florida - 3.9% | 6,000 | Highlands County, Florida, Health Facilities Authority, Hospital (Adventist Health System), Series C, 5.25% due 11/15/2036 |
| | 6,000 | Highlands County, Florida, Health Facilities Authority, Hospital (Adventist Health System), Series D, 5.375% due 11/15/2013 (a) |
| | 10,320 | Orange County, Florida, Health Facilities Authority, Hospital R (Adventist Health System), 5.625% due 11/15/2032 |
| Georgia - 3.2% | 4,600 | Georgia Municipal Electric Authority, Power Revenue Refunding B due 1/01/2018 |
| | 250 | Georgia Municipal Electric Authority, Power Revenue Refunding B due 1/01/2018 (e) |
| | 250 | Georgia Municipal Electric Authority, Power Revenue Refunding B due 1/01/2010 (e) |
| | 4,390 | Milledgeville-Baldwin County, Georgia, Development Authority Re College and State University Foundation), 5.50% due 9/01/2024 |

BlackRock MuniVest Fund, Inc.

Schedule of Investments as of November 30, 2006

(in Thousands)

| State | Face Amount | Municipal Bonds |
|------------------|----------------|--|
| | \$ 3,500 | Milledgeville-Baldwin County, Georgia, Development Authority Re College and State University Foundation), 5.625% due 9/01/2030 |
| | 4,785 | Monroe County, Georgia, Development Authority, PCR, Refunding (C Corporation-Scherer), Series A, 6.80% due 1/01/2011 |
| Idaho - 0.1% | 390 | Idaho Housing Agency, S/F Mortgage Revenue Refunding Bonds, AM due 1/01/2027 |
| Illinois - 12.3% | 5,000 | Chicago, Illinois, O'Hare International Airport, General Airpor Bonds, Third Lien, AMT, Series A, 5.75% due 1/01/2019 (c) |
| | 11,200 | Chicago, Illinois, O'Hare International Airport Revenue Bonds, Series B-2, 6% due 1/01/2029 (n) |
| | 80 | Chicago, Illinois, S/F Mortgage Revenue Bonds, AMT, Series C, 7 |
| | 10,000 | Hodgkins, Illinois, Environmental Improvement Revenue Bonds (Me Management LLC Project), AMT, 6% due 11/01/2023 |
| | 2,140 | Illinois Development Finance Authority Revenue Bonds (Community Providers Facilities), Series A, 6.50% due 7/01/2022 |
| | 1,365 | Illinois Development Finance Authority, Revenue Refunding Bonds Rehabilitation Providers Facilities), Series A, 6% due 7/01/201 |
| | 455 | Illinois HDA, Revenue Refunding Bonds (M/F Program), Series 5, |

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

| | |
|--------|--|
| 13 | Kane and De Kalb Counties, Illinois, Community Unit School District DRIVERS, Series 283, 7.545% due 2/01/2018 (f)(m) |
| 5,000 | McLean and Woodford Counties, Illinois, Community Unit, School GO, Refunding, 6.25% due 12/01/2014 (i) |
| 4,000 | McLean and Woodford Counties, Illinois, Community Unit, School GO, Refunding, 6.375% due 12/01/2016 (i) |
| 18,550 | Metropolitan Pier and Exposition Authority, Illinois, Dedicated Refunding Bonds (McCormick Place Expansion Project), Series B, (c) |
| 3,500 | Regional Transportation Authority, Illinois, Revenue Bonds, Series 11/01/2020 (h) |
| 4,000 | Regional Transportation Authority, Illinois, Revenue Bonds, Series 6/01/2020 (f) |
| 1,475 | Will County, Illinois, School District Number 122 (New Lenox Elementary, 6.50% due 11/01/2010 (a)(i) |
| 505 | Will County, Illinois, School District Number 122 (New Lenox Elementary, 6.50% due 11/01/2013 (i) |
| 395 | Will County, Illinois, School District Number 122 (New Lenox Elementary, 6.50% due 11/01/2015 (i) |

BlackRock MuniVest Fund, Inc.

Schedule of Investments as of November 30, 2006

(in Thousands)

| State | Face Amount | Municipal Bonds |
|------------------|-------------|--|
| ----- | | |
| Indiana - 10.3% | \$ 5,000 | Delaware County, Indiana, Hospital Authority, Hospital Revenue System Obligated Group), 5.125% due 8/01/2029 |
| | 16,350 | Indiana Health and Educational Facilities Financing Authority, (Clarian Health Obligation), Series A, 5.25% due 2/15/2040 |
| | 8,650 | Indiana Health and Educational Facility Financing Authority, Revenue (Ascension Health Credit), Series B-5, 5% due 11/15/2036 |
| | 4,290 | Indiana State HFA, S/F Mortgage Revenue Refunding Bonds, Series 1/01/2017 (j) |
| | 8,195 | Indiana Transportation Finance Authority, Highway Revenue Bonds 12/01/2016 |
| | 15,335 | Indianapolis, Indiana, Local Public Improvement Bond Bank, Revenue Series D, 6.75% due 2/01/2014 |
| ----- | | |
| Kansas - 0.6% | 3,805 | Sedgwick and Shawnee Counties, Kansas, S/F Mortgage Revenue Bonds Securities Program), AMT, Series A-4, 5.95% due 12/01/2033 (d) |
| ----- | | |
| Kentucky - 2.5% | 14,350 | Louisville and Jefferson County, Kentucky, Metropolitan Government Revenue Refunding Bonds (Norton Healthcare, Inc.), 5.25% due 10/01/2030 (h) |
| ----- | | |
| Louisiana - 5.1% | 10,575 | Louisiana Local Government, Environmental Facilities, Community Revenue Bonds (Capital Projects and Equipment Acquisition), Series 7/01/2030 (h) |
| | 6,220 | Louisiana Public Facilities Authority, Hospital Revenue Bonds (Missionaries of Our Lady Health System, Inc.), Series A, 5% due 11/01/2030 (h) |
| | 11,660 | Louisiana Public Facilities Authority, Hospital Revenue Bonds (Missionaries of Our Lady Health System, Inc.), Series A, 5.25% due 11/01/2030 (h) |
| ----- | | |
| Maine - 0.3% | 775 | Portland, Maine, Housing Development Corporation, Senior Living (Avesta Housing Development Corporation Project), Series A, 5.75% due 11/01/2030 (h) |
| | 1,190 | Portland, Maine, Housing Development Corporation, Senior Living (Avesta Housing Development Corporation Project), Series A, 5.75% due 11/01/2030 (h) |

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

(Avesta Housing Development Corporation Project), Series A, 6%

| | | |
|----------------------|--------|---|
| Massachusetts - 7.4% | 2,035 | Boston, Massachusetts, Water and Sewer Commission Revenue Bonds (e) |
| | 3,010 | Massachusetts Bay Transportation Authority, Revenue Refunding Bonds (Transportation System), Series A, 7% due 3/01/2019 |
| | 30,000 | Massachusetts State Water Resource Authority Revenue Bonds, Series A, 7/15/2019 |
| | 3,480 | Massachusetts State Water Resource Authority, Revenue Refunding Bonds due 8/01/2010 (a) (f) |

BlackRock MuniVest Fund, Inc.

Schedule of Investments as of November 30, 2006

(in Thousands)

| State | Face Amount | Municipal Bonds |
|--------------------|-------------|--|
| Michigan - 9.4% | \$ 7,695 | Delta County, Michigan, Economic Development Corporation, Environmental Revenue Refunding Bonds (Mead Westvaco-Escanaba), Series A, 6.25% due 11/15/2025 |
| | 3,715 | Macomb County, Michigan, Hospital Finance Authority, Hospital Revenue Refunding Bonds (Clemens General Hospital), Series B, 5.75% due 11/15/2025 |
| | 4,250 | Macomb County, Michigan, Hospital Finance Authority, Hospital Revenue Refunding Bonds (Clemens General Hospital), Series B, 5.875% due 11/15/2034 |
| | 1,900 | Michigan State Hospital Finance Authority, Hospital Revenue Refunding Bonds (Crittenton Hospital), Series A, 5.625% due 3/01/2027 |
| | 5,900 | Michigan State Hospital Finance Authority, Revenue Bonds (Mid-Michigan Group), Series A, 5% due 4/15/2036 |
| | 10,000 | Michigan State Hospital Finance Authority, Revenue Bonds (Trinity Group), Series A, 5% due 12/01/2026 |
| | 6,500 | Michigan State Hospital Finance Authority, Revenue Bonds (Trinity Group), Series A, 5% due 12/01/2031 |
| | 3,000 | Michigan State Hospital Finance Authority, Revenue Refunding Bonds (System), Series A, 5.25% due 11/15/2032 |
| | 10,600 | Michigan State Hospital Finance Authority, Revenue Refunding Bonds (System), Series A, 5% due 11/15/2038 |
| | 1,000 | Michigan State Hospital Finance Authority, Revenue Refunding Bonds (System), Series A, 6.70% due 1/01/2026 |
| Minnesota - 1.5% | 7,235 | Minneapolis, Minnesota, Health Care System Revenue Bonds (Allina Series A, 5.75% due 11/15/2032 |
| | 1,405 | Saint Cloud, Minnesota, Health Care Revenue Refunding Bonds (Saint Cloud Obligation Group), Series A, 6.25% due 5/01/2017 (i) |
| Mississippi - 6.0% | 9,160 | Lowndes County, Mississippi, Solid Waste Disposal and PCR, Refunding Bonds (Company Project), Series A, 6.80% due 4/01/2022 |
| | 4,500 | Lowndes County, Mississippi, Solid Waste Disposal and PCR, Refunding Bonds (Company Project), Series B, 6.70% due 4/01/2022 |
| | 20,705 | Mississippi Business Finance Corporation, Mississippi, PCR, Refunding Bonds (Resources Inc. Project), 5.875% due 4/01/2022 |
| Missouri - 0.5% | 2,600 | Missouri State Development Finance Board, Infrastructure Facility Revenue Refunding Bonds (Branson), Series A, 5.50% due 12/01/2032 |
| | 240 | Missouri State Housing Development Commission, S/F Mortgage Revenue Refunding Bonds (Loan), AMT, Series A, 7.50% due 3/01/2031 (d) |

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

Montana - 1.0% 6,000 Forsyth, Montana, PCR, Refunding (Portland General Electric Com
due 5/01/2033

BlackRock MuniVest Fund, Inc.
Schedule of Investments as of November 30, 2006 (in Thousands)

| State | Face Amount | Municipal Bonds |
|----------------------|-------------|---|
| Nebraska - 0.1% | \$ 415 | Nebraska Investment Finance Authority, S/F Housing Revenue Bonds 6.30% due 9/01/2028 (d) (k) |
| Nevada - 0.8% | 3,475 | Nevada Housing Division, Multi-Unit Housing Revenue Bonds (Arvi AMT, 6.60% due 10/01/2023 (b) |
| | 1,175 | Nevada Housing Division Revenue Bonds (Multi-Unit Housing), AMT 10/01/2017 (b) |
| | 15 | Nevada Housing Division Revenue Bonds (S/F Program), AMT, Serie 10/01/2012 (j) |
| New Hampshire - 0.7% | 1,275 | New Hampshire Health and Education Facilities Authority, Hospit (Catholic Medical Center), 5% due 7/01/2032 |
| | 2,675 | New Hampshire Health and Education Facilities Authority, Revenue (Elliot Hospital), Series B, 5.60% due 10/01/2022 |
| New Jersey - 5.3% | 9,080 | New Jersey EDA, Cigarette Tax Revenue Bonds, 5.50% due 6/15/202 |
| | 2,885 | New Jersey EDA, Cigarette Tax Revenue Bonds, 5.75% due 6/15/202 |
| | 2,855 | New Jersey EDA, Cigarette Tax Revenue Bonds, 5.50% due 6/15/203 |
| | 6,695 | New Jersey EDA, Cigarette Tax Revenue Bonds, 5.75% due 6/15/203 |
| | 8,480 | Tobacco Settlement Financing Corporation of New Jersey, Asset-B 7% due 6/01/2041 |
| New Mexico - 0.5% | 3,300 | Farmington, New Mexico, PCR, Refunding (Public Service Company Juan Project), Series A, 5.80% due 4/01/2022 |
| New York - 2.3% | 400 | Metropolitan Transportation Authority, New York, Dedicated Tax Refunding Bonds, VRDN, Series B, 3.60% due 11/01/2022 (i) (l) |
| | 1,125 | New York City, New York, City Transitional Finance Authority Re Series 283, 8.72% due 11/15/2015 (m) |
| | 965 | New York City, New York, GO, Refunding, Series A, 6.375% due 5/ |
| | 670 | New York City, New York, GO, Series F, 5.25% due 1/15/2013 (a) |
| | 6,480 | New York City, New York, GO, Series F, 5.25% due 1/15/2033 |
| | 360 | New York City, New York, GO, Series I, 6.25% due 4/15/2007 (a) (|
| | 20 | New York City, New York, GO, Series I, 6.25% due 4/15/2017 (n) |
| | 2,000 | New York City, New York, GO, Sub-Series I-1, 5% due 4/01/2025 |
| | 400 | New York State Local Government Assistance Corporation, Revenue Sub-Lien, VRDN, Series 4V, 3.40% due 4/01/2022 (i) (l) |
| | 1,200 | Triborough Bridge and Tunnel Authority, New York, General Purpo Bonds, VRDN, Series C, 3.42% due 1/01/2032 (h) (l) |

BlackRock MuniVest Fund, Inc.
Schedule of Investments as of November 30, 2006 (in Thousands)

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

| State | Face Amount | Municipal Bonds |
|-----------------------|-------------|---|
| North Carolina - 0.7% | \$ 4,105 | Gaston County, North Carolina, Industrial Facilities and Pollution Authority, Revenue Bonds (National Gypsum Company Project), AMT |
| Ohio - 0.2% | 1,000 | Richland County, Ohio, Hospital Facilities Revenue Refunding Bonds (System), 5.25% due 11/15/2036 |
| Pennsylvania - 4.0% | 2,440 | Pennsylvania State Higher Education Assistance Agency Revenue Bonds Acquisition, 6.125% due 12/15/2010 (a) (c) |
| | 6,250 | Pennsylvania State Higher Educational Facilities Authority Revenue Bonds of Pennsylvania Medical Center Health System), Series A, 6% due 11/01/2031 |
| | 1,000 | Philadelphia, Pennsylvania, Authority for Industrial Development Revenue Bonds (Arbor House Inc. Project), Series E, 6.10% due 7/01/2031 |
| | 1,355 | Philadelphia, Pennsylvania, Authority for Industrial Development Revenue Bonds (Rieder House Project), Series A, 6.10% due 7/01/2031 |
| | 9,280 | Sayre, Pennsylvania, Health Care Facilities Authority, Revenue Bonds (Healthcare System), Series B, 7.125% due 12/01/2031 |
| | 1,750 | Sayre, Pennsylvania, Health Care Facilities Authority, Revenue Bonds (Guthrie Healthcare System), Series A, 6.25% due 12/01/2018 |
| South Carolina - 2.1% | 1,000 | Georgetown County, South Carolina, Environmental Improvement Revenue Bonds (International Paper Company Project), AMT, Series A, 5.55% due 11/01/2032 |
| | 3,500 | Lexington County, South Carolina, Health Services District Inc. Revenue Refunding and Improvement Bonds, 5.50% due 11/01/2032 |
| | 2,450 | Medical University Hospital Authority, South Carolina, Hospital Revenue Refunding Bonds, 6.50% due 8/15/2012 (a) |
| | 5,000 | Richland County, South Carolina, Environmental Improvement Revenue Bonds (International Paper), AMT, 6.10% due 4/01/2023 |
| Tennessee - 1.5% | 2,000 | McMinn County, Tennessee, IDB, Solid Waste Revenue Bonds (Recycling Newsprint), AMT, 7.40% due 12/01/2022 |
| | 2,380 | Shelby County, Tennessee, Health, Educational and Housing Facilities Revenue Refunding Bonds (Methodist Healthcare), 6.50% due 9/01/2033 |
| | 4,120 | Shelby County, Tennessee, Health, Educational and Housing Facilities Revenue Refunding Bonds (Methodist Healthcare), 6.50% due 9/01/2033 |
| Texas - 13.9% | 6,000 | Austin, Texas, Convention Center Revenue Bonds (Convention Entertainment Center), Series A, 6.70% due 1/01/2011 (a) |
| | 1,290 | Austin, Texas, Convention Center Revenue Bonds (Convention Entertainment Center), Series A, 6.70% due 1/01/2011 (a) |
| | 3,055 | Brazos River Authority, Texas, PCR, Refunding (Texas Utility Company), 7.70% due 4/01/2033 |

BlackRock MuniVest Fund, Inc.

Schedule of Investments as of November 30, 2006

(in Thousands)

| State | Face Amount | Municipal Bonds |
|-------|-------------|--|
| | \$ 11,460 | Brazos River, Texas, Harbor Navigation District, Brazoria County |

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

| | | |
|-------------------|--------|--|
| | | Revenue Refunding Bonds (Dow Chemical Company Project), AMT, Series A, 5/15/2033 |
| | 3,000 | Gregg County, Texas, Health Facilities Development Corporation, Revenue Refunding Bonds (Good Shepherd Medical Center Project), 6.875% due 10/01/2026 |
| | 10,250 | Guadalupe-Blanco River Authority, Texas, Sewage and Solid Waste Revenue Bonds (E. I. du Pont de Nemours and Company Project), AMT, Series A, 4/01/2026 |
| | 6,000 | Gulf Coast, Texas, Waste Disposal Authority, Revenue Refunding Bonds (Paper Company), AMT, Series A, 6.10% due 8/01/2024 |
| | 5,500 | Harris County-Houston Sports Authority, Texas, Revenue Refunding Bonds, Series G, 5.75% due 11/15/2020 (c) |
| | 1,795 | Houston, Texas, Industrial Development Corporation Revenue Bonds, 6.375% due 1/01/2023 |
| | 1,875 | Mansfield, Texas, Independent School District, GO, Refunding, Series A (a) |
| | 155 | Mansfield, Texas, Independent School District, GO, Refunding, Series B |
| | 9,355 | Matagorda County, Texas, Navigation District Number 1, Revenue Refunding Bonds (Centerpoint Energy Project), 5.60% due 3/01/2027 |
| | 5,225 | Midway, Texas, Independent School District, GO, Refunding, Series A, 6.125% due 11/01/2030 |
| | 2,700 | Port Corpus Christi, Texas, Revenue Refunding Bonds (Celanese Project), 6.45% due 11/01/2030 |
| | 5,000 | Red River Authority, Texas, PCR, Refunding (Celanese Project), Series A, due 11/01/2030 |
| | 7,280 | Sabine River Authority, Texas, PCR, Refunding (TXU Electric Company Energy Company LLC), Series C, 5.20% due 5/01/2028 |
| ----- | | |
| Vermont - 0.2% | 1,000 | Vermont Educational and Health Buildings Financing Agency, Development Revenue Bonds (Howard Center for Human Services), Series A, 6/15/2022 |
| ----- | | |
| Virginia - 0.2% | 1,425 | Chesterfield County, Virginia, IDA, PCR (Virginia Electric and Power Company), Series A, 5.875% due 6/01/2017 |
| ----- | | |
| Washington - 3.4% | 3 | Energy Northwest, Washington, Electric Revenue Refunding Bonds, Series A, 8.042% due 7/01/2018 (h) (m) |
| | 2,370 | Seattle, Washington, Housing Authority Revenue Bonds (Replacement), 6.125% due 12/01/2032 |
| | 408 | Washington State, GO, Trust Receipts, Class R, Series 6, 7.972% due 11/01/2030 |
| | 14,320 | Washington State Public Power Supply System, Revenue Refunding Bonds (Number 1), Series B, 7.125% due 7/01/2016 |
| ----- | | |

BlackRock MuniVest Fund, Inc.

Schedule of Investments as of November 30, 2006

(in Thousands)

| State | Face Amount | Municipal Bonds |
|------------------|-------------|---|
| Wisconsin - 2.4% | \$ 3,960 | Badger Tobacco Asset Securitization Corporation, Wisconsin, Assured Income Bonds, 6.125% due 6/01/2027 |
| | 1,765 | Milwaukee, Wisconsin, Revenue Bonds (Air Cargo), AMT, 6.50% due 11/01/2026 |
| | 5,000 | Wisconsin State Health and Educational Facilities Authority, Missouri (Hudson Memorial Hospital), 5.70% due 1/15/2029 (j) |
| | 3,040 | Wisconsin State Health and Educational Facilities Authority Revenue Bonds (Synergyhealth Inc.), 6% due 11/15/2032 |
| ----- | | |

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

| | | |
|---|--------|--|
| Puerto Rico - 0.5% | 2,750 | Puerto Rico Commonwealth, Public Improvement, GO, Series A, 5.2 |
| U.S. Virgin Islands - 1.5% | 8,000 | Virgin Islands Government Refinery Facilities, Revenue Refunding Project), AMT, 6.50% due 7/01/2021 |
| Total Municipal Bonds (Cost - \$748,833) - 131.2% | | |
| Municipal Bonds Held in Trust (q) | | |
| Illinois - 7.4% | 14,000 | Chicago, Illinois, O'Hare International Airport, General Airport Bonds, Third Lien, AMT, Series A, 5.75% due 1/01/2020 (c) |
| | 17,080 | Chicago, Illinois, O'Hare International Airport Revenue Bonds, Series B-2, 6% due 1/01/2027 (c) |
| | | Kane and De Kalb Counties, Illinois, Community Unit School District GO (f): |
| | 2,975 | 5.75% due 2/01/2018 |
| | 2,710 | 5.75% due 2/01/2019 |
| | 4,780 | 5.75% due 2/01/2021 |
| Massachusetts - 3.5% | 20,000 | Massachusetts State School Building Authority, Dedicated Sales Series A, 5% due 8/15/2030 (i) |
| New York - 7.1% | 13,500 | New York City, New York, City Transitional Finance Authority Revenue Tax Secured, Series B, 6.25% due 11/15/2018 |
| | 26,750 | New York State Dormitory Authority, State University Educational Refunding Bonds, Series 1989, 6% due 5/15/2010 (a) (c) |
| Oregon - 1.3% | 7,610 | Portland, Oregon, Sewer System Revenue Bonds, Series A, 5.75% due |
| Texas - 6.3% | 20,970 | Harris County, Texas, Health Facilities Development Corporation Bonds (School Health Care System), Series B, 5.75% due 7/01/2020 |
| | 12,500 | San Antonio, Texas, Electric and Gas Revenue Bonds, Series A, 5.75% due |
| Washington - 8.6% | | Energy Northwest, Washington, Electric Revenue Refunding Bonds (Station): |
| | 11,660 | Series A, 5.75% due 7/01/2018 (c) |
| | 7,015 | Series B, 6% due 7/01/2018 (h) |
| | 14,700 | Energy Northwest, Washington, Electric Revenue Refunding Bonds Series B, 6% due 7/01/2017 (b) |
| | 15,385 | Washington State, Various Purpose, GO, Series B, 6% due 1/01/2020 |
| Total Municipal Bonds Held in Trust (Cost -\$200,240) - 34.2% | | |

BlackRock MuniVest Fund, Inc.

Schedule of Investments as of November 30, 2006

(in Thousands)

| Shares Held | Short-Term Securities |
|---|--|
| 7,000 | Merrill Lynch Institutional Tax-Exempt Fund, 3.38% (o) (p) |
| Total Short-Term Securities (Cost - \$7,000) - 1.1% | |
| Total Investments (Cost - \$956,073*) - 166.5% | |
| Other Assets Less Liabilities - 3.4% | |

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

Liability for Trust Certificates, Including Interest Expense Pa
Preferred Stock, at Redemption Value - (53.8%)

Net Assets Applicable to Common Stock - 100.0%

* The cost and unrealized appreciation (depreciation) of investments as of November 30, 2006, as computed for federal income tax purposes, were as follows:

| | |
|-------------------------------|------------|
| Aggregate cost | \$ 863,367 |
| | ===== |
| Gross unrealized appreciation | \$ 72,334 |
| Gross unrealized depreciation | (186) |
| | ----- |
| Net unrealized appreciation | \$ 72,148 |
| | ===== |

- (a) Prerefunded.
- (b) FNMA Collateralized.
- (c) MBIA Insured.
- (d) FNMA/GNMA Collateralized.
- (e) Escrowed to maturity.
- (f) FGIC Insured.
- (g) Radian Insured.
- (h) AMBAC Insured.
- (i) FSA Insured.
- (j) FHA Insured.
- (k) FHLMC Collateralized.
- (l) Security may have a maturity of more than one year at time of issuance, but has variable rate and demand features that qualify it as a short-term security. The rate disclosed is that currently in effect. This rate changes periodically based upon prevailing market rates.
- (m) The rate disclosed is that currently in effect. This rate changes periodically and inversely based upon prevailing market rates.
- (n) XL Capital Insured.

BlackRock MuniVest Fund, Inc.

Schedule of Investments as of November 30, 2006

(in Thousands)

- (o) Investments in companies considered to be an affiliate of the Fund, for purposes of Section 2(a)(3) of the Investment Company Act of 1940, were as follows:

| Affiliate | Net Activity | Dividend Income |
|--|-----------------|--------------------|
| Merrill Lynch Institutional Tax-Exempt Fund | 6,578 | \$ 111 |

- (p) Represents the current yield as of November 30, 2006.
- (q) Securities represent underlying bonds transferred to a separate securitization trust established in a tender option bond transaction in which the Fund may have acquired the residual interest certificates. These securities serve as collateral in a financing transaction.
- o Forward interest rate swaps outstanding as of November 30, 2006 were as follows:

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

| | Notional Amount | Unrealized Depreciation |
|---|--------------------|----------------------------|
| Pay a fixed rate of 3.901% and receive a floating rate based on 1-week Bond Market Association rate | | |
| Broker, JPMorgan Chase Expires December 2016 | \$ 17,250 | \$ (475) |
| Pay a fixed rate of 3.722% and receive a floating rate based on 1-week Bond Market Association rate | | |
| Broker, JPMorgan Chase Expires January 2017 | \$ 25,000 | 25,000 |
| Pay a fixed rate of 3.636% and receive a floating rate based on 1-week Bond Market Association rate | | |
| Broker, JPMorgan Chase Expires February 2017 | \$ 25,000 | 25,000 |
| Pay a fixed rate of 4.158% and receive a floating rate based on 1-week Bond Market Association rate | | |
| Broker, JPMorgan Chase Expires December 2026 | \$ 25,000 | 25,000 |
| Total | | \$ (2,153) ===== |

Item 2 - Controls and Procedures

2(a) - The Registrant's principal executive and principal financial officers have evaluated the Registrant's disclosure controls and procedures, including internal control over financial reporting, within 90 days of this filing. Such principal officers have concluded that as of January 23, 2007 the Registrant's disclosure controls and procedures were effective in design and operation to reasonably ensure that information required to be disclosed by the Registrant in this Form N-Q was recorded, processed, summarized, and reported within the required time periods, and were sufficient to form the basis of the certifications required by Rule 30a-2 of the Investment Company Act of 1940, as amended. Prior to reaching that conclusion, such principal officers had become aware of matters relating to the Registrant's participation in certain inverse floater structures that necessitated adjustments to financial information included in Item 1 of this filing. As a result, management of the Registrant had reevaluated certain disclosure controls and procedures determined not to be effective, as discussed more fully below.

Management of the Registrant is responsible for establishing and maintaining effective internal control over financial reporting. In fulfilling this responsibility, estimates and judgments by management are required to assess the expected benefits and related costs of controls. The Registrant's internal control over financial reporting is a process

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles. Such internal control includes policies and procedures that provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of a registrant's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

A control deficiency exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect misstatements on a timely basis. A significant deficiency is a control deficiency, or combination of control deficiencies, that adversely affects the Registrant's ability to initiate, authorize, record, process or report financial data reliably in accordance with generally accepted accounting principles such that there is more than a remote likelihood that a misstatement of the Registrant's annual or interim financial statements that is more than inconsequential will not be prevented or detected. A material weakness is a significant deficiency, or combination of significant deficiencies, that results in more than a remote likelihood that a material misstatement of the annual or interim financial statements will not be prevented or detected.

The Registrant identified the following control deficiency, that was determined to be a material weakness, as defined above, in the Registrant's internal control over financial reporting at October 31, 2006. The Registrant's controls related to the review and analysis of relevant terms and conditions of transfers of certain assets pertaining to inverse floater structures were not operating effectively to appropriately determine whether the transfers of assets qualified for

sale accounting under the provisions of Statement of Financial Accounting Standards No. 140, "Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities" ("SFAS 140"). As a result, these controls did not detect that certain transfers were not appropriately recorded as borrowings. Accordingly, the Registrant's schedule of investments as of and for the period ended October 31, 2006, were restated to appropriately reflect transfers of such securities as secured borrowings. These adjustments had no impact on net assets, net asset value per share or total return.

Subsequent to October 31, 2006, but prior to the evaluation of the design and operation of the Registrant's disclosure controls and procedures at January 23, 2007, the Registrant's disclosure controls and procedures were modified to enhance the review and analysis of the relevant terms and conditions of transfers of securities in connection with inverse floater structures in light of SFAS 140.

- 2(b) - There have been no changes in the registrant's internal control over financial reporting (as defined in Rule 30a-3(d) under the Act (17 CFR 270.30a-3(d)) that occurred during the last fiscal quarter of the period covered by this report that has materially affected, or are reasonably likely to materially affect, the registrant's internal control over

Edgar Filing: BLACKROCK MUNIVEST FUND INC - Form N-Q

financial reporting. However, as discussed above, subsequent to October 31, 2006, the Registrant has enhanced controls related to the application of SFAS 140.

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 MuniVest Fund, Inc.

By: /s/ Robert C. Doll, Jr.

Robert C. Doll, Jr.
Chief Executive Officer
BlackRock MuniVest Fund, Inc.

Date: January 23, 2007

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/ Robert C. Doll, Jr.

Robert C. Doll, Jr.
Chief Executive Officer
BlackRock MuniVest Fund, Inc.

Date: January 23, 2007

By: /s/ Donald C. Burke

Donald C. Burke
Chief Financial Officer
BlackRock MuniVest Fund, Inc.

Date: January 23, 2007