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

Series E, 7.25% due 7/01/2031

	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 Compardue 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,

	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%	625 225	Colorado HFA, Revenue Refunding Bonds (S/F Program), AMT, Senio due 5/01/2028 Colorado HFA, Revenue Refunding Bonds (S/F Program), AMT, Senio
	3,000	due $4/01/2031$ 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, Hospita (Adventist Health System), Series C, 5.25% due 11/15/2036
	6,000	Highlands County, Florida, Health Facilities Authority, Hospita (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
	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 4,785	Milledgeville-Baldwin County, Georgia, Development Authority Re College and State University Foundation), 5.625% due 9/01/2030 Monroe County, Georgia, Development Authority, PCR, Refunding (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 11,200	Chicago, Illinois, O'Hare International Airport, General Airport Bonds, Third Lien, AMT, Series A, 5.75% due 1/01/2019 (c) Chicago, Illinois, O'Hare International Airport Revenue Bonds,
	80 10,000	Series B-2, 6% due 1/01/2029 (n) Chicago, Illinois, S/F Mortgage Revenue Bonds, AMT, Series C, 7 Hodgkins, Illinois, Environmental Improvement Revenue Bonds (Me
	2,140	Management LLC Project), AMT, 6% due 11/01/2023 Illinois Development Finance Authority Revenue Bonds (Community Providers Facilities), Series A, 6.50% due 7/01/2022
	1,365 455	Illinois Development Finance Authority, Revenue Refunding Bonds Rehabilitation Providers Facilities), Series A, 6% due 7/01/201 Illinois HDA, Revenue Refunding Bonds (M/F Program), Series 5,

13	Kane and De Kalb Counties, Illinois, Community Unit School Dist 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, Ser 11/01/2020 (h)					
4,000	Regional Transportation Authority, Illinois, Revenue Bonds, Ser 6/01/2020 (f)					
1,475	Will County, Illinois, School District Number 122 (New Lenox El A, 6.50% due 11/01/2010 (a)(i)					
505	Will County, Illinois, School District Number 122 (New Lenox El A, 6.50% due 11/01/2013 (i)					
395	Will County, Illinois, School District Number 122 (New Lenox El A, 6.50% due 11/01/2015 (i)					

State	Face Amount	Municipal Bonds
Indiana - 10.3%	\$ 5,000 16,350 8,650 4,290 8,195 15,335	Delaware County, Indiana, Hospital Authority, Hospital Revenue System Obligated Group), 5.125% due 8/01/2029 Indiana Health and Educational Facilities Financing Authority, (Clarian Health Obligation), Series A, 5.25% due 2/15/2040 Indiana Health and Educational Facility Financing Authority, Re (Ascension Health Credit), Series B-5, 5% due 11/15/2036 Indiana State HFA, S/F Mortgage Revenue Refunding Bonds, Series 1/01/2017 (j) Indiana Transportation Finance Authority, Highway Revenue Bonds 12/01/2016 Indianapolis, Indiana, Local Public Improvement Bond Bank, Reve Series D, 6.75% due 2/01/2014
Kansas - 0.6%	3 , 805	Sedgwick and Shawnee Counties, Kansas, S/F Mortgage Revenue Bon Securities Program), AMT, Series A-4, 5.95% due 12/01/2033 (d)
Kentucky - 2.5%	14,350	Louisville and Jefferson County, Kentucky, Metropolitan Governm Revenue Refunding Bonds (Norton Healthcare, Inc.), 5.25% due 10
Louisiana - 5.1%	10,575 6,220 11,660	Louisiana Local Government, Environmental Facilities, Community Revenue Bonds (Capital Projects and Equipment Acquisition), Ser 7/01/2030 (h) Louisiana Public Facilities Authority, Hospital Revenue Bonds (Missionaries of Our Lady Health System, Inc.), Series A, 5% due Louisiana Public Facilities Authority, Hospital Revenue Bonds (Missionaries of Our Lady Health System, Inc.), Series A, 5.25%
Maine - 0.3%	775 1,190	Portland, Maine, Housing Development Corporation, Senior Living (Avesta Housing Development Corporation Project), Series A, 5.7 Portland, Maine, Housing Development Corporation, Senior Living

		(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 B Transportation System), Series A, 7% due 3/01/2019
	30,000	Massachusetts State Water Resource Authority Revenue Bonds, Ser 7/15/2019
	3,480	Massachusetts State Water Resource Authority, Revenue Refunding due $8/01/2010$ (a)(f)

State	Face Amount	Municipal Bonds
Michigan - 9.4%	\$ 7,695	Delta County, Michigan, Economic Development Corporation, Envir Revenue Refunding Bonds (Mead Westvaco-Escanaba), Series A, 6.2
	3,715	Macomb County, Michigan, Hospital Finance Authority, Hospital R Clemens General Hospital), Series B, 5.75% due 11/15/2025
	4,250	Macomb County, Michigan, Hospital Finance Authority, Hospital R Clemens General Hospital), Series B, 5.875% due 11/15/2034
	1,900	Michigan State Hospital Finance Authority, Hospital Revenue Ref (Crittenton Hospital), Series A, 5.625% due 3/01/2027
	5 , 900	Michigan State Hospital Finance Authority, Revenue Bonds (Mid-M Group), Series A, 5% due 4/15/2036
	10,000	Michigan State Hospital Finance Authority, Revenue Bonds (Trini Group), Series A, 5% due 12/01/2026
	6,500	Michigan State Hospital Finance Authority, Revenue Bonds (Trini Group), Series A, 5% due 12/01/2031
	3,000	Michigan State Hospital Finance Authority, Revenue Refunding Bo System), Series A, 5.25% due 11/15/2032
	10,600	Michigan State Hospital Finance Authority, Revenue Refunding Bo System), Series A, 5% due 11/15/2038
	1,000	Michigan State Hospital Finance Authority, Revenue Refunding Bo 6.70% due 1/01/2026
Minnesota - 1.5%	7,235	Minneapolis, Minnesota, Health Care System Revenue Bonds (Allin Series A, 5.75% due 11/15/2032
	1,405	Saint Cloud, Minnesota, Health Care Revenue Refunding Bonds (Sa Obligation Group), Series A, 6.25% due 5/01/2017 (i)
Mississippi - 6.0%	9 , 160	Lowndes County, Mississippi, Solid Waste Disposal and PCR, Refu Company Project), Series A, 6.80% due 4/01/2022
	4,500	Lowndes County, Mississippi, Solid Waste Disposal and PCR, Refu Company Project), Series B, 6.70% due 4/01/2022
	20,705	Mississippi Business Finance Corporation, Mississippi, PCR, Ref Resources Inc. Project), 5.875% due 4/01/2022
Missouri - 0.5%	2,600	Missouri State Development Finance Board, Infrastructure Facili Bonds (Branson), Series A, 5.50% due 12/01/2032
	240	Missouri State Housing Development Commission, S/F Mortgage Rev Loan), AMT, Series A, 7.50% due 3/01/2031 (d)

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

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

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

	Face	
State	Amount	Municipal Bonds

\$ 11,460 Brazos River, Texas, Harbor Navigation District, Brazoria Count

		Revenue Refunding Bonds (Dow Chemical Company Project), AMT, Se 5/15/2033
	3,000	Gregg County, Texas, Health Facilities Development Corporation, Bonds (Good Shepherd Medical Center Project), 6.875% due 10/01/
	10,250	Guadalupe-Blanco River Authority, Texas, Sewage and Solid Waste Revenue Bonds (E. I. du Pont de Nemours and Company Project), A 4/01/2026
	6,000	Gulf Coast, Texas, Waste Disposal Authority, Revenue Refunding Paper Company), AMT, Series A, 6.10% due 8/01/2024
	5,500	Harris County-Houston Sports Authority, Texas, Revenue Refundin Series G, 5.75% due 11/15/2020 (c)
	1,795	Houston, Texas, Industrial Development Corporation Revenue Bond 6.375% due 1/01/2023
	1,875	Mansfield, Texas, Independent School District, GO, Refunding, 6 (a)
	155 9,355	Mansfield, Texas, Independent School District, GO, Refunding, 6 Matagorda County, Texas, Navigation District Number 1, Revenue (Centerpoint Energy Project), 5.60% due 3/01/2027
	5,225 2,700	Midway, Texas, Independent School District, GO, Refunding, 6.12 Port Corpus Christi, Texas, Revenue Refunding Bonds (Celanese P 6.45% due 11/01/2030
	5,000	Red River Authority, Texas, PCR, Refunding (Celanese Project), due 11/01/2030
	7,280	Sabine River Authority, Texas, PCR, Refunding (TXU Electric Com Energy Company LLC), Series C, 5.20% due 5/01/2028
Vermont - 0.2%	1,000	Vermont Educational and Health Buildings Financing Agency, Deve Health Revenue Bonds (Howard Center for Human Services), Series 6/15/2022
Virginia - 0.2%	1,425	Chesterfield County, Virginia, IDA, PCR (Virginia Electric and Series A, 5.875% due 6/01/2017
Washington - 3.4%	3	Energy Northwest, Washington, Electric Revenue Refunding Bonds, 8.042% due 7/01/2018 (h)(m)
	2,370	Seattle, Washington, Housing Authority Revenue Bonds (Replaceme 6.125% due 12/01/2032
	408 14,320	Washington State, GO, Trust Receipts, Class R, Series 6, 7.972% Washington State Public Power Supply System, Revenue Refunding 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 1,765 5,000 3,040	Badger Tobacco Asset Securitization Corporation, Wisconsin, Ass Bonds, 6.125% due 6/01/2027 Milwaukee, Wisconsin, Revenue Bonds (Air Cargo), AMT, 6.50% due Wisconsin State Health and Educational Facilities Authority, Mo (Hudson Memorial Hospital), 5.70% due 1/15/2029 (j) Wisconsin State Health and Educational Facilities Authority Rev (Synergyhealth Inc.), 6% due 11/15/2032

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 Refundin 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 Airpor 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 Dist GO (f):		
	2,975	5.75% due 2/01/2018		
	2,710 4,780	5.75% due 2/01/2019 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 Re Tax Secured, Series B, 6.25% due 11/15/2018		
	26 , 750	New York State Dormitory Authority, State University Educationa 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% d		
Texas - 6.3%	20,970	Harris County, Texas, Health Facilities Development Corporation Bonds (School Health Care System), Series B, 5.75% due 7/01/202		
	12,500	San Antonio, Texas, Electric and Gas Revenue Bonds, Series A, 5		
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 1/01/20		
		Total Municipal Bonds Held in Trust (Cost -\$200,240) - 34.2%		

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%

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:

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

- (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.
- (1) 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:

	Net	Dividend
Affiliate	Activity	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:

	Notional Amount	realized reciation
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

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

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