BLACKROCK MUNIVEST FUND INC

Form N-Q January 29, 2008

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 811-05611

Name of Fund: BlackRock MuniVest Fund, Inc. (MVF)

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: Donald C. Burke, 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: (800) 882-0052, Option 4

Date of fiscal year end: 08/31/2008

Date of reporting period: 09/01/2007 - 11/30/2007

Item 1 - Schedule of Investments

BlackRock MuniVest Fund, Inc. Schedule of Investments as of November 30, 2007 (Unaudited) (in Thousands)

500

560

1,000

Face State Amount Municipal Bonds ______ Alabama - 2.9% \$ 2,550 Camden, Alabama, IDB, Exempt Facilities Revenue Bonds (Weyerha Series A, 6.125% due 12/01/2024 3,500 Huntsville, Alabama, Health Care Authority Revenue Bonds, Seri due 6/01/2011 (a) 6,500 Prattville, Alabama, IDB, Environmental Improvement Revenue Bo Paper Company Projects), AMT, Series A, 4.75% due 12/01/2030 5,000 Selma, Alabama, IDB, Environmental Improvement Revenue Refundi (International Paper Company Project), Series B, 5.50% due 5/0 4,100 Maricopa County, Arizona, IDA, Education Revenue Bonds (Arizon Arizona - 2.4% Project 1), Series A, 6.75% due 7/01/2029 2,100 Pima County, Arizona, IDA, Education Revenue Bonds (Arizona Ch

Project), Series E, 7.25% due 7/01/2031

Project), Series I, 6.10% due 7/01/2024

Project), Series I, 6.30% due 7/01/2031

Schools Project), Series O, 5% due 7/01/2026

Pima County, Arizona, IDA, Education Revenue Bonds (Arizona Ch

Pima County, Arizona, IDA, Education Revenue Bonds (Arizona Ch

Pima County, Arizona, IDA, Education Revenue Refunding Bonds (

1,545 Pima County, Arizona, IDA, Education Revenue Refunding Bonds (

1		

	970 3,500	Schools Project II), Series A, 6.75% due 7/01/2011 (a) Pima County, Arizona, IDA, Education Revenue Refunding Bonds (Schools Project II), Series A, 6.75% due 7/01/2021 Salt Verde Financial Corporation, Arizona, Senior Gas Revenue due 12/01/2037
California - 16.4%	18,850	California Health Facilities Financing Authority Revenue Bonds Permanente), Series A, 5.25% due 4/01/2039
	550	California State, GO, 5.50% due 4/01/2014 (a)
	10	California State, GO, 5.50% due 4/01/2030
	5,000	California State Public Works Board, Lease Revenue Bonds (Depa Corrections), Series C, 5.50% due 6/01/2022
	6,000	California State Public Works Board, Lease Revenue Bonds (Depa Corrections), Series C, 5.50% due 6/01/2023
	11,075	California State Public Works Board, Lease Revenue Bonds (Depa Health - Coalinga State Hospital), Series A, 5.125% due 6/01/2
	11,250	California State, Various Purpose, GO, 5.50% due 11/01/2033
	5,240	California Statewide Communities Development Authority, Health Bonds (Memorial Health Services), Series A, 6% due 10/01/2023

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
HFA	Housing Finance Agency
IDA	Industrial Development Authority
IDB	Industrial Development Board
IDR	Industrial Development Revenue Bonds
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, 2007 (Unaudited) (in Thousands)

	Face	Model and Books
State	Amount	Municipal Bonds
	\$ 1,250	Chula Vista, California, IDR (San Diego Gas and Electric Compa
		Series B, 5% due 12/01/2027
	10,725	Golden State Tobacco Securitization Corporation of California,
		Revenue Bonds, Series A-3, 7.875% due 6/01/2013 (a)
	3,750	Golden State Tobacco Securitization Corporation of California,
		Revenue Bonds, Series A-4, 7.80% due 6/01/2013 (a)
	1,425	Golden State Tobacco Securitization Corporation of California,
		Revenue Bonds, Series A-5, 7.875% due 6/01/2013 (a)
	10,000	Golden State Tobacco Securitization Corporation of California,
		Revenue Bonds, Series B, 5.375% due 6/01/2010 (a)
	5,100	Golden State Tobacco Securitization Corporation of California,

		Revenue Refunding Bonds, Senior Series A-1, 5.125% due 6/01/20
Colorado - 0.6%	540 180 3,000	Colorado HFA, Revenue Refunding Bonds (S/F Program), AMT, Seni 6.60% due 5/01/2028 Colorado HFA, Revenue Refunding Bonds (S/F Program), AMT, Seni 7.50% due 4/01/2031 Colorado Health Facilities Authority Revenue Bonds (Lutheran M Series A, 5.25% due 6/01/2034
Connecticut - 0.5%	2,810	Mohegan Tribe Indians Gaming Authority, Connecticut, Public Im Refunding Bonds (Priority Distribution), 6.25% due 1/01/2031
Florida - 5.8%	15,800 6,500 10,320	Highlands County, Florida, Health Facilities Authority, Hospit (Adventist Health System), Series C, 5.25% due 11/15/2036 Hillsborough County, Florida, IDA, Hospital Revenue Bonds (H. Center Project), Series A, 5.25% due 7/01/2037 Orange County, Florida, Health Facilities Authority, Hospital (Adventist Health System), 5.625% due 11/15/2012 (a)
Georgia - 4.5%	1,100 4,600 250 250 5,000 4,390 3,500 4,785	Gainesville, Georgia, Redevelopment Authority, Educational Fac Refunding Bonds (Riverside Military Academy), 5.125% due 3/01/Georgia Municipal Electric Authority, Power Revenue Refunding 6.60% due 1/01/2018 Georgia Municipal Electric Authority, Power Revenue Refunding 6.60% due 1/01/2018 (e) Georgia Municipal Electric Authority, Power Revenue Refunding 10% due 1/01/2010 (e) Houston County, Georgia, Hospital Authority Revenue Bonds (Hou Project), 5.25% due 10/01/2035 Milledgeville-Baldwin County, Georgia, Development Authority R (Georgia College and State University Foundation), 5.50% due 9 Milledgeville-Baldwin County, Georgia, Development Authority R (Georgia College and State University Foundation), 5.625% due Monroe County, Georgia, Development Authority, PCR, Refunding Corporation-Scherer), Series A, 6.80% due 1/01/2011
Idaho - 0.5%	330 2,380	Idaho Housing Agency, S/F Mortgage Revenue Refunding Bonds, A 6.90% due 1/01/2027 Idaho Housing and Financing Association, S/F Mortgage Revenue Series J-1, Class III, 5% due 1/01/2028
Illinois - 11.2%	5,000 11,200 75	Chicago, Illinois, O'Hare International Airport, General Airpo Bonds, Third Lien, AMT, Series A, 5.75% due 1/01/2019 (c) Chicago, Illinois, O'Hare International Airport Revenue Bonds, Series B-2, 6% due 1/01/2029 (n) Chicago, Illinois, S/F Mortgage Revenue Bonds, AMT, Series C, due 3/01/2032 (d)(k)

BlackRock MuniVest Fund, Inc.
Schedule of Investments as of November 30, 2007 (Unaudited) (in Thousands)

\$10,000 Hodgkins, Illinois, Environmental Improvement Revenue Bonds (Management LLC Project), AMT, 6% due 11/01/2023

	2,140	Illinois Development Finance Authority Revenue Bonds (Communit Providers Facilities), Series A, 6.50% due 7/01/2022
	465 2 , 695	Illinois Development Finance Authority, Revenue Refunding Bond Rehabilitation Providers Facilities), Series A, 6% due 7/01/20 Illinois State Finance Authority, Revenue Bonds (Community Reh
	12	Facilities), 4.625% due 7/01/2027 Kane and De Kalb Counties, Illinois, Community Unit School Dis
	1,005	DRIVERS, Series 283, 7.545% due 2/01/2018 (f)(m) McLean and Woodford Counties, Illinois, Community Unit School
	845	GO, Refunding, 6.25% due 12/01/2014 (i) 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, Dedicate Refunding Bonds (McCormick Place Expansion Project), Series B, due 6/15/2023 (c)
	3,500	Regional Transportation Authority, Illinois, Revenue Bonds, Se due 11/01/2020 (h)
	4,000	Regional Transportation Authority, Illinois, Revenue Bonds, Se due 6/01/2020 (f)
	395	Will County, Illinois, School District Number 122 (New Lenox E Series A, 6.50% due 11/01/2010 (a)(i)
	505	Will County, Illinois, School District Number 122 (New Lenox E Series A, 6.50% due 11/01/2013 (i)
Indiana - 8.5%	18 , 350	Indiana Health and Educational Facilities Financing Authority, Bonds (Clarian Health Obligation), Series A, 5.25% due 2/15/20
	4,290	Indiana State, HFA, S/F Mortgage Revenue Refunding Bonds, Seri due 1/01/2017 (j)
	8,195	Indiana Transportation Finance Authority, Highway Revenue Bond 6.80% due 12/01/2016
	15 , 335	Indianapolis, Indiana, Local Public Improvement Bond Bank, Rev Bonds, Series D, 6.75% due 2/01/2014
Iowa - 1.1%	6 , 540	Iowa Financing Authority, S/F Mortgage Revenue Refunding Bonds 5.15% due 7/01/2032 (d)
Kansas - 0.7%	3 , 805	Sedgwick and Shawnee Counties, Kansas, S/F Mortgage Revenue Bo Securities Program), AMT, Series A-4, 5.95% due 12/01/2033 (d)
Kentucky - 3.4%	20,100	Louisville and Jefferson County, Kentucky, Metropolitan Govern Revenue Refunding Bonds (Norton Healthcare, Inc.), 5.25% due 1
Louisiana - 3.5%	8 , 720	Louisiana Public Facilities Authority, Hospital Revenue Bonds Missionaries of Our Lady Health System, Inc.), Series A, 5% du
	11,660	Louisiana Public Facilities Authority, Hospital Revenue Bonds Missionaries of Our Lady Health System, Inc.), Series A, 5.25%
Maine - 0.3%	775	Portland, Maine, Housing Development Corporation, Senior Livin (Avesta Housing Development Corporation Project), Series A, 5.
	1,190	Portland, Maine, Housing Development Corporation, Senior Livin (Avesta Housing Development Corporation Project), Series A, 6%
Maryland - 0.5%	3,250	Maryland State Community Development Administration, Departmen Community Development, Residential Revenue Refunding Bonds, AM due 9/01/2042

BlackRock MuniVest Fund, Inc. Schedule of Investments as of November 30, 2007 (Unaudited) (in Thousands)

	Face	
State	Amount	Municipal Bonds
Massachusetts - 9.7%	\$ 2,035	Boston, Massachusetts, Water and Sewer Commission Revenue Bond due 1/01/2011 (e)
	3,010	Massachusetts Bay Transportation Authority, Revenue Refunding Transportation System), Series A, 7% due 3/01/2019 (q)
	3,000	Massachusetts State, HFA, Housing Revenue Bonds, AMT, Series A
	3,000	Massachusetts State, HFA, Housing Revenue Refunding Bonds, AMT due 6/01/2040
	5 , 500	Massachusetts State, HFA, S/F Housing Revenue Bonds, AMT, Seri due 12/01/2032
	30,000	Massachusetts State Water Resource Authority Revenue Bonds, Se due $7/15/2019$ (e)
	1,000	Massachusetts State Water Resource Authority, Revenue Refundin 6% due $8/01/2010$ (a) (f)
	2,480	Massachusetts State Water Resource Authority, Revenue Refundin 6% due 8/01/2010 (a)(f)
Michigan - 7.2%	2,500	Delta County, Michigan, Economic Development Corporation, Envi Revenue Refunding Bonds (Mead Westvaco-Escanaba), Series A, 6.
	3 , 715	Macomb County, Michigan, Hospital Finance Authority, Hospital Clemens General Hospital), Series B, 5.75% due 11/15/2025
	4,250	Macomb County, Michigan, Hospital Finance Authority, Hospital Clemens General Hospital), Series B, 5.875% due 11/15/2034
	1,900	Michigan State Hospital Finance Authority, Hospital Revenue Re (Crittenton Hospital), Series A, 5.625% due 3/01/2027
	2,000	Michigan State Hospital Finance Authority, Hospital Revenue Re (Oakwood Obligated Group), Series A, 5% due 7/15/2025
	7,205	Michigan State Hospital Finance Authority, Revenue Refunding B Health System), Series A, 5.25% due 11/15/2032
	17,100	Michigan State Hospital Finance Authority, Revenue Refunding B Health System), Series A, 5% due 11/15/2038
	2 , 750	Michigan State Hospital Finance Authority, Revenue Refunding B Health System), Series A, 5.25% due 11/15/2046
	1,000	Michigan State Hospital Finance Authority, Revenue Refunding B (Sinai Hospital), 6.70% due 1/01/2026
Minnesota - 1.6%	7 , 235	Minneapolis, Minnesota, Health Care System Revenue Bonds (Alli
	1,405	Series A, 5.75% due 11/15/2012 (a) Saint Cloud, Minnesota, Health Care Revenue Refunding Bonds (S Obligation Group), Series A, 6.25% due 5/01/2017 (i)
Mississippi - 6.2%	9,160	Lowndes County, Mississippi, Solid Waste Disposal and PCR, Ref
	4,500	Company Project), Series A, 6.80% due 4/01/2022 Lowndes County, Mississippi, Solid Waste Disposal and PCR, Ref
	20,705	Company Project), Series B, 6.70% due 4/01/2022 Mississippi Business Finance Corporation, Mississippi, PCR, Re Energy Resources Inc. Project), 5.875% due 4/01/2022
Missouri - 0.5%	2,600	Missouri State Development Finance Board, Infrastructure Facil
	195	Refunding Bonds (Branson), Series A, 5.50% due 12/01/2032 Missouri State Housing Development Commission, S/F Mortgage Re (Homeowner Loan), AMT, Series A, 7.50% due 3/01/2031 (d)
Montana - 1.0%	6 , 000	Forsyth, Montana, PCR, Refunding (Portland General Electric Co 5.20% due 5/01/2033

BlackRock MuniVest Fund, Inc. Schedule of Investments as of November 30, 2007 (Unaudited) (in Thousands)

State	Face Amount	Municipal Bonds
Nebraska - 0.0%	\$ 135	Nebraska Investment Finance Authority, S/F Housing Revenue Bon 6.30% due 9/01/2028 (d)(k)
Nevada - 0.2%	1,105	Nevada Housing Division Revenue Bonds (Multi-Unit Housing), AMdue 10/01/2017 (b)
New Hampshire - 0.5%	2,675	New Hampshire Health and Education Facilities Authority, Reven (Elliot Hospital), Series B, 5.60% due 10/01/2022
New Jersey - 4.9%	9,080 2,885 2,855 6,695 5,980	New Jersey EDA, Cigarette Tax Revenue Bonds, 5.50% due 6/15/20 New Jersey EDA, Cigarette Tax Revenue Bonds, 5.75% due 6/15/20 New Jersey EDA, Cigarette Tax Revenue Bonds, 5.50% due 6/15/20 New Jersey EDA, Cigarette Tax Revenue Bonds, 5.75% due 6/15/20 Tobacco Settlement Financing Corporation of New Jersey, Asset-Bonds, 7% due 6/01/2013 (a)
New Mexico - 0.6%	3,300	Farmington, New Mexico, PCR, Refunding (Public Service Company San Juan Project), Series A, 5.80% due 4/01/2022
New York - 1.5%	400 1,125 965 5,480 20 400	Metropolitan Transportation Authority, New York, Dedicated Tax Refunding Bonds, VRDN, Series B, 3.54% due 11/01/2022 (i) (1) New York City, New York, City Transitional Finance Authority R Series 283, 8.56% 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 1/15/2033 New York City, New York, GO, Series I, 6.25% due 4/15/2017 (a) New York State Local Government Assistance Corporation, Revenus Sub-Lien, VRDN, Series 4V, 3.50% due 4/01/2022 (i) (1)
North Carolina - 0.7%	4,105	Gaston County, North Carolina, Industrial Facilities and Pollu Financing Authority, Revenue Bonds (National Gypsum Company Pr due 8/01/2035
Ohio - 5.0%	8,870 3,000 17,000	Buckeye Tobacco Settlement Financing Authority, Ohio, Tobacco Asset-Backed Bonds, Series A-2, 6% due 6/01/2043 Buckeye Tobacco Settlement Financing Authority, Ohio, Tobacco Asset-Backed Bonds, Series A-2, 5.875% due 6/01/2048 Buckeye Tobacco Settlement Financing Authority, Ohio, Tobacco Asset-Backed Bonds, Series A-2, 6.50% due 6/01/2048
Oklahoma - 1.3%	7,635	Oklahoma State Development Finance Authority, Revenue Refundin John Health System), 5% due 2/15/2042
Pennsylvania - 4.3%		Pennsylvania State Higher Education Assistance Agency Revenue Acquisition, 6.125% due 12/15/2010 (a)(c) Pennsylvania State Higher Educational Facilities Authority Rev (University of Pennsylvania Medical Center Health System), Ser due 1/15/2031

1,000 Philadelphia, Pennsylvania, Authority for Industrial Developme

	Revenue Bonds (Arbor House Inc. Project), Series E, 6.10% due
1,355	Philadelphia, Pennsylvania, Authority for Industrial Developme
	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 12/01/2011 (a)

BlackRock MuniVest Fund, Inc.
Schedule of Investments as of November 30, 2007 (Unaudited) (in Thousands)

State	Face Amount	Municipal Bonds
	\$ 1,340 410	Sayre, Pennsylvania, Health Care Facilities Authority, Revenue (Guthrie Healthcare System), Series A, 6.25% due 12/01/2011 (a Sayre, Pennsylvania, Health Care Facilities Authority, Revenue (Guthrie Healthcare System), Series A, 6.25% due 12/01/2018
South Carolina - 2.7%	1,000	Georgetown County, South Carolina, Environmental Improvement R
	9,700	(International Paper Company Project), AMT, Series A, 5.55% du Lexington County, South Carolina, Health Services District Inc Refunding Bonds, 5% due 11/01/2032
	5,000	Richland County, South Carolina, Environmental Improvement Rev (International Paper), AMT, 6.10% due 4/01/2023
South Dakota - 0.4%	2 , 605	South Dakota State Health and Educational Facilities Authority (Sanford Health), 5% due 11/01/2040
Tennessee - 4.5%	4,120	Shelby County, Tennessee, Health, Educational and Housing Faci Revenue Refunding Bonds (Methodist Healthcare), 6.50% due 9/01
	21,450	Tennessee Energy Acquisition Corporation, Gas Revenue Bonds, S due 9/01/2026
Texas - 12.7%	5,000	Austin, Texas, Convention Center Revenue Bonds (Convention Ent First Tier, Series A, 6.70% due 1/01/2011 (a)
	1,290	Austin, Texas, Convention Center Revenue Bonds (Convention Ent First Tier, Series A, 6.70% due 1/01/2011 (a)
	3,055	Brazos River Authority, Texas, PCR, Refunding (TXU Energy Comp AMT, Series A, 7.70% due 4/01/2033
	11,460	Brazos River, Texas, Harbor Navigation District, Brazoria Coun Revenue Refunding Bonds (Dow Chemical Company Project), AMT, S due 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 Wast Revenue Bonds (E. I. du Pont de Nemours and Company Project), due 4/01/2026
	6,000	Gulf Coast Waste Disposal Authority, Texas, Revenue Refunding Paper Company), AMT, Series A, 6.10% due 8/01/2024
	5,500	Harris County-Houston Sports Authority, Texas, Revenue Refundi Senior Lien, Series G, 5.75% due 11/15/2020 (c)
	1,790	Houston, Texas, Industrial Development Corporation Revenue Box 6.375% due 1/01/2023
	155 9 , 355	Mansfield, Texas, Independent School District, GO, Refunding, Matagorda County, Texas, Navigation District Number 1, Revenue

(Centerpoint Energy Project), 5.60% due 3/01/2027 5,225 Midway, Texas, Independent School District, GO, Refunding, 6.1

	5,000	Port Corpus Christi, Texas, Revenue Refunding Bonds (Celanese 6.45% due 11/01/2030 Red River Authority, Texas, PCR, Refunding (Celanese Project), 6.70% due 11/01/2030 Texas State Affordable Housing Corporation, S/F Mortgage Reven Fighter and Law Enforcement or Security Officer Home Loan Prog Series B, 5.25% due 9/01/2039 (d)
Vermont - 0.2%	1,000	Vermont Educational and Health Buildings Financing Agency, Dev Mental Health Revenue Bonds (Howard Center for Human Services) 6.375% due 6/15/2022

BlackRock MuniVest Fund, Inc.
Schedule of Investments as of November 30, 2007 (Unaudited) (in Thousands)

State	Face Amount	Municipal Bonds	
Virginia - 0.6%	\$ 1,425 2,250	Chesterfield County, Virginia, IDA, PCR (Virginia Electric and Series A, 5.875% due 6/01/2017 Fairfax County, Virginia, EDA, Residential Care Facilities, Mo Refunding Bonds (Goodwin House, Inc.), 5.125% due 10/01/2042	
Washington - 3.5%	3 2,355 408 14,320	Energy Northwest, Washington, Electric Revenue Refunding Bonds Series 255, 8.042% due 7/01/2018 (h) (m) Seattle, Washington, Housing Authority Revenue Bonds (Replacer 6.125% due 12/01/2032 Washington State, GO, Trust Receipts, Class R, Series 6, 7.982 Washington State Public Power Supply System, Revenue Refunding Project Number 1), Series B, 7.125% due 7/01/2016	
Wisconsin - 1.7%	1,765 5,000 3,040	Milwaukee, Wisconsin, Revenue Bonds (Air Cargo), AMT, 6.50% du Wisconsin State Health and Educational Facilities Authority, M (Hudson Memorial Hospital), 5.70% due 1/15/2029 (j) Wisconsin State Health and Educational Facilities Authority Re (SynergyHealth Inc.), 6% due 11/15/2032	
U.S. Virgin Islands	8 , 000	Virgin Islands Government Refinery Facilities, Revenue Refundi Coker Project), AMT, 6.50% due 7/01/2021	
		Total Municipal Bonds (Cost - \$761,048) - 135.8%	
		Municipal Bonds Held in Trust (r)	
Illinois - 7.7%	14,000 17,080 2,975 2,710	Chicago, Illinois, O'Hare International Airport, General Airpo Bonds, Third Lien, AMT, Series A, 5.75% due 1/01/2020 (c) 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 Dis GO, 5.75% due 2/01/2018 (f) Kane and De Kalb Counties, Illinois, Community Unit School Dis GO, 5.75% due 2/01/2019 (f)	

	4,780	Kane and De Kalb Counties, Illinois, Community Unit School Dis GO, 5.75% due 2/01/2021 (f)	
Massachusetts - 3.6%	20,000	Massachusetts State School Building Authority, Dedicated Sales Series A, 5% due 8/15/2030 (i)	
New York - 7.4%	13,500 26,750	New York City, New York, City Transitional Finance Authority R Future Tax Secured, Series B, 6.25% due 11/15/2018 New York State Dormitory Authority, State University Education Revenue Refunding Bonds, Series 1989, 6% due 5/15/2010 (c)	
Oregon - 1.2%	6,610	Portland, Oregon, Sewer System Revenue Bonds, Series A, 5.75%	
Texas - 6.5%	20,970	Harris County, Texas, Health Facilities Development Corporatio Bonds (School Health Care System), Series B, 5.75% due 7/01/20 San Antonio, Texas, Electric and Gas Revenue Bonds, Series A, due 2/01/2010 (a)	
Washington - 9.0%	11,660 7,015 14,700 15,385	Energy Northwest, Washington, Electric Revenue Refunding Bonds Generating Station), Series A, 5.75% due 7/01/2018 (c) Energy Northwest, Washington, Electric Revenue Refunding Bonds Generating Station), Series B, 6% due 7/01/2018 (h) Energy Northwest, Washington, Electric Revenue Refunding Bonds Number 1), Series B, 6% due 7/01/2017 (c) Washington State, Various Purpose, GO, Series B, 6% due 1/01/2	
		Total Municipal Bonds Held in Trust (Cost - \$201,037) - 35.4%	

BlackRock MuniVest Fund, Inc.
Schedule of Investments as of November 30, 2007 (Unaudited) (in Thousands)

Shares Held	Short-Term Securities
11,100	Merrill Lynch Institutional Tax-Exempt Fund, 3.43% (o)(p)
	Total Short-Term Securities (Cost - \$11,100) - 1.9%
	Total Investments (Cost - \$973,185*) - 173.1%
	Other Assets Less Liabilities - 1.0%
	Liability for Trust Certificates, Including Interest Expense P
	Preferred Stock, at Redemption Value - (57.2%)

Net Assets Applicable to Common Stock - 100.0%

Aggregate cost \$ 878,483

^{*} The cost and unrealized appreciation (depreciation) of investments as of November 30, 2007, as computed for federal income tax purposes, were as follows:

Gross unrealized appreciation \$ 43,787 Gross unrealized depreciation (7,743) \$ 36,044 Net unrealized appreciation _____

- Prerefunded. (a)
- (b) FNMA Collateralized.
- MBIA Insured. (c)
- (d) FNMA/GNMA Collateralized.
- Escrowed to maturity. (e)
- FGIC Insured. (f)
- Radian Insured. (g)
- AMBAC Insured. (h)
- FSA Insured. (i)
- FHA Insured. (j)
- FHLMC Collateralized. (k)
- 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.
- The rate disclosed is that currently in effect. This rate changes periodically and inversely based upon prevailing market rates.
- (n) XL Capital Insured.
- (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	3,177	\$69

- Represents the current yield as of November 30, 2007.
- (q) Commonwealth Guaranteed.

BlackRock MuniVest Fund, Inc. Schedule of Investments as of November 30, 2007 (Unaudited) (in Thousands)

- Securities represent underlying bonds transferred to a separate (r) 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.
- Forward interest rate swaps outstanding as of November 30, 2007 were as

______ Notional Unrealized Amount Depreciation ______

Pay a fixed rate of 3.925% and received a floating rate based on 1-week (SIFMA) Municipal Swap Index Rate

Broker, JPMorgan Chase Expires February 2028

\$ 17,250 \$ (545)

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 and 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 MuniVest Fund, Inc.

By: /s/ Donald C. Burke
----Donald C. Burke,
Chief Executive Officer of
BlackRock MuniVest Fund, Inc.

Date: January 16, 2008

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/ Donald C. Burke

Donald C. Burke, Chief Executive Officer (principal executive officer) of BlackRock MuniVest Fund, Inc.

Date: January 16, 2008

By: /s/ Neal J. Andrews

Neal J. Andrews, Chief Financial Officer (principal financial officer) of BlackRock MuniVest Fund, Inc.

Date: January 16, 2008