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FORM N-CSRS

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FILER

MUNIVEST FUND INC

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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM N-CSRS

CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT
INVESTMENT COMPANIES

Investment Company Act file number 811-05611

Name of Fund: 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, 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: 08/31/05

Date of reporting period: 09/01/04 - 02/28/05

Item 1 - Report to Stockholders

MuniVest Fund, Inc.

Semi-Annual Report
February 28, 2005

MuniVest Fund, Inc.

The Benefits and Risks of Leveraging

MuniVest Fund, Inc. utilizes leveraging to seek to enhance the yield and net asset value of its Common Stock. However, these objectives cannot be achieved in all interest rate environments. To leverage, the Fund issues Preferred Stock, which pays dividends at prevailing short-term interest rates, and invests the proceeds in long-term municipal bonds. The interest earned on these investments, net of dividends to Preferred Stock, is paid to Common Stock shareholders in the form of dividends, and the value of these portfolio holdings is reflected in the per share net asset value of the Fund's Common Stock. However, in order to benefit Common Stock shareholders, the yield curve must be positively sloped; that is, short-term interest rates must be lower than long-term interest rates. At the same time, a period of generally declining interest rates will benefit Common Stock shareholders. If either of these conditions change, then the risks of leveraging will begin to outweigh the benefits.

To illustrate these concepts, assume a fund's Common Stock capitalization of \$100 million and the issuance of Preferred Stock for an additional \$50 million, creating a total value of \$150 million available for investment in long-term municipal bonds. If prevailing short-term interest rates are approximately 3% and long-term interest rates are approximately 6%, the yield curve has a strongly positive slope. The fund pays dividends on the \$50 million of Preferred Stock based on the lower short-term interest rates. At the same time, the fund's total portfolio of \$150 million earns the income based on long-term interest rates. Of course, increases in short-term interest rates would reduce (and even eliminate) the dividends on the Common Stock.

In this case, the dividends paid to Preferred Stock shareholders are significantly lower than the income earned on the fund's long-term investments, and therefore the Common Stock shareholders are the beneficiaries of the incremental yield. However, if short-term interest rates rise, narrowing the differential between short-term and long-term interest rates, the incremental yield pickup on the Common Stock will be reduced or eliminated completely. At the same time, the market value of the fund's Common Stock (that is, its price as listed on the American Stock Exchange) may, as a result, decline. Furthermore, if long-term interest rates rise, the Common Stock's net asset value will reflect the full decline in the price of the portfolio's investments, since the value of the fund's Preferred Stock does not fluctuate. In addition to the decline in net asset value, the market value of the fund's Common Stock may also decline.

As a part of its investment strategy, the Fund may invest in certain securities whose potential income return is inversely related to changes in a floating

interest rate ("inverse floaters"). In general, income on inverse floaters will decrease when short-term interest rates increase and increase when short-term interest rates decrease. Investments in inverse floaters may be characterized as derivative securities and may subject the Fund to the risks of reduced or eliminated interest payments and losses of invested principal. In addition, inverse floaters have the effect of providing investment leverage and, as a result, the market value of such securities will generally be more volatile than that of fixed-rate, tax-exempt securities. To the extent the Fund invests in inverse floaters, the market value of the Fund's portfolio and the net asset value of the Fund's shares may also be more volatile than if the Fund did not invest in these securities. As of February 28, 2005, the percentage of the Fund's total net assets invested in inverse floaters was 11.36%, before the deduction of Preferred Stock.

Swap Agreements

The Fund may also invest in swap agreements, which are over-the-counter contracts in which one party agrees to make periodic payments based on the change in market value of a specified bond, basket of bonds, or index in return for periodic payments based on a fixed or variable interest rate or the change in market value of a different bond, basket of bonds or index. Swap agreements may be used to obtain or reduce exposure to a bond or market without owning or taking physical custody of securities. Swap agreements involve the risk that the party with whom the Fund has entered into the swap will default on its obligation to pay the Fund and the risk that the Fund will not be able to meet its obligations to pay the other party to the agreement.

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A Letter From the President

Dear Shareholder

Financial markets broadly posted positive returns over the most recent reporting period, with international equities providing some of the most impressive results.

<TABLE>

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Total Returns as of February 28, 2005	6-month	12-month
<S>	<C>	<C>
U.S. equities (Standard & Poor's 500 Index)	+ 9.99%	+ 6.98%
International equities (MSCI Europe Australasia Far East Index)	+21.18	+18.68
Fixed income (Lehman Brothers Aggregate Bond Index)	+ 1.26	+ 2.43
Tax-exempt fixed income (Lehman Brothers Municipal Bond Index)	+ 2.40	+ 2.96
High yield bonds (Credit Suisse First Boston High Yield Index)	+ 7.53	+11.21

</TABLE>

The U.S. economy has continued to show resilience in the face of the Federal Reserve Board's (the Fed) continued interest rate hikes and, more recently, higher oil prices. The Fed's measured tightening program recently brought the federal funds rate to 2.75% en route to a more "neutral" short-term interest rate target (relative to inflation). Since the U.S. presidential election, progress has been monitored on many fronts in Washington, although concerns remain about the structural problems of debt and deficits, as reflected by a significant decline in the U.S. dollar.

U.S. equities ended 2004 in a strong rally, but remained in a fairly narrow trading range for the first two months of 2005. Divergences were notable among sectors, with energy emerging as a clear leader. On the positive side, corporations have accelerated their hiring plans, capital spending remains reasonably robust and merger-and-acquisition activity has increased. Offsetting the positives are slowing corporate earnings growth, renewed energy price concerns and the potential for an economic slowdown. International equities, particularly in Asia, have benefited from higher economic growth rates (China recorded growth of 9.3% in 2004), stronger currencies and relatively reasonable valuations.

The major action in the bond market has been a flattening of the yield curve. As short-term interest rates continued to rise, yields on the long end of the curve remained relatively stable -- even declining at certain points since the Fed's monetary tightening program began in June 2004. This phenomenon has been largely attributed to continued foreign interest in U.S. bonds, which has served to absorb much of the excess supply. By period-end, many believed long-term yields were long overdue for a rise.

Looking ahead, the environment is likely to be a challenging one for investors, with diversification and selectivity becoming increasingly important themes. With this in mind, we encourage you to meet with your financial advisor to review your goals and asset allocation and to rebalance your portfolio, as necessary, to ensure it remains aligned with your objectives and risk tolerance. As always, we thank you for trusting Merrill Lynch Investment Managers with your investment assets, and we look forward to serving you in the months and years ahead.

Sincerely,

/s/ Robert C. Doll, Jr.

Robert C. Doll, Jr.
President and Director

MUNIVEST FUND, INC.

FEBRUARY 28, 2005

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A Discussion With Your Fund's Portfolio Manager

Fund performance exceeded its comparable Lipper category average for the period, benefiting from a focus on lower-rated, higher-yielding securities -- an area of the municipal market that continued to outperform.

Describe the recent market environment relative to municipal bonds.

Despite broadly positive economic conditions, long-term bond yields declined during the past six months as bond prices, which move opposite yields, generally rose. Gross domestic product (GDP) growth was recently revised to 3.8% for the fourth quarter of 2004, similar to the 4% rate recorded in the third quarter. For 2004 as a whole, real GDP grew at a 4.4% rate, well ahead of 2003's annual rate of 3%. The improving economic activity was largely offset by inflationary trends remaining in the 1.5% - 2% range. Also helping to boost bond prices was strong currency-related demand for long-term U.S. Treasury issues on the part of many foreign governments.

Over the past six months, long-term U.S. Treasury bond yields declined 21 basis points (.21%) to 4.72% at February 28, 2005. However, the Federal Reserve Board (the Fed) continued to raise short-term interest rates, moving its federal funds target rate recently to 2.75%. The Fed's series of interest rate hikes, and the expectation for a continuation of the monetary tightening program, pressured shorter-maturity bond yields higher throughout the period. The yield on the 10-year Treasury note stood at 4.36% at the end of February, an increase of 26 basis points over the six-month period.

A generally positive technical environment supported higher bond prices in the long end of the municipal bond market. Recent bond issuance has been heavily weighted in the 10-year - 20-year maturity range, leading to a moderate scarcity of bonds maturing in 30 years - 35 years. Investor demand was solid throughout the period and increased in the latter months. The most current statistics from the Investment Company Institute indicate that long-term municipal bond funds saw net new cash flows of \$870 million in January 2005. This represented a considerable improvement from January 2004, which experienced net cash outflows of \$224 million. As measured by the Bond Buyer Revenue Bond Index, the yield on A-rated revenue bonds maturing in 30 years declined 16 basis points to 4.93% at the end of February. AAA-rated issues maturing in 30 years, as reported by Municipal Market Data, declined 19 basis points to 4.51%. Conversely, shorter-maturity municipal bond yields increased, responding to rising U.S. Treasury note yields and increased supply pressures. AAA-rated tax-exempt bonds maturing in 10 years yielded 3.65% at the end of February, representing an increase of 15 basis points over the period.

During the past six months, more than \$175 billion in new long-term tax-exempt bonds was underwritten, essentially unchanged versus the same period a year ago. In the last three months, the pace of new issuance increased. Approximately \$91 billion in long-term tax-exempt bonds was issued during that time, an increase of 12% compared to the same three months a year ago. New-issue municipal volume is expected to be easily manageable in early 2005, continuing to support the tax-exempt market's favorable technical position.

Finally, long-term tax-exempt bond yield ratios have remained in the 88% - 95% range relative to taxable bonds, at or above their recent historic average of 85% - 88%. These attractive yield ratios should continue to attract both traditional and non-traditional investors to the municipal market.

How did the Fund perform during the period in light of the existing market conditions?

For the six-month period ended February 28, 2005, the Common Stock of MuniVest Fund, Inc. had net annualized yields of 6.72% and 7.09%, based on a period-end per share net asset value of \$10.09 and a per share market price of \$9.55,

respectively, and \$.336 per share income dividends. Over the same period, the total investment return on the Fund's Common Stock was +5.46%, based on a change in per share net asset value from \$9.91 to \$10.09, and assuming reinvestment of all distributions.

The Fund's total return, based on net asset value, exceeded the +4.96% average return of the Lipper General Municipal Debt Funds (Leveraged) category for the six-month period. (Funds in this Lipper category invest primarily in municipal debt issues rated in the top four credit-rating categories. These funds can be leveraged via use of debt, preferred equity and/or reverse repurchase agreements.) The Fund was able to achieve the outperformance despite its modest defensive positioning during a period when long-term tax-exempt bond yields declined slightly. Benefiting performance over the past six months was the Fund's above-average yield and the continued outperformance of our lower-rated holdings, such as A-rated hospital or corporate-backed debt.

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For a description of the Fund's total investment return based on a change in the per share market value of the Fund's Common Stock (as measured by the trading price of the Fund's shares on the American Stock Exchange), and assuming reinvestment of dividends, please refer to the Financial Highlights section of this report. As a closed-end fund, the Fund's shares may trade in the secondary market at a premium or discount to the Fund's net asset value. As a result, total investment returns based on changes in the market value of the Fund's Common Stock can vary significantly from total investment returns based on changes in the Fund's net asset value.

What changes were made to the portfolio during the period?

Along with a rise in long-term municipal bond prices, we have seen increased demand for higher-yielding tax-exempt securities. In recent months, much of the new net cash flows into municipal bond funds has been directed into "high yield" tax-exempt funds. The demand in this area of the market has helped generate significant price appreciation for the Fund's lower-rated issues. We will be monitoring the price improvement of these lower-rated issues. Should it continue and/or intensify, we would look to reduce some of the Fund's exposure to lower-rated issues. Higher-quality securities could then be purchased at historically attractive yield differentials.

During the period, we also took advantage of the continued appreciation in California state-related issues. Overall exposure to these bonds was reduced by approximately 2.5%, allowing the Fund to benefit from the recent price improvements. The proceeds from the sales were largely invested in New Jersey securities, where we found an attractive buying opportunity as supply increased and prices fell. Specifically, a number of large New Jersey issues were marketed in early October 2004, resulting in a temporary increase in New Jersey municipal bond yields.

For the six-month period ended February 28, 2005, the Fund's Auction Market Preferred Stock (AMPS) had average yields as follows: Series A, 1.38%; Series B, 1.60%; Series C, 1.71%; Series D, 1.36%; Series E, 1.53%; and Series F, 1.60%. Continued short-term interest rate increases by the Fed have modestly boosted the Fund's borrowing costs throughout the past six months. While we believe the majority of the Fed's monetary tightening actions have already occurred, we expect additional increases in the federal funds rate until at least midyear. Despite the recent rate hikes, the Fund's borrowing costs remain quite low on a historical basis and the leveraging of the Preferred Stock has continued to generate a material income benefit to the Fund's Common Stock shareholders. However, should the spread between short-term and long-term interest rates narrow, the benefits of leverage will decline and, as a result, reduce the yield on the Fund's Common Stock. At the end of the period, the Fund's leverage amount, due to AMPS, was 35.04% of total net assets. (For a more complete explanation of the benefits and risks of leveraging, see page 2 of this report to shareholders.)

How would you characterize the Fund's position at the close of the period?

The Fund ended the period with a defensive posture, and we expect to maintain that structure in the coming months. Rising short-term interest rates, an expanding domestic economy, and increasing commodity prices (especially oil) are all textbook indicators for rising long-term interest rates.

Nevertheless, bond yields are still near their historic lows and, under the circumstances, we believe the more prudent strategy is to maintain our emphasis on higher-yielding issues rather than more interest rate-sensitive securities. The Fund also will remain fully invested in order to enhance shareholder income. Given the municipal bond market's strong technical position, including favorable supply/demand dynamics, we expect the tax-exempt market to perform well relative to its taxable counterpart.

Fred K. Stuebe

March 24, 2005

MUNIVEST FUND, INC.

FEBRUARY 28, 2005

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Schedule of Investments

(in Thousands)

<TABLE>

<CAPTION>

State	Face Amount	Municipal Bonds	Value
<S>	<C>	<C>	<C>
Alabama--4.0%	\$ 2,550	Camden, Alabama, IDB, Exempt Facilities Revenue Bonds (Weyerhaeuser Company), Series A, 6.125% due 12/01/2024	\$ 2,762
	7,500	Courtland, Alabama, IDB, Solid Waste Disposal Revenue Bonds (Champion International Corporation Project), AMT, Series A, 6.50% due 9/01/2025	7,786
	3,500	Huntsville, Alabama, Health Care Authority Revenue Bonds: Series A, 5.75% due 6/01/2031	3,683
	5,000	Series B, 5.75% due 6/01/2032	5,326
	5,000	Selma, Alabama, IDB, Environmental Improvement Revenue Refunding Bonds (International Paper Company Project), Series B, 5.50% due 5/01/2020	5,308
Alaska--1.4%	3,575	Anchorage, Alaska, Lease Revenue Bonds (Correctional Facility) (i): 6% due 2/01/2014	4,026
	3,830	6% due 2/01/2016	4,300
	500	Valdez, Alaska, Marine Terminal Revenue Refunding Bonds (BP Pipelines Inc. Project), VRDN, Series B, 1.77% due 7/01/2037 (1)	500
Arizona--1.6%	4,375	Maricopa County, Arizona, IDA, Education Revenue Bonds (Arizona Charter Schools Project 1), Series A, 6.75% due 7/01/2029	4,328
	2,100	Pima County, Arizona, IDA, Education Revenue Bonds (Arizona Charter Schools Project): Series E, 7.25% due 7/01/2031	2,238
	500	Series I, 6.10% due 7/01/2024	507
	1,000	Series I, 6.30% due 7/01/2031	1,011
	1,610	Pima County, Arizona, IDA, Education Revenue Refunding Bonds (Arizona Charter Schools Project II), Series A, 6.75% due 7/01/2021	1,687
California--20.3%	4,000	California State, GO, Refunding, 5% due 3/01/2034 (h)	4,150
	5,000	California State Public Works Board, Lease Revenue Bonds: (Department of Corrections), Series C, 5.50% due 6/01/2022	5,487
	6,000	(Department of Corrections), Series C, 5.50% due 6/01/2023	6,562
	10,775	(Department of Mental Health--Coalinga State Hospital), Series A, 5.125% due 6/01/2029	11,197
	13,570	California State, Various Purpose, GO: 5.50% due 4/01/2030	14,816
	16,250	5.50% due 11/01/2033	17,648
	5,240	California Statewide Communities Development Authority, Health Facility Revenue Bonds (Memorial Health Services), Series A, 6% due 10/01/2023	5,954
	7,280	Golden State Tobacco Securitization Corporation of California, Tobacco Settlement Revenue Bonds: Series A-3, 7.875% due 6/01/2042	8,352
	3,750	Series A-4, 7.80% due 6/01/2042	4,284
	1,375	Series A-5, 7.875% due 6/01/2042	1,577
	13,900	Series B, 5.375% due 6/01/2028	14,576
	8,850	Series B, 5.50% due 6/01/2033	9,530
	15,000	Series B, 5.50% due 6/01/2033 (f)	16,370
	5,000	Series B, 5.50% due 6/01/2043 (f)	5,420
Colorado--2.6%	5,750	Arapahoe County, Colorado, School District Number 005, GO (Cherry Creek): 6% due 12/15/2013	6,470
	4,165	6% due 12/15/2014	4,687
	1,175	Colorado HFA, Revenue Refunding Bonds (S/F Program), AMT, Senior Series A-2: 6.60% due 5/01/2028	1,197
	385	7.50% due 4/01/2031	393
	3,000	Colorado Health Facilities Authority Revenue Bonds (Lutheran Medical Center), Series A, 5.25% due 6/01/2034	3,079

</TABLE>

Portfolio Abbreviations

To simplify the listings of 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 at right.

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
RITR Residual Interest Trust Receipts
S/F Single-Family
VRDN Variable Rate Demand Notes

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Schedule of Investments (continued) (in Thousands)

<TABLE>
<CAPTION>

State	Face Amount	Municipal Bonds	Value
<S>	<C>	<C>	<C>
Connecticut--0.5%	\$ 2,810	Mohegan Tribe Indians Gaming Authority, Connecticut, Public Improvement Revenue Refunding Bonds (Priority Distribution), 6.25% due 1/01/2031	\$ 2,971
Florida--2.8%	6,000	Highlands County, Florida, Health Facilities Authority, Hospital Revenue Bonds (Adventist Health System), Series D, 5.375% due 11/15/2035	6,263
	10,320	Orange County, Florida, Health Facilities Authority, Hospital Revenue Bonds (Adventist Health System), 5.625% due 11/15/2032	10,996
Georgia--3.2%	1,100	Atlanta, Georgia, Water and Wastewater Revenue Bonds, VRDN, Series C, 1.73% due 11/01/2041 (i) (l)	1,100
	4,600	Georgia Municipal Electric Authority, Power Revenue Refunding Bonds: Series W, 6.60% due 1/01/2018	5,526
	250	Series W, 6.60% due 1/01/2018 (e)	302
	250	Series Y, 10% due 1/01/2010 (e)	326
	4,390	Milledgeville-Baldwin County, Georgia, Development Authority Revenue Bonds (Georgia College and State University Foundation): 5.50% due 9/01/2024	4,630
	2,000	5.625% due 9/01/2030	2,092
	4,785	Monroe County, Georgia, Development Authority, PCR, Refunding (Oglethorpe Power Corporation--Scherer), Series A, 6.80% due 1/01/2011	5,558
Idaho--0.2%	915	Idaho Housing Agency, S/F Mortgage Revenue Refunding Bonds, AMT, Series E-2, 6.90% due 1/01/2027	924
Illinois--21.5%	3,005	Chicago, Illinois, GO (Neighborhoods Alive 21 Program), Series A, 6% due 1/01/2016 (f)	3,424
	5,000	Chicago, Illinois, O'Hare International Airport, General Airport Revenue Refunding Bonds, Third Lien, AMT, Series A, 5.75% due 1/01/2019 (c)	5,503
	11,200	Chicago, Illinois, O'Hare International Airport Revenue Bonds, AMT: 3rd Lien, Series B-2, 6% due 1/01/2029 (n)	12,561
	8,540	Series 368, DRIVERS, 9.793% due 7/01/2011 (c) (m)	10,696
	7,000	Chicago, Illinois, O'Hare International Airport Revenue Refunding Bonds, DRIVERS, AMT, Series 253, 9.299% due 1/01/2020 (c) (m)	8,409
	130	Chicago, Illinois, S/F Mortgage Revenue Bonds, AMT, Series C, 7% due 3/01/2032 (b) (d) (k)	132
	5,000	Cook County, Illinois, Community High School District Number 219, Niles Township, GO, 6% due 12/01/2010 (a) (f)	5,703
	10,000	Hodgkins, Illinois, Environmental Improvement Revenue Bonds (Metro Biosolids Management LLC Project), AMT, 6% due 11/01/2023	10,457
	2,140	Illinois Development Finance Authority Revenue Bonds (Community Rehabilitation Providers Facility), Series A, 6.50% due 7/01/2022	2,278
	1,365	Illinois Development Finance Authority, Revenue Refunding Bonds (Community Rehabilitation Providers), Series A, 6% due 7/01/2015	1,418
	3,690	Illinois HDA, Revenue Refunding Bonds (M/F Program), Series 5, 6.75% due 9/01/2023	3,772
	4,000	Illinois State Finance Authority Revenue Bonds (Northwestern University), VRDN, Sub-Series A, 1.83% due 12/01/2034 (l)	4,000
	2,500	Kane, Cook and Du Page Counties, Illinois, School District 46, Elgin, GO, 6.375% due 1/01/2011 (a) (i)	2,915
	5,245	Kane and De Kalb Counties, Illinois, Community Unit School District Number 302, GO, DRIVERS, Series 283, 9.329% due 2/01/2018 (f) (m)	6,709
		McLean and Woodford Counties, Illinois, Community Unit, School District Number 005, GO, Refunding (i): 6.25% due 12/01/2014	5,843
	5,000	6.375% due 12/01/2016	4,697
	4,000	Metropolitan Pier and Exposition Authority, Illinois, Dedicated State Tax and Capital Appreciation Revenue Bonds (McCormick Place Expansion Project), Series A (c):	
	16,000	5.05%** due 12/15/2038	2,809
	26,800	5.06%** due 12/15/2039	4,455

</TABLE>

MUNIVEST FUND, INC. FEBRUARY 28, 2005 7

Schedule of Investments (continued) (in Thousands)

<TABLE>
<CAPTION>

State	Face Amount	Municipal Bonds	Value
<S>	<C>	<C>	<C>
Illinois (concluded)	\$ 3,500	Regional Transportation Authority, Illinois, Revenue Bonds: Series A, 7.20% due 11/01/2020 (h)	\$ 4,556
	4,000	Series C, 7.75% due 6/01/2020 (f)	5,599
	3,000	Will County, Illinois, Environmental Revenue Bonds (Mobil Oil Refining Corporation Project), AMT, 6.40% due 4/01/2026	3,167
		Will County, Illinois, School District Number 122 (New Lenox Elementary), GO, Series A (i):	
	1,475	6.50% due 11/01/2010 (a)	1,728
	505	6.50% due 11/01/2013	586
	395	6.50% due 11/01/2015	458
Indiana--6.7%	1,700	Fort Wayne, Indiana, PCR, Refunding (General Motors Corporation Project), 6.20% due 10/15/2025	1,857
	6,500	Indiana Health Facility Financing Authority, Hospital Revenue Refunding Bonds (Clarian Health Partners Inc.), Series A, 6% due 2/15/2021	6,866
	4,290	Indiana State, HFA, S/F Mortgage Revenue Refunding Bonds, Series A, 6.80% due 1/01/2017 (j)	4,298
	8,195	Indiana Transportation Finance Authority, Highway Revenue Bonds, Series A, 6.80% due 12/01/2016	10,054
	15,335	Indianapolis, Indiana, Local Public Improvement Bond, Bank Revenue Refunding Bonds, Series D, 6.75% due 2/01/2014 (e)	18,278
Kansas--0.7%	3,805	Sedgwick and Shawnee Counties, Kansas, S/F Mortgage Revenue Bonds (Mortgage-Backed Securities Program), AMT, Series A-4, 5.95% due 12/01/2033 (b) (d)	4,011
Louisiana--2.5%	4,000	De Soto Parish, Louisiana, Environmental Improvement Revenue Refunding Bonds (International Paper Co. Project), AMT, Series B, 6.55% due 4/01/2019	4,117
	10,575	Louisiana Local Government, Environmental Facilities, Community Development Authority Revenue Bonds (Capital Projects and Equipment Acquisition), Series A, 6.30% due 7/01/2030 (h)	11,597
Maine--0.3%		Portland, Maine, Housing Development Corporation, Senior Living Revenue Bonds (Avesta Housing Development Corporation Project), Series A:	
	775	5.70% due 8/01/2021	771
	1,190	6% due 2/01/2034	1,182
Massachusetts--7.6%	2,035	Boston, Massachusetts, Water and Sewer Commission Revenue Bonds, 9.25% due 1/01/2011 (e)	2,624
	3,010	Massachusetts Bay Transportation Authority, Revenue Refunding Bonds (General Transportation System), Series A, 7% due 3/01/2019	3,825
	30,000	Massachusetts State Water Resource Authority Revenue Bonds, Series A, 6.50% due 7/15/2019	36,512
		Massachusetts State Water Resource Authority, Revenue Refunding Bonds, Series A (f):	
	1,000	6% due 8/01/2014	1,144
	2,480	6% due 8/01/2017	2,832
Michigan--4.1%	7,695	Delta County, Michigan, Economic Development Corporation, Environmental Improvement Revenue Refunding Bonds (Mead Westvaco-Escanaba), Series A, 6.25% due 4/15/2027	8,751
		Macomb County, Michigan, Hospital Finance Authority, Hospital Revenue Bonds (Mount Clemens General Hospital), Series B:	
	3,715	5.75% due 11/15/2025	3,571
	5,250	5.875% due 11/15/2034	4,992
	1,900	Michigan State Hospital Finance Authority, Hospital Revenue Refunding Bonds (Crittenton Hospital), Series A, 5.625% due 3/01/2027	2,023
		Michigan State Hospital Finance Authority, Revenue Refunding Bonds:	
	390	(Ascension Health Credit), Series A, 6.125% due 11/15/2009 (a)	445
	3,000	(Ascension Health Credit), Series A, 6.125% due 11/15/2009 (a) (c)	3,420
	1,300	(Detroit Medical Center Obligation Group), Series A, 6.25% due 8/15/2013	1,300
	1,000	(Sinai Hospital), 6.70% due 1/01/2026	1,011

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<TABLE> <CAPTION>				
State	Face Amount	Municipal Bonds		Value
<S>	<C>	<C>		<C>
Minnesota--1.5%	\$ 7,235	Minneapolis, Minnesota, Health Care System Revenue Bonds (Allina Health System), Series A, 5.75% due 11/15/2032		\$ 7,674
	1,405	Saint Cloud, Minnesota, Health Care Revenue Refunding Bonds (Saint Cloud Hospital Obligation Group), Series A, 6.25% due 5/01/2017 (i)		1,608
Mississippi--4.9%		Lowndes County, Mississippi, Solid Waste Disposal and PCR, Refunding (Weyerhaeuser Company Project):		
	3,900	Series A, 6.80% due 4/01/2022		4,718
	4,000	Series B, 6.70% due 4/01/2022		4,793
	20,705	Mississippi Business Finance Corporation, Mississippi, PCR, Refunding (System Energy Resources Inc. Project), 5.875% due 4/01/2022		20,882
Missouri--0.5%	2,600	Missouri State Development Finance Board, Infrastructure Facilities Revenue Refunding Bonds (Branson), Series A, 5.50% due 12/01/2032		2,722
	340	Missouri State Housing Development Commission, S/F Mortgage Revenue Bonds (Homeowner Loan), AMT, Series A, 7.50% due 3/01/2031 (b) (d)		346
Montana--1.0%	6,000	Forsyth, Montana, PCR, Refunding (Portland General Electric Company), Series A, 5.20% due 5/01/2033		6,336
Nebraska--0.1%	810	Nebraska Investment Finance Authority, S/F Housing Revenue Bonds, AMT, Series C, 6.30% due 9/01/2028 (b) (d) (k)		829
Nevada--2.2%	6,700	Clark County, Nevada, IDR (Power Company Project), AMT, Series A, 6.70% due 6/01/2022 (f)		6,821
	1,600	Clark County, Nevada, Public Safety, GO, 6% due 3/01/2010 (a)		1,818
	3,475	Nevada Housing Division, Multi-Unit Housing Revenue Bonds, AMT, 6.60% due 10/01/2023 (b):		
	1,235	(Arville Electric Project), 6.60% due 10/01/2023		3,593
		Issue B, 7.45% due 10/01/2017		1,262
	265	Nevada Housing Division Revenue Bonds (S/F Program), AMT (j):		
	95	Senior Series E, 7% due 10/01/2019		271
		Series A, 6.55% due 10/01/2012		95
New Hampshire--0.5%	2,675	New Hampshire Health and Education Facilities Authority, Revenue Refunding Bonds (Elliot Hospital), Series B, 5.60% due 10/01/2022		2,789
New Jersey--5.1%		New Jersey EDA, Cigarette Tax Revenue Bonds:		
	9,080	5.50% due 6/15/2024		9,552
	2,885	5.75% due 6/15/2029		3,066
	2,855	5.50% due 6/15/2031		2,960
	6,695	5.75% due 6/15/2034		7,095
	8,480	Tobacco Settlement Financing Corporation of New Jersey Revenue Bonds, 7% due 6/01/2041		9,099
New Mexico--0.5%	3,300	Farmington, New Mexico, PCR, Refunding (Public Service Company--San Juan Project), Series A, 5.80% due 4/01/2022		3,380
New York--11.8%		New York City, New York, City Municipal Water Finance Authority, Water and Sewer System Revenue Refunding Bonds, Series B:		
	13,405	5% due 6/15/2036		13,867
	7,000	5% due 6/15/2036 (i)		7,275
	7,875	New York City, New York, City Transitional Finance Authority Revenue Bonds, RIB, Series 283, 5% due 5/15/2010 (a) (m)		10,271
		New York City, New York, GO:		
	760	Series D, 5% due 11/01/2034		785
	7,150	Series F, 5.25% due 1/15/2033		7,551
	2,200	Series I, 6.25% due 4/15/2007 (a) (n)		2,387
	380	Series I, 6.25% due 4/15/2017 (n)		411
	630	Series I, 6.25% due 4/15/2027 (n)		679
		New York City, New York, GO, Refunding:		
	7,035	Series A, 6.375% due 5/15/2010 (a) (f)		8,211
	965	Series A, 6.375% due 5/15/2014 (f)		1,118
	4,000	Series G, 5% due 12/01/2033		4,134
		New York State Dormitory Authority, Revenue Refunding Bonds:		
	1,000	(Mount Sinai Health), Series A, 6.50% due 7/01/2025		1,048
	11,875	RIB, Series 305, 9.84% due 5/15/2015 (c) (m)		15,208
	200	New York State Local Government Assistance Corporation, Revenue Refunding Bonds, Sub-Lien, VRDN, Series A-5V, 1.80% due 4/01/2020 (i) (l)		200

</TABLE>

<TABLE>			
<CAPTION>			
State	Face Amount	Municipal Bonds	Value
=====			
<S>	<C>	<C>	<C>
Oregon--1.0%	\$ 2,000	Portland, Oregon, Airport Way, Urban Renewal and Redevelopment Tax Allocation Refunding Bonds, Series A, 6% due 6/15/2015 (h)	\$ 2,267
	3,305	Portland, Oregon, Sewer System Revenue Bonds, RIB, Series 386, 9.96% due 8/01/2020 (f) (m)	4,068
=====			
Pennsylvania--4.1%	2,440	Pennsylvania State Higher Education Assistance Agency Revenue Bonds, Capital Acquisition, 6.125% due 12/15/2010 (a) (c)	2,820
	6,250	Pennsylvania State Higher Educational Facilities Authority Revenue Bonds (University of Pennsylvania Medical Center Health System), Series A, 6% due 1/15/2031	6,853
		Philadelphia, Pennsylvania, Authority for Industrial Development, Senior Living Revenue Bonds:	
	1,000	(Arbor House Inc. Project), Series E, 6.10% due 7/01/2033	970
	1,355	(Rieder House Project), Series A, 6.10% due 7/01/2033	1,314
	700	Philadelphia, Pennsylvania, Water and Wastewater Revenue Refunding Bonds, VRDN, 1.85% due 6/15/2023 (i) (l)	700
	9,280	Sayre, Pennsylvania, Health Care Facilities Authority Revenue Bonds (Guthrie Health Issue), Series B, 7.125% due 12/01/2031	10,973
1,750	Sayre, Pennsylvania, Health Care Facilities Authority, Revenue Refunding Bonds (Guthrie Healthcare System), Series A, 6.25% due 12/01/2018	1,920	
=====			
South Carolina--1.9%	3,500	Lexington County, South Carolina, Health Services District Inc., Hospital Revenue Refunding and Improvement Bonds, 5.50% due 11/01/2032	3,660
	2,450	Medical University Hospital Authority, South Carolina, Hospital Facilities Revenue Refunding Bonds, 6.50% due 8/15/2012 (a)	2,942
	5,000	Richland County, South Carolina, Environmental Improvement Revenue Refunding Bonds (International Paper), AMT, 6.10% due 4/01/2023	5,367
	=====		
Tennessee--1.6%	2,000	McMinn County, Tennessee, IDB, Solid Waste Revenue Bonds (Recycling Facility--Calhoun Newsprint), AMT, 7.40% due 12/01/2022	2,011
		Shelby County, Tennessee, Health, Educational and Housing Facility Board, Hospital Revenue Refunding Bonds (Methodist Healthcare):	
	4,120	6.50% due 9/01/2012 (a)	4,932
	2,380	6.50% due 9/01/2026 (e)	2,848
=====			
Texas--19.9%		Austin, Texas, Convention Center Revenue Bonds (Convention Enterprises Inc.), First Tier, Series A:	
	6,000	6.70% due 1/01/2028	6,407
	1,290	6.70% due 1/01/2032	1,368
		Brazos River Authority, Texas, PCR, Refunding, AMT:	
	3,000	(Texas Utilities Electric Company Project), Series B, 5.40% due 5/01/2029	3,081
	3,055	(Texas Utility Company), Series A, 7.70% due 4/01/2033	3,605
	11,870	(Utilities Electric Company), Series B, 5.05% due 6/01/2030	12,100
	11,460	Brazos River, Texas, Harbor Navigation District, Brazoria County Environmental Revenue Refunding Bonds (Dow Chemical Company Project), AMT, Series A-7, 6.625% due 5/15/2033	12,614
	5,750	Dallas, Texas, Independent School District, GO, Refunding, Series A, 5% due 8/15/2031	5,969
	3,000	Gregg County, Texas, Health Facilities Development Corporation, Hospital Revenue Bonds (Good Shepherd Medical Center Project), 6.875% due 10/01/2020 (g)	3,480
	10,250	Guadalupe-Blanco River Authority, Texas, Sewage and Solid Waste Disposal Facility Revenue Bonds (E. I. du Pont de Nemours and Company Project), AMT, 6.40% due 4/01/2026	10,774
3,000	Gulf Coast, Texas, Waste Disposal Authority, Revenue Refunding Bonds (International Paper Company), AMT, Series A, 6.10% due 8/01/2024	3,190	
5,500	Harris County, Houston, Texas, Sports Authority, Revenue Refunding Bonds, Senior Lien, Series G, 5.75% due 11/15/2020 (c)	6,120	
10,385	Harris County, Texas, Health Facilities Development Corporation, Revenue Refunding Bonds, RITR, Series 6, 8.965% due 12/01/2027 (e) (m)	14,267	
1,795	Houston, Texas, Industrial Development Corporation Revenue Bonds (Air Cargo), AMT, 6.375% due 1/01/2023	1,848	
</TABLE>			

10 MUNIVEST FUND, INC. FEBRUARY 28, 2005

<TABLE>			
<CAPTION>			
State	Face Amount	Municipal Bonds	Value

<S>	<C>	<C>	<C>
Texas (concluded)	\$ 1,500	Katy, Texas, Independent School District, GO, Refunding, Series A, 5% due 2/15/2032	\$ 1,554
	2,030	Mansfield, Texas, Independent School District, GO, Refunding, 6.625% due 2/15/2015	2,332
	9,355	Matagorda County, Texas, Navigation District Number 1, Revenue Refunding Bonds (Centerpoint Energy Project), 5.60% due 3/01/2027	9,675
	5,225	Midway, Texas, Independent School District, GO, Refunding, 6.125% due 8/15/2014	5,955
	5,400	Port Corpus Christi, Texas, Revenue Refunding Bonds (Celanese Project), Series A, 6.45% due 11/01/2030	5,596
	5,000	Red River Authority, Texas, PCR, Refunding (Celanese Project), AMT, Series B, 6.70% due 11/01/2030	5,301
	6,250	San Antonio, Texas, Electric and Gas Revenue Bonds, RIB, Series 469x, 9.37% due 2/01/2014 (m)	7,798
Vermont--0.2%	1,000	Vermont Educational and Health Buildings Financing Agency, Developmental and Mental Health Revenue Bonds (Howard Center for Human Services), Series A, 6.375% due 6/15/2022	1,056
Virginia--0.9%	1,425	Chesterfield County, Virginia, IDA, PCR (Virginia Electric and Power Company), Series A, 5.875% due 6/01/2017	1,564
	1,500	Isle of Wight County, Virginia, IDA, Solid Waste Disposal Facilities Revenue Bonds (Union Camp Corporation Project), AMT, 6.55% due 4/01/2024	1,535
	2,440	Virginia State, HDA, Commonwealth Mortgage Revenue Bonds, Series J, Sub-Series J-1, 5.20% due 7/01/2019 (c)	2,479
Washington--8.3%		Energy Northwest, Washington, Electric Revenue Refunding Bonds, DRIVERS (m):	
	5,330	Series 248, 9.329% due 7/01/2018 (c)	6,730
	3,510	Series 255, 9.825% due 7/01/2018 (h)	4,544
	7,350	Series 256, 9.829% due 7/01/2017 (c)	9,546
	2,440	Seattle, Washington, Housing Authority Revenue Bonds (Replacement Housing Project), 6.125% due 12/01/2032	2,416
	8,100	Washington State, GO, Trust Receipts, Class R, Series 6, 9.744% due 1/01/2014 (i) (m)	10,064
	14,320	Washington State Public Power Supply System, Revenue Refunding Bonds (Nuclear Project Number 1), Series B, 7.125% due 7/01/2016	18,254
Wisconsin--2.7%	4,465	Badger Tobacco Asset Securitization Corporation, Wisconsin, Asset-Backed Revenue Bonds, 6.125% due 6/01/2027	4,588
	1,765	Milwaukee, Wisconsin, Revenue Bonds (Air Cargo), AMT, 6.50% due 1/01/2025	1,788
	5,000	Wisconsin State Health and Educational Facilities Authority, Mortgage Revenue Bonds (Hudson Memorial Hospital), 5.70% due 1/15/2029 (j)	5,316
	4,540	Wisconsin State Health and Educational Facilities Authority Revenue Bonds (Synergyhealth Inc.), 6% due 11/15/2032	4,760
Wyoming--2.1%		Sweetwater County, Wyoming, Solid Waste Disposal Revenue Bonds (FMC Corporation Project), AMT:	
	5,425	Series A, 7% due 6/01/2024	5,511
	7,475	Series B, 6.90% due 9/01/2024	7,577

</TABLE>

MUNIVEST FUND, INC. FEBRUARY 28, 2005 11

Schedule of Investments (concluded) (in Thousands)

<TABLE> <CAPTION>	Face Amount	Municipal Bonds	Value
<S>	<C>	<C>	<C>
U.S. Virgin Islands--1.4%	\$ 8,000	Virgin Islands Government Refinery Facilities, Revenue Refunding Bonds (Hovensa Coker Project), AMT, 6.50% due 7/01/2021	\$ 8,756
Total Investments (Cost--\$865,623*)--152.2%			942,363
Other Assets Less Liabilities--1.7%			10,757
Preferred Stock, at Redemption Value--(53.9%)			(334,021)
Net Assets Applicable to Common Stock--100.0%			\$ 619,099

</TABLE>

* The cost and unrealized appreciation (depreciation) of investments as of February 28, 2005, as computed for federal income tax purposes, were as follows:

(in Thousands)

Aggregate cost	\$ 865,633
	=====
Gross unrealized appreciation	\$ 77,823
Gross unrealized depreciation	(1,093)

Net unrealized appreciation	\$ 76,730
	=====

** Represents a zero coupon bond; the interest rate shown reflects the effective yield at the time of purchase by the Fund.

- (a) Prerefunded.
- (b) FNMA Collateralized.
- (c) MBIA Insured.
- (d) 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 has a maturity of more than one year, but has variable rate and demand features which 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.

Investments in companies considered to be an affiliate of the Fund (such companies are defined as "Affiliated Companies" in Section 2(a)(3) of the Investment Company Act of 1940) were as follows:

(in Thousands)

Affiliate	Net Activity	Dividend Income
Merrill Lynch Institutional Tax-Exempt Fund	(37,658)	\$ 96

Forward interest rate swaps outstanding as of February 28, 2005 were as follows:

(in Thousands)

	Notional Amount	Unrealized Appreciation
Receive a variable rate equal to 7-Day Bond Market Association Municipal Swap Index Rate and pay a fixed rate of 3.63%		
Broker, JPMorgan Chase Bank Expires March 2015	\$ 7,000	\$ 28
Receive a variable rate equal to 7-Day Bond Market Association Municipal Swap Index Rate and pay a fixed rate of 3.688%		
Broker, JPMorgan Chase Bank Expires April 2015	\$24,000	9
Receive a variable rate equal to 7-Day Bond Market Association Municipal Swap Index Rate and pay a fixed rate of 3.565%		
Broker, JPMorgan Chase Bank Expires April 2015	\$43,500	483
Receive a variable rate equal to 7-Day Bond Market Association Municipal Swap Index Rate and pay a fixed rate of 3.567%		
Broker, JPMorgan Chase Bank Expires May 2015	\$20,200	244

See Notes to Financial Statements.

12 MUNIVEST FUND, INC. FEBRUARY 28, 2005

Statement of Net Assets

<TABLE>

As of February 28, 2005

Assets		
<S>	<C>	<C>
Investments in unaffiliated securities, at value (identified cost--\$865,622,979)		\$ 942,362,896
Cash		7,457,275
Unrealized appreciation on forward interest rate swaps		763,744
Receivables:		
Securities sold	\$ 20,035,396	
Interest	13,441,438	33,476,834
Prepaid expenses		21,931
Total assets		984,082,680

Liabilities

Payables:		
Securities purchased	30,089,176	
Dividends to Common Stock shareholders	417,445	
Investment adviser	289,130	
Other affiliates	8,405	30,804,156
Accrued expenses and other liabilities		158,573
Total liabilities		30,962,729

Preferred Stock

Preferred Stock, at redemption value, par value \$.025 per share; 10,000,000 shares authorized (2,000 Series A Shares, 2,000 Series B Shares, 2,000 Series C Shares, 2,000 Series D Shares, 3,000 Series E Shares and 2,360 Series F Shares of AMPS*, issued and outstanding at \$25,000 per share liquidation preference)		334,020,815
--	--	-------------

Net Assets Applicable to Common Stock

Net assets applicable to Common Stock		\$ 619,099,136
---	--	----------------

Analysis of Net Assets Applicable to Common Stock

Common Stock, par value \$.10 per share; 150,000,000 shares authorized (61,346,288 shares issued and outstanding)		\$ 6,134,629
Paid-in capital in excess of par		564,457,899
Undistributed investment income--net	\$ 10,345,347	
Accumulated realized capital losses--net	(39,342,400)	
Unrealized appreciation--net	77,503,661	
Total accumulated earnings--net		48,506,608
Total--Equivalent to \$10.09 net asset value per share of Common Stock (market price--\$9.55)		\$ 619,099,136

</TABLE>

* Auction Market Preferred Stock.

See Notes to Financial Statements.

MUNIVEST FUND, INC. FEBRUARY 28, 2005

13

Statement of Operations

<TABLE>

Investment Income

<S>	<C>	<C>
Interest		\$ 25,893,265
Dividends from affiliates		96,058
Total income		25,989,323

Expenses

Investment advisory fees	\$ 2,352,467	
Commission fees	419,551	
Accounting services	133,594	
Transfer agent fees	58,551	
Professional fees	27,791	
Printing and shareholder reports	23,816	
Custodian fees	22,966	
Directors' fees and expenses	16,456	
Pricing fees	15,693	
Listing fees	12,273	
Other	22,711	
Total expenses before reimbursement	3,105,869	
Reimbursement of expenses	(13,941)	
Total expenses after reimbursement		3,091,928
Investment income--net		22,897,395

Realized & Unrealized Gain (Loss)--Net

Realized gain (loss) on:		
Investments--net	2,189,716	
Forward interest rate swaps--net	(2,505,950)	(316,234)
Change in unrealized appreciation (depreciation) on:		
Investments--net	9,476,438	
Forward interest rate swaps--net	2,350,506	11,826,944
Total realized and unrealized gain--net		11,510,710

Dividends to Preferred Stock Shareholders

Investment income--net		(2,538,250)
Net Increase in Net Assets Resulting from Operations		\$ 31,869,855

</TABLE>

See Notes to Financial Statements.

Statements of Changes in Net Assets

<TABLE>
<CAPTION>

	For the Six Months Ended February 28, 2005	For the Year Ended August 31, 2004
Increase (Decrease) in Net Assets:		
Operations		
Investment income--net	\$ 22,897,395	\$ 44,466,102
Realized gain (loss)--net	(316,234)	2,139,538
Change in unrealized appreciation (depreciation)--net	11,826,944	19,875,698
Dividends to Preferred Stock shareholders	(2,538,250)	(2,612,850)
Net increase in net assets resulting from operations	31,869,855	63,868,488
Dividends to Common Stock Shareholders		
Investment income--net	(20,612,353)	(40,304,511)

Net decrease in net assets resulting from dividends to Common Stock shareholders	(20,612,353)	(40,304,511)
---	--------------	--------------

Capital Stock Transactions

Offering and underwriting costs resulting from issuance of Preferred Stock	--	(744,726)
Net decrease in net assets resulting from capital stock transactions	--	(744,726)

Net Assets Applicable to Common Stock

Total increase in net assets applicable to Common Stock	11,257,502	22,819,251
Beginning of period	607,841,634	585,022,383
End of period*	\$ 619,099,136	\$ 607,841,634
* Undistributed investment income--net	\$ 10,345,347	\$ 10,598,555

</TABLE>

See Notes to Financial Statements.

MUNIVEST FUND, INC. FEBRUARY 28, 2005 15

Financial Highlights

<TABLE>
<CAPTION>

The following per share data and ratios have been derived from information provided in the financial statements.	For the Six Months Ended February 28,		For the Year Ended August 31,		
	2005	2004	2003	2002	2001
Per Share Operating Performance					
<S>	<C>	<C>	<C>	<C>	<C>
Net asset value, beginning of period	\$ 9.91	\$ 9.54	\$ 9.76	\$ 9.71	\$ 9.07
Investment income--net .....	.37+	.72+	.72+	.69	.69
Realized and unrealized gain (loss)--net	.19	.36	(.26)	.02	.65
Dividends to Preferred Stock shareholders from investment income--net	(.04)	(.04)	(.05)	(.07)	(.16)
Total from investment operations .....	.52	1.04	.41	.64	1.18
Less dividends to Common Stock shareholders from investment income--net	(.34)	(.66)	(.63)	(.59)	(.54)
Offering costs resulting from the issuance of Preferred Stock	--	(.01)	--	--	--
Net asset value, end of period	\$ 10.09	\$ 9.91	\$ 9.54	\$ 9.76	\$ 9.71
Market price per share, end of period ...	\$ 9.55	\$ 9.30	\$ 8.80	\$ 9.11	\$ 9.30
Total Investment Return++					
Based on net asset value per share	5.46% ⁰	11.60%	4.79%	7.28%	13.89%
Based on market price per share	6.37% ⁰	13.53%	3.56%	4.55%	19.92%
Ratios Based on Average Net Assets of Common Stock					
Total expenses, net of reimbursement** ..	1.01%*	.94%	.95%	.95%	.98%
Total expenses**	1.02%*	.95%	.96%	.95%	.98%
Total investment income--net**	7.51%*	7.37%	7.33%	7.33%	7.37%
Amount of dividends to Preferred Stock shareholders .....	.83%*	.43%	.50%	.75%	1.70%
Investment income--net, to Common Stock shareholders	6.68%*	6.94%	6.83%	6.58%	5.67%

</TABLE>

Financial Highlights (concluded)

<TABLE>
<CAPTION>

The following per share data and ratios have been derived from information provided in the financial statements.	For the Six Months Ended	For the Year Ended August 31,			
	February 28, 2005	2004	2003	2002	2001
Ratios Based on Average Net Assets of Common & Preferred Stock**					
<S>	<C>	<C>	<C>	<C>	<C>
Total expenses, net of reimbursement ....	.66%*	.65%	.65%	.65%	.66%
Total expenses .....	.66%*	.65%	.66%	.65%	.66%
Total investment income--net	4.87%*	5.06%	5.03%	4.98%	4.98%
Ratios Based on Average Net Assets of Preferred Stock					
Dividends to Preferred Stock shareholders	1.53%*	.95%	1.11%	1.59%	3.53%
Supplemental Data					
Net assets applicable to Common Stock, end of period (in thousands)	\$619,099	\$607,842	\$585,022	\$598,816	\$595,908
Preferred Stock outstanding, end of period (in thousands)	\$334,000	\$334,000	\$275,000	\$275,000	\$275,000
Portfolio turnover	23.98%	45.33%	44.30%	74.00%	74.80%
Leverage					
Asset coverage per \$1,000	\$ 2,854	\$ 2,820	\$ 3,127	\$ 3,178	\$ 3,167
Dividends Per Share on Preferred Stock Outstanding					
Series A--Investment income--net	\$ 171	\$ 244	\$ 266	\$ 388	\$ 909
Series B--Investment income--net	\$ 199	\$ 238	\$ 278	\$ 394	\$ 923
Series C--Investment income--net	\$ 212	\$ 239	\$ 269	\$ 391	\$ 906
Series D--Investment income--net	\$ 169	\$ 242	\$ 306	\$ 445	\$ 877
Series E--Investment income--net	\$ 190	\$ 229	\$ 269	\$ 372	\$ 851
Series F***--Investment income--net	\$ 198	--	--	--	--

</TABLE>

* Annualized
 ** Do not reflect the effect of dividends to Preferred Stock shareholders.
 *** Series F was issued on August 31, 2004.
 + Based on average shares outstanding.
 ++ Total investment returns based on market value, which can be significantly greater or lesser than the net asset value, may result in substantially different returns. Total investment returns exclude the effects of sales charges.
 @ Aggregate total investment return.
 See Notes to Financial Statements.

Notes to Financial Statements

1. Significant Accounting Policies:

MuniVest Fund, Inc. (the "Fund") is registered under the Investment Company Act of 1940, as amended, as a non-diversified, closed-end management investment company. The Fund's financial statements are prepared in conformity with U.S. generally accepted accounting principles, which may require the use of

management accruals and estimates. Actual results may differ from these estimates. These unaudited financial statements reflect all adjustments, which are, in the opinion of management, necessary to present a fair statement of the results for the interim period. All such adjustments are of a normal, recurring nature. The Fund determines and makes available for publication the net asset value of its Common Stock on a daily basis. The Fund's Common Stock is listed on the American Stock Exchange under the symbol MVF. The following is a summary of significant accounting policies followed by the Fund.

(a) Valuation of investments -- Municipal bonds are traded primarily in the over-the-counter markets and are valued at the last available bid price in the over-the-counter market or on the basis of values as obtained by a pricing service. Pricing services use valuation matrixes that incorporate both dealer-supplied valuations and valuation models. The procedures of the pricing service and its valuations are reviewed by the officers of the Fund under the general direction of the Board of Directors. Such valuations and procedures are reviewed periodically by the Board of Directors of the Fund. Financial futures contracts and options thereon, which are traded on exchanges, are valued at their closing prices as of the close of such exchanges. Options written or purchased are valued at the last sale price in the case of exchange-traded options. In the case of options traded in the over-the-counter market, valuation is the last asked price (options written) or the last bid price (options purchased). Swap agreements are valued by quoted fair values received daily by the Fund's pricing service. Short-term investments with a remaining maturity of 60 days or less are valued at amortized cost, which approximates market value, under which method the investment is valued at cost and any premium or discount is amortized on a straight line basis to maturity. Investments in open-end investment companies are valued at their net asset value each business day. Securities and other assets for which market quotations are not readily available are valued at fair value as determined in good faith by or under the direction of the Board of Directors of the Fund.

(b) Derivative financial instruments -- The Fund may engage in various portfolio investment strategies both to increase the return of the Fund and to hedge, or protect its exposure to interest rate movements and movements in the securities markets. Losses may arise due to changes in the value of the contract or if the counterparty does not perform under the contract.

o Financial futures contracts -- The Fund may purchase or sell financial futures contracts and options on such futures contracts. Futures contracts are contracts for delayed delivery of securities at a specific future date and at a specific price or yield. Upon entering into a contract, the Fund deposits and maintains as collateral such initial margin as required by the exchange on which the transaction is effected. Pursuant to the contract, the Fund agrees to receive from or pay to the broker an amount of cash equal to the daily fluctuation in value of the contract. Such receipts or payments are known as variation margin and are recorded by the Fund as unrealized gains or losses. When the contract is closed, the Fund records a realized gain or loss equal to the difference between the value of the contract at the time it was opened and the value at the time it was closed.

o Options -- The Fund may purchase and write call and put options. When the Fund writes an option, an amount equal to the premium received by the Fund is reflected as an asset and an equivalent liability. The amount of the liability is subsequently marked-to-market to reflect the current market value of the option written. When a security is purchased or sold through an exercise of an option, the related premium paid (or received) is added to (or deducted from) the basis of the security acquired or deducted from (or added to) the proceeds of the security sold. When an option expires (or the Fund enters into a closing transaction), the Fund realizes a gain or loss on the option to the extent of the premiums received or paid (or gain or loss to the extent the cost of the closing transaction exceeds the premium paid or received).

Written and purchased options are non-income producing investments.

o Forward interest rate swaps -- The Fund may enter into forward interest rate swaps. In a forward interest rate swap, the Fund and the counterparty agree to make periodic net payments on a specified notional contract amount, commencing on a specified future effective date, unless terminated earlier. When the agreement is closed, the Fund records a realized gain or loss in an amount equal to the value of the agreement.

Notes to Financial Statements (concluded)

(c) Income taxes -- It is the Fund's policy to comply with the requirements of the Internal Revenue Code applicable to regulated investment companies and to distribute substantially all of its taxable income to its shareholders. Therefore, no federal income tax provision is required.

(d) Security transactions and investment income -- Security transactions are recorded on the dates the transactions are entered into (the trade dates). Realized gains and losses on security transactions are determined on the identified cost basis. Dividend income is recorded on the ex-dividend dates. Interest income is recognized on the accrual basis. The Fund amortizes all premiums and discounts on debt securities.

(e) Dividends and distributions -- Dividends from net investment income are declared and paid monthly. Distributions of capital gains are recorded on the ex-dividend dates.

2. Investment Advisory Agreement and Transactions with Affiliates:

The Fund has entered into an Investment Advisory Agreement with Fund Asset Management, L.P. ("FAM"). The general partner of FAM is Princeton Services, Inc. ("PSI"), an indirect, wholly-owned subsidiary of Merrill Lynch & Co. ("ML & Co."), which is the limited partner.

FAM is responsible for the management of the Fund's portfolio and provides the necessary personnel, facilities, equipment and certain other services necessary to the operations of the Fund. For such services, the Fund pays a monthly fee at an annual rate of .50% of the Fund's average daily net assets, including assets acquired from the sale of Preferred Stock. The Investment Adviser has agreed to waive its management fee by the amount of management fees the Fund pays to FAM indirectly through its investment in the Merrill Lynch Institutional Tax-Exempt Fund. For the six months ended February 28, 2005, FAM reimbursed the Fund in the amount of \$13,941.

For the six months ended February 28, 2005, the Fund reimbursed FAM \$9,886 for certain accounting services.

Certain officers and/or directors of the Fund are officers and/or directors of FAM, PSI, and/or ML & Co.

3. Investments:

Purchases and sales of investments, excluding short-term securities, for the six months ended February 28, 2005, were \$252,223,863 and \$221,777,394 respectively.

4. Capital Stock Transactions:

Common Stock

At February 28, 2005, the Fund had one class of shares of Common Stock, par value \$.10 per share, of which 150,000,000 shares were authorized.

Preferred Stock

Auction Market Preferred Stock are redeemable shares of Preferred Stock of the Fund with a par value of \$.025 per share and a liquidation preference of \$25,000 per share plus accrued and unpaid dividends, that entitle their holders to receive cash dividends at an annual rate that may vary for the successive dividend periods for each series. The Fund is authorized to issue 10,000,000 shares of Preferred Stock. The yields in effect at February 28, 2005 were as follows: Series A, 1.85%; Series B, 1.84%; Series C, 1.859%; Series D, 1.809%; Series E, 1.80%; and Series F, 1.84%.

Shares issued and outstanding for the six months ended February 28, 2005 remained constant. During the year ended August 31, 2004, shares increased by 2,360 shares from the issuance of an additional series of Preferred Stock.

The Fund pays commissions to certain broker-dealers at the end of each auction at an annual rate ranging from .25% to .375% calculated on the proceeds of each auction. For the six months ended February 28, 2005, Merrill Lynch, Pierce, Fenner & Smith Incorporated, an affiliate of FAM, received \$207,835 as commissions.

5. Capital Loss Carryforward:

On August 31, 2004, the Fund had a net capital loss carryforward of \$25,236,756, of which \$7,556,873 expires in 2008 and \$17,679,883 expires in 2009. This amount will be available to offset like amounts of any future taxable gains.

6. Subsequent Event:

The Fund paid a tax-exempt income dividend to holders of Common Stock in the amount of \$.056000 per share payable on March 30, 2005 to shareholders of record on March 15, 2005.

Quality Ratings by S&P/Moody's	Percent of Total Investments
AAA/Aaa	34.6%
AA/Aa	15.1
A/A	20.7
BBB/Baa	23.9
BB/Ba	4.8
NR (Not Rated)	0.9

Dividend Policy

The Fund's dividend policy is to distribute all or a portion of its net investment income to its shareholders on a monthly basis. In order to provide shareholders with a more stable level of dividend distributions, the Fund may at times pay out less than the entire amount of net investment income earned in any particular month and may at times in any particular month pay out such accumulated but undistributed income in addition to net investment income earned in that month. As a result, the dividends paid by the Fund for any particular month may be more or less than the amount of net investment income earned by the Fund during such month. The Fund's current accumulated but undistributed net investment income, if any, is disclosed in the Statement of Net Assets, which comprises part of the financial information included in this report.

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Proxy Results

During the six-month period ended February 28, 2005, MuniVest Fund, Inc.'s Common Stock shareholders voted on the following proposal. The proposal was approved at a shareholders' meeting on January 27, 2005. A description of the proposal and number of shares voted are as follows:

<TABLE>
<CAPTION>

		Shares Voted For	Shares Withheld From Voting
<S>	<C>	<C>	<C>
1. To elect the Fund's Directors:	Robert C. Doll, Jr.	57,862,025	1,402,303
	Cynthia A. Montgomery	57,924,601	1,339,727
	Jean Margo Reid	57,923,489	1,340,839
	Roscoe S. Suddarth	57,878,125	1,386,203
	Edward D. Zinbarg	57,865,181	1,399,147

</TABLE>

During the six-month period ended February 28, 2005, MuniVest Fund, Inc.'s Preferred Stock shareholders (Series A-F) voted on the following proposal. The proposal was approved at a shareholders' meeting on January 27, 2005. A description of the proposal and number of shares voted are as follows:

<TABLE>
<CAPTION>

		Shares Voted For	Shares Withheld From Voting
<S>	<C>	<C>	<C>
1. To elect the Fund's Directors:	Ronald W. Forbes and Richard R. West	11,143	1

</TABLE>

Availability of Quarterly Schedule of Investments

The Fund files its complete schedule of portfolio holdings with the Securities and Exchange Commission ("SEC") for the first and third quarters of each fiscal year on Form N-Q. The Fund's Forms N-Q are available on the SEC's Web site at <http://www.sec.gov>. The Fund's Forms N-Q may also be reviewed and copied at the SEC's Public Reference Room in Washington, DC. Information on the operation of the Public Reference Room may be obtained by calling 1-800-SEC-0330.

MUNIVEST FUND, INC. FEBRUARY 28, 2005 21

Officers and Directors

Robert C. Doll, Jr., President and Director
Ronald W. Forbes, Director
Cynthia A. Montgomery, Director
Jean Margo Reid, Director
Roscoe S. Suddarth, Director
Richard R. West, Director
Edward D. Zinbarg, Director
Kenneth A. Jacob, Senior Vice President
John M. Loffredo, Senior Vice President
Fred K. Stuebe, Vice President
Donald C. Burke, Vice President and Treasurer
Jeffrey Hiller, Chief Compliance Officer
Alice A. Pellegrino, Secretary

Custodian

The Bank of New York
100 Church Street
New York, NY 10286

Transfer Agents

Common Stock:

The Bank of New York
101 Barclay Street -- 11 East
New York, NY 10286

Preferred Stock:

The Bank of New York
101 Barclay Street -- 7 West
New York, NY 10286

Amex Symbol

MVF

Effective January 1, 2005, Terry K. Glenn, President and Director and Kevin A. Ryan, Director of MuniVest Fund, Inc. retired. The Fund's Board of Directors wishes Messrs. Glenn and Ryan well in their retirements.

Effective January 1, 2005, Robert C. Doll, Jr. became President and Director of the Fund.

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Electronic Delivery

The Fund offers electronic delivery of communications to its shareholders. In order to receive this service, you must register your account and provide us with e-mail information. To sign up for this service, simply access this Web site at <http://www.icsdelivery.com/live> and follow the instructions. When you visit this site, you will obtain a personal identification number (PIN). You will need this PIN should you wish to update your e-mail address, choose to discontinue this service and/or make any other changes to the service. This service is not available for certain retirement accounts at this time.

MUNIVEST FUND, INC. FEBRUARY 28, 2005 23

[LOGO] Merrill Lynch Investment Managers

www.mlim.ml.com

Mercury Advisors

A Division of Merrill Lynch Investment Managers

www.mercury.ml.com

MuniVest Fund, Inc. seeks to provide shareholders with as high a level of current income exempt from federal income taxes as is consistent with its investment policies and prudent investment management by investing primarily in a portfolio of long-term, investment grade municipal obligations, the interest on which is exempt from federal income taxes in the opinion of bond counsel to

the issuer.

This report, including the financial information herein, is transmitted to the shareholders of MuniVest Fund, Inc. for their information. It is not a prospectus, circular or representation intended for use in the purchase of shares of the Fund or any securities mentioned in the report. Past performance results shown in this report should not be considered a representation of future performance. The Fund has leveraged its Common Stock and intends to remain leveraged by issuing Preferred Stock to provide the Common Stock shareholders with a potentially higher rate of return. Leverage creates risks for Common Stock shareholders, including the likelihood of greater volatility of net asset value and market price of shares of the Common Stock, and the risk that fluctuations in the short-term dividend rates of the Preferred Stock may affect the yield to Common Stock shareholders. Statements and other information herein are as dated and are subject to change.

A description of the policies and procedures that the Fund uses to determine how to vote proxies relating to portfolio securities is available (1) without charge, upon request, by calling toll-free 1-800-MER-FUND (1-800-637-3863); (2) at www.mutualfunds.ml.com; and (3) on the Securities and Exchange Commission's Web site at <http://www.sec.gov>. Information about how the Fund voted proxies relating to securities held in the Fund's portfolio during the most recent 12-month period ended June 30 is available (1) at www.mutualfunds.ml.com and (2) on the Securities and Exchange Commission's Web site at <http://www.sec.gov>.

MuniVest Fund, Inc.
Box 9011
Princeton, NJ 08543-9011

#10787 -- 2/05

- Item 2 - Code of Ethics - Not Applicable to this semi-annual report
- Item 3 - Audit Committee Financial Expert - Not Applicable to this semi-annual report
- Item 4 - Principal Accountant Fees and Services - Not Applicable to this semi-annual report
- Item 5 - Audit Committee of Listed Registrants - Not Applicable to this semi-annual report
- Item 6 - Schedule of Investments - Not Applicable
- Item 7 - Disclosure of Proxy Voting Policies and Procedures for Closed-End Management Investment Companies - Not Applicable to this semi-annual report
- Item 8 - Portfolio Managers of Closed-End Management Investment Companies - Not Applicable to this semi-annual report
- Item 9 - Purchases of Equity Securities by Closed-End Management Investment Company and Affiliated Purchasers - Not Applicable
- Item 10 - Submission of Matters to a Vote of Security Holders - Not Applicable
- Item 11 - Controls and Procedures
 - 11(a) - The registrant's certifying officers have reasonably designed such disclosure controls and procedures to ensure material information relating to the registrant is made known to us by others particularly during the period in which this report is being prepared. The registrant's certifying officers have determined that the registrant's disclosure controls and procedures are effective based on our evaluation of these controls and procedures as of a date within 90 days prior to the filing date of this report.
 - 11(b) - There were 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 half-year of the period covered by this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting.
- Item 12 - Exhibits attached hereto
 - 12(a)(1) - Code of Ethics - Not Applicable to this semi-annual report
 - 12(a)(2) - Certifications - Attached hereto
 - 12(a)(3) - Not Applicable

12(b) - 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.

MuniVest Fund, Inc.

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

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

Date: April 22, 2005

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 of
MuniVest Fund, Inc.

Date: April 22, 2005

By: /s/ Donald C. Burke

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

Date: April 22, 2005

CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Robert C. Doll, Jr., Chief Executive Officer of MuniVest Fund, Inc., certify that:

1. I have reviewed this report on Form N-CSR of MuniVest Fund, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, changes in net assets, and cash flows (if the financial statements are required to include a statement of cash flows) of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940) and internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act of 1940) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our

conclusions about the effectiveness of the disclosure controls and procedures, as of a date within 90 days prior to the filing date of this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the second fiscal quarter of the period covered by this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 22, 2005

/s/ Robert C. Doll, Jr.

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

EX-99. CERT

CERTIFICATION PURSUANT TO SECTION 302
OF THE SARBANES-OXLEY ACT OF 2002

I, Donald C. Burke, Chief Financial Officer of MuniVest Fund, Inc., certify that:

1. I have reviewed this report on Form N-CSR of MuniVest Fund, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact

necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations, changes in net assets, and cash flows (if the financial statements are required to include a statement of cash flows) of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Rule 30a-3(c) under the Investment Company Act of 1940) and internal control over financial reporting (as defined in Rule 30a-3(d) under the Investment Company Act of 1940) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of a date within 90 days prior to the filing date of this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the second fiscal quarter of the period covered by this report that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

- a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize, and report financial information; and
- b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: April 22, 2005

/s/ Donald C. Burke

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

Exhibit 99.1350CERT

Certification Pursuant to Section 906 of the Sarbanes Oxley Act

I, Robert C. Doll, Jr., Chief Executive Officer of MuniVest Fund, Inc. (the "Fund"), certify that:

1. The N-CSR of the Fund (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Fund.

Dated: April 22, 2005

/s/ Robert C. Doll, Jr.

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

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to MuniVest Fund, Inc. and will be retained by MuniVest Fund, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

Exhibit 99.1350CERT

Certification Pursuant to Section 906 of the Sarbanes Oxley Act

I, Donald C. Burke, Chief Financial Officer of MuniVest Fund, Inc. (the "Fund"), certify that:

1. The N-CSR of the Fund (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Fund.

Dated: April 22, 2005

/s/ Donald C. Burke

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

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to MuniVest Fund, Inc. and will be retained by MuniVest Fund, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.