MUNIVEST FUND INC Form N-CSR October 29, 2004

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

FORM N-CSR

# CERTIFIED SHAREHOLDER REPORT OF REGISTERED MANAGEMENT INVESTMENT COMPANIES

Investment Company Act file number 811-5611

Name of Fund: MuniVest Fund, Inc.

Fund Address: P.O. Box 9011

Princeton, NJ 08543-9011

Name and address of agent for service: Terry K. Glenn, President, 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: 08/31/04

Date of reporting period: 09/01/03 - 08/31/04

Item 1 - Report to Stockholders

[LOGO] Merrill Lynch Investment Managers

www.mlim.ml.com

MuniVest Fund, Inc.

Annual Report August 31, 2004

[LOGO] Merrill Lynch Investment Managers

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 August 31, 2004, the percentage of the Fund's total net assets invested in inverse floaters was 13.75%, 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

In recent months, the Federal Reserve Board (the Fed) has taken center stage as it shifts away from its long-accommodative monetary stance. The Fed raised the Federal Funds rate 75 basis points (.75%) in three separate moves since June, bringing the target short-term interest rate to 1.75% -- still low by historical standards. The Fed has been deliberate in telegraphing its intention to take a "measured" approach to interest rate increases in order to avoid upsetting the economy or the financial markets, while still leaving room to move more aggressively if inflation and economic growth accelerate more than anticipated. The forward curve currently projects further increases in short-term interest rates before year-end. In addition to the Fed policy change, the financial markets recently have had to grapple with a tense geopolitical environment, higher oil prices and the worry and anticipation that accompanies a presidential election.

The transition to higher rates can cause concern among equity and fixed income investors alike. For bond investors, rising interest rates means the value of older issues declines because they bear the former lower interest rates. In addition, increasing inflation erodes the purchasing power of fixed income securities. However, because municipal bonds offer the advantage of tax-exempt income, they continue to be an attractive alternative for many fixed income investors. For the 12-month period ended August 31, 2004, municipal bonds posted a return of +7.11%, as measured by the Lehman Brothers Municipal Bond Index.

As always, our investment professionals are closely monitoring the markets, the economy and the overall environment in an effort to make well-informed decisions for the portfolios they manage. Our goal is to provide shareholders with competitive returns, while always keeping one eye on managing the unavoidable risk inherent in investing.

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/ Terry K. Glenn

Terry K. Glenn President and Director

MUNIVEST FUND, INC.

AUGUST 31, 2004

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[LOGO] Merrill Lynch Investment Managers

A Discussion With Your Fund's Portfolio Manager

The Fund was able to outperform its Lipper category average for the period, as we remained focused on enhancing yield and preserving net asset value in a volatile interest rate environment.

Describe the recent market environment relative to municipal bonds.

Amid considerable monthly volatility, long-term U.S. Treasury bond yields finished the 12-month period ended August 31, 2004 lower than where they began. At the start of the period, bond yields declined as bond prices — which move in the opposite direction — rose. Despite continued improvement in U.S. economic conditions, solid job creation remained elusive. Consumer confidence faltered, and investors became increasingly convinced that the Federal Reserve Board (the Fed) would hold short-term interest rates at their historic lows. Under the

circumstances, 30-year U.S. Treasury bond yields declined to 4.65% by mid-March.

In early April, however, monthly employment reports began to show unexpectedly large gains. In response, bond yields increased as their prices fell. Associated improvements in consumer confidence and spending led some investors to reverse their earlier expectations, believing instead that the Fed would soon be forced to raise short-term interest rates to ward off potential inflation. By early June, long-term U.S. Treasury bond yields had risen above 5.50%.

For the remainder of the period, bond yields generally declined. Payroll growth had begun to wane and inflationary measures continued to be negligible. Although the Fed began raising interest rates (.25% in June, .25% in August and another .25% in September, bringing the target rate to 1.75%), it seemed committed to a measured tightening policy. This effectively removed much of the earlier concern over the potential for a prolonged series of interest rate increases. The prospect for a measured, moderate tightening sequence helped support higher bond prices (and lower yields) for the remainder of the Fund's fiscal year. By the end of August 2004, long-term U.S. Treasury bond yields stood at 4.93%, a decline of almost 30 basis points (.30%) over the past year. The 10-year U.S. Treasury note yield ended the period at 4.12%, a decrease of 35 basis points during the 12-month period.

Tax-exempt issues, supported by a favorable technical backdrop, exhibited less volatility than their taxable counterparts during the year. Declining supply trends allowed tax-exempt bond prices to register moderate gains. As measured by the Bond Buyer Revenue Bond Index, yields on long-term revenue bonds fell approximately 30 basis points over the past year. According to Municipal Market Data, yields on Aaa-rated issues maturing in 30 years declined more than 30 basis points to 4.70%, and yields on 10-year Aaa-rated issues fell more than 40 basis points to 3.50%.

In terms of new issuance, more than \$360 billion in new long-term tax-exempt bonds was underwritten in the past 12 months, a decline of approximately 6% compared to last year. Approximately \$95 billion in long-term tax-exempt bonds was issued in the last three months of the fiscal year, a decline of nearly 15% versus the same period a year ago. The tax-exempt bond market maintained a positive supply/demand position throughout the reporting period, allowing municipal issues to outperform their taxable counterparts. New-issue volume is expected to remain manageable, continuing to support the tax-exempt market's favorable technical position for the remainder of the year. In addition, attractive yield ratios compared to taxable securities should continue to draw both traditional and non-traditional investors to the tax-exempt market.

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

For the fiscal year ended August 31, 2004, the Common Stock of MuniVest Fund, Inc. had net annualized yields of 6.66% and 7.10%, based on a period-end per share net asset value of \$9.91 and a per share market price of \$9.30, respectively, and \$.660 per share income dividends. Over the same period, the total investment return on the Fund's Common Stock was +11.60%, based on a change in per share net asset value from \$9.54 to \$9.91, and assuming reinvestment of \$.657 per share ordinary income dividends.

The Fund's total return, based on net asset value, exceeded the +11.01% average return of the Lipper General Municipal Debt Funds (Leveraged) category for the 12 months ended August 31, 2004. (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 this favorable result despite maintaining a modest defensive position throughout most of the reporting period. Recently, performance has been

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aided both by the Fund's above-average dividend yield and positive security selection.

For the six-month period ended August 31, 2004, the total investment return on the Fund's Common Stock was +0.54%, based on a change in per share net asset value from \$10.23 to \$9.91, and assuming reinvestment of \$.336 per share income dividends.

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?

In general, we continued to focus on adding higher-yielding, lower-rated bonds to the portfolio whenever they were attractively priced. These issues allowed the Fund to distribute an above-average market yield and performed well as the municipal bond market improved in the latter months of the Fund's fiscal year.

In addition, we significantly increased the Fund's holdings in California general obligation (GO) bonds and other state-related issues. Earlier this year, in response to the negative publicity surrounding the state's budgetary difficulties, prices of California GO bonds materially weakened relative to the rest of the tax-exempt market. We viewed this as an attractive opportunity to add fundamentally strong credit issues at distressed levels. This proved to be a beneficial decision, as California state issues were recently upgraded by the major credit-rating agencies. The resultant market price improvement for these bonds positively impacted the Fund's performance.

For the six-month period ended August 31, 2004, the Fund's Auction Market Preferred Stock (AMPS) had average yields as follows: Series A, 1.10%; Series B, .94%; Series C, 1.00%; Series D, 1.13%; and Series E, .97%. These attractive funding levels, even after the recent interest rate increases, continued to generate a significant income benefit to the Fund's Common Stock shareholders. While additional interest rate hikes are anticipated, future increases are not expected to be sizeable or protracted. Most importantly, the spread between short-term and long-term tax-exempt interest rates has remained historically wide. In fact, the spread at period-end was wider than it was at the end of August 2000 and August 2001. Of course, should the spread between short-term and long-term interest rates narrow, the benefits of leveraging 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 35.45% of total net assets, before the deduction of Preferred Stock. (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?

We ended the period in a defensive position with respect to future interest rate movements. Low historic bond yields suggest that an emphasis on higher-yielding instruments over more interest rate sensitive issues is the more prudent long-term strategy. Consequently, the Fund is structured to perform better in

stable-to-rising interest rate environments. We intend to keep limited cash reserves in an effort to enhance the Fund's dividend income stream.

Looking ahead, we believe that economic growth will remain moderate and should eventually translate into modestly higher interest rate levels. The strong technical environment municipal bonds have enjoyed is expected to continue in the coming months, insulating the tax-exempt market from much of the anticipated interest rate volatility.

Fred K. Stuebe Vice President and Portfolio Manager

September 22, 2004

MUNIVEST FUND, INC. AUGUST 31, 2004

[LOGO] Merrill Lynch Investment Managers

Schedule of Investments

(in Thousands)

State	S&P Ratings+	Moody's Ratings+	Face Amount	Municipal Bonds
Alabama4.4%	BBB	NR*	\$ 2,550	Camden, Alabama, IDB, Exempt Facilities Rev Company), Series A, 6.125% due 12/01/2024
	BBB	Baa2	7,500	Courtland, Alabama, IDB, Solid Waste Dispos (Champion International Corporation Project due 9/01/2025 Huntsville, Alabama, Health Care Authority
	NR*	A2	3,500	Series A, 5.75% due 6/01/2031
	NR*	A2	7,000	Series B, 5.75% due 6/01/2032
	BBB	Baa2	5,000	Selma, Alabama, IDB, Environmental Improvem
			,	Bonds (International Paper Company Project) due 5/01/2020
Alaska1.4%		=======		
	AAA	Aaa	3,575	6% due 2/01/2014
	AAA	Aaa	3,830	6% due 2/01/2016
Arizona1.0%	NR*	Baa3	4 <b>,</b> 375	Maricopa County, Arizona, IDA, Education Re Charter Schools Project 1), Series A, 6.75% Pima County, Arizona, IDA, Education Revenu Schools Project), Series I:
	NR*	Baa3	500	6.10% due 7/01/2024
	NR*	Baa3	1,000	6.30% due 7/01/2031
======================================		=======	-======	California State, GO, Refunding:
	AAA	Aaa	10,000	5% due 2/01/2031 (c)
	A	A3	9,600	5.125% due 6/01/2031
			,	California State Public Works Board, Lease
	A-	Baa1	3,170	(California Community Colleges), Seri
	A-	Baa1	5,000	(Department of Corrections), Series C
	A-	Baa1	6,000	(Department of Corrections), Series C
	A-	Baa1	19,415	(Department of Mental HealthCoaling Series A, 5.125% due 6/01/2029
	7	7	12 570	California State, Various Purpose, GO:
	A	Aaa	13,570	5.50% due 4/01/2030

	A A	A3 A3	21,250 5,240	
	BBB	Baa3	7,280	Series A-3, 7.875% due 6/01/2042
	BBB	Baa3	3,250	Series A-4, 7.80% due 6/01/2042
	BBB	Baa3	1,125	Series A-5, 7.875% due 6/01/2042
	A-	Baa1	13,900	Series B, 5.375% due 6/01/2028
	A-	Baa1	8,850	,
	AAA	Aaa	15,000	Series B, 5.50% due 6/01/2033 (f)
	AAA	Aaa	5,000	Series B, 5.50% due 6/01/2043 (f)
Colorado2.7%		========	======	Arapahoe County, Colorado, School District (Cherry Creek):
	AA	Aa2	5 <b>,</b> 750	6% due 12/15/2013
	AA	Aa2	4,165	6% due 12/15/2014
				Colorado HFA, Revenue Refunding Bonds (S/F Series A-2:
	NR*	Aa2	1,465	6.60% due 5/01/2028
	NR*	Aa2	550	7.50% due 4/01/2031
	A-	А3	3,000	Colorado Health Facilities Authority Revenu Center), Series A, 5.25% due 6/01/2034

#### 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
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

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Schedule of Investments (continued)

(in Thousands)

State	S&P Ratings+	Moody's Ratings+	Face Amount	Municipal Bonds
Connecticut0.5%	BBB-	NR*	\$ 2,810	Mohegan Tribe Indians, Connecticut, Gaming Improvement Revenue Refunding Bonds (Priori due 1/01/2031

Florida1.1%	A	A2	5,000	Highlands County, Florida, Health Facilitie Revenue Bonds (Adventist Health System), Se 11/15/2035
	A 	A2	1,880	Orange County, Florida, Health Facilities A Revenue Bonds (Adventist Health System), 5.
Georgia2.5%				Georgia Municipal Electric Authority, Power
	A+	A2	4,600	Series W, 6.60% due 1/01/2018
	A	A2	250	Series W, 6.60% due 1/01/2018 (e)
	A	A2	250	Series Y, 10% due 1/01/2010 (e)
				Milledgeville-Baldwin County, Georgia, Deve
				Revenue Bonds (Georgia College and State Ur
	BBB	NR*	1,250	5.50% due 9/01/2024
	BBB	NR*	2,000	5.625% due 9/01/2030
	А	A3	4,785	Monroe County, Georgia, Development Authoric (Oglethorpe Power CorporationScherer), Sedue 1/01/2011
Idaho0.2%	NR*	Aaa	1,145	Idaho Housing Agency, S/F Mortgage Revenue Series E-2, 6.90% due 1/01/2027
Illinois19.7%	AAA	Aaa	3,005	Chicago, Illinois, GO (Neighborhoods Alive 6% due 1/01/2016 (f)
	AAA	Aaa	5,000	Chicago, Illinois, O'Hare International Air Revenue Refunding Bonds, Third Lien, AMT, S due 1/01/2019 (c) Chicago, Illinois, O'Hare International Air
	AAA	Aaa	11,200	3rd Lien, Series B-2, 6% due 1/01/202
	AAA	NR*	8,540	Series 368, DRIVERS, 9.338% due 7/01/
	AAA	NR*	7,000	Chicago, Illinois, O'Hare International Air Bonds, DRIVERS, AMT, Series 253, 9.854% due
	AAA	Aaa	135	Chicago, Illinois, S/F Mortgage Revenue Bordue 3/01/2032 (b)(d)(l)
	AAA	Aaa	5,000	Cook County, Illinois, Community High School Niles Township, GO, 6% due 12/01/2017 (f)
	BBB	Baa1	10,000	Hodgkins, Illinois, Environmental Improveme Biosolids Management LLC Project), AMT, 6%
	BBB	NR*	2,140	Illinois Development Finance Authority Reve Rehabilitation Providers Facility), Series
	BBB	NR*	1,365	Illinois Development Finance Authority, Rev (Community Rehabilitation Providers), Serie
	A+	A1	6,040	Illinois HDA, Revenue Refunding Bonds (M/F 6.75% due 9/01/2023
	AA+	Aa2	5,500	Illinois State Finance Authority Revenue Bo Memorial Hospital), Series A, 5.50% due 8/1
	NR*	Aaa	2,500	Kane, Cook and Du Page Counties, Illinois, Elgin, GO, 6.375% due 1/01/2019 (i)
	NR*	Aaa	5,245	Kane and De Kalb Counties, Illinois, Commur Number 302, GO, DRIVERS, Series 283, 9.8859 Mc Lean and Woodford Counties, Illinois, Co District Number 005, GO, Refunding (i):
	NR*	Aaa	5,000	6.25% due 12/01/2014
	NR*	Aaa	4,000	6.375% due 12/01/2016
	AAA	NR*	18,550	Metropolitan Pier and Exposition Authority, State Tax Revenue Refunding Bonds, DRIVERS, due 6/15/2023 (c)(f)(j) Regional Transportation Authority, Illinois
	AAA	Aaa	3,500	Series A, 7.20% due 11/01/2020 (h)
	AAA	Aaa	4,000	Series C, 7.75% due 6/01/2020 (f)
	AAA	Aaa	3,000	Will County, Illinois, Environmental Revenu Refining Corporation Project), AMT, 6.40% of Will County, Illinois, School District Numb
				will county, illinois, school bistrict

		E	Elementary), GO, Series A (i)	:
NR*	Aaa	55	6.50% due 11/01/2010 (a	1)
NR*	Aaa	945	6.50% due 11/01/2013	
NR*	Aaa	1,375	6.50% due 11/01/2015	

MUNIVEST FUND, INC. AUGUST 31, 2004 7

[LOGO] Merrill Lynch Investment Managers

Schedule of Investments (continued)

(in Thousands)

State	S&P Ratings+ ======	Moody's Ratings+	Face Amount	Municipal Bonds
Indiana6.9%	BBB	Baa1	\$ 1,700	Fort Wayne, Indiana, PCR, Refunding (General Project), 6.20% due 10/15/2025
	AA-	A1	6,500	Indiana Health Facility Financing Authority Refunding Bonds (Clarian Health Partners In due 2/15/2021
	NR*	Aaa	4,290	<pre>Indiana State, HFA, S/F Mortgage Revenue Re 6.80% due 1/01/2017 (k)</pre>
	AA-	NR*	8,195	Indiana Transportation Finance Authority, H Series A, 6.80% due 12/01/2016
	AA	NR*	15,335	Indianapolis, Indiana, Local Public Improve Refunding Bonds, Series D, 6.75% due 2/01/2
Kansas0.7%	NR*	Aaa	3,805	Sedgwick and Shawnee Counties, Kansas, S/F (Mortgage Backed Securities Program), AMT, due 12/01/2033 (b)(d)
Louisiana2.7%	BBB	Baa2	4,000	De Soto Parish, Louisiana, Environmental Im Refunding Bonds (International Paper Co. Pr 6.55% due 4/01/2019
	AAA	Aaa	10,575	Louisiana Local Government, Environmental F Development Authority Revenue Bonds (Capita Acquisition), Series A, 6.30% due 7/01/2030
Maine0.3%	=======	=======		Portland, Maine, Housing Development Corpor Revenue Bonds (Avesta Housing Development C Series A:
	NR*	Baa2	775	5.70% due 8/01/2021
	NR*	Baa2	1,190	6% due 2/01/2034
Massachusetts7.8%	AAA	Aaa	2 <b>,</b> 035	Boston, Massachusetts, Water and Sewer Comm 9.25% due 1/01/2011 (e)
	AA	Aa2	3,010	Massachusetts Bay Transportation Authority, (General Transportation System), Series A,
	AA	Aa3	30,000	Massachusetts State Water Resource Authorit Series A, 6.50% due 7/15/2019 Massachusetts State Water Resource Authorit Bonds, Series A (f):
	AAA	Aaa	1,000	6% due 8/01/2014
	AAA 	Aaa 	2,480	6% due 8/01/2017
Michigan3.7%	BBB	======= Baa2	7,695	Delta County, Michigan, Economic Developmen Environmental Improvement Revenue Refunding

				Westvaco-Escanaba), Series A, 6.25% due 4/1 Macomb County, Michigan, Hospital Finance A Revenue Bonds (Mount Clemens General Hospit
	BBB-	NR*	3,715	5.75% due 11/15/2025
	BBB-	NR*	5,250	5.875% due 11/15/2034
				Michigan State Hospital Finance Authority,
	AAA	Aa2	390	(Ascension Health Credit), Series A,
	AAA	Aaa	3,000	(Ascension Health Credit), Series A, 11/15/2009 (a)(c)
	В	Ba1	1,300	(Detroit Medical Center Obligation Gr due 8/15/2013
	NR*	Ba3	1,000	(Sinai Hospital), 6.70% due 1/01/2026
Minnesota1.5%	NR*	А3	7,235	Minneapolis, Minnesota, Health Care System Health System), Series A, 5.75% due 11/15/2
	NR*	Aaa	1,405	Saint Cloud, Minnesota, Health Care Revenue Cloud Hospital Obligation Group), Series A,
Mississippi4.8%				Lowndes County, Mississippi, Solid Waste Di (Weyerhaeuser Company Project):
	BBB	Baa2	3 <b>,</b> 650	Series A, 6.80% due 4/01/2022
	BBB	Baa2	4,000	Series B, 6.70% due 4/01/2022
	BBB-	Ba1	20,705	Mississippi Business Finance Corporation, M Refunding (System Energy Resources Inc. Pro due 4/01/2022
Missouri0.5%	BBB+	Baa1	2,600	Missouri State Development Finance Board, I Revenue Refunding Bonds (Branson), Series A
	AAA	NR*	450	Missouri State Housing Development Commissi Bonds (Homeowner Loan), AMT, Series A, 7.50
Montana1.0%	BBB+	Baa2	6 <b>,</b> 000	Forsyth, Montana, PCR, Refunding (Portland Company), Series A, 5.20% due 5/01/2033
Nebraska0.2%	AAA	NR*	960	Nebraska Investment Finance Authority, S/F AMT, Series C, 6.30% due 9/01/2028 (b)(d)(1

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Schedule of Investments (continued) (in Thousands)

State	S&P Ratings+	Moody's Ratings+	Face Amount	Municipal Bonds
Nevada2.4%	AAA	Aaa	\$ 6 <b>,</b> 700	Clark County, Nevada, IDR (Power Company Pr 6.70% due 6/01/2022 (f)
	AA	Aa2	1,600	Clark County, Nevada, Public Safety, GO, 6% Nevada Housing Division Revenue Bonds, Mult
	AAA	NR*	3,475	(Arville Electric Project), AMT, 6.60
	AAA	Aa2	1,235	Issue B, 7.45% due 10/01/2017 Nevada Housing Division Revenue Bonds, (S/F
	AAA	Aaa	445	Senior Series E, 7% due 10/01/2019
	NR*	Aa2	225	Series A, 6.55% due 10/01/2012
New Hampshire0.4%	BBB+	Baa1	2,425	New Hampshire Health and Education Faciliti Refunding Bonds (Elliot Hospital), Series B

AAA	Aaa	800	New Jersey State Housing and Mortgage Finar Revenue Bonds, AMT, Series M, 6.95% due 10,
BBB	Baa3	10,230	Tobacco Settlement Financing Corporation of Bonds, 7% due 6/01/2041
BBB-	Baa2	3,300	Farmington, New Mexico, PCR, Refunding (Puk Juan Project), Series A, 5.80% due 4/01/202
NR*	Aa2	7,875	New York City, New York, City Transitional Bonds, RIB, Series 283, 10.88% due 11/15/20 New York City, New York, GO:
A	A2	7 <b>,</b> 150	Series F, 5.25% due 1/15/2033
AAA	A2	520	Series I, $6.25\%$ due $4/15/2007$ (a)(m)
AAA	Aaa	380	Series I, $6.25\%$ due $4/15/2017$ (m)
AAA	A2	1,680	Series I, 6.25% due 4/15/2017 (a)(m)
AAA	Aaa	630	Series I, $6.25\%$ due $4/15/2027$ (m)
A	A2	5,110	Sub-Series C-1, 5.25% due 8/15/2026
A	A2		Sub-Series C-1, 5.10% due 8/15/2027
		,	New York City, New York, GO, Refunding, Sen
AAA	A2	4,550	6.375% due 5/15/2010 (a)
AAA	A2	3,450	6.375% due 5/15/2014
			New York State Dormitory Authority, Revenue
BB	Ba1	1,000	(Mount Sinai Health), Series A, 6.509
AAA	NR*	11,875	RIB, Series 305, 10.38% due 5/15/2015
NR*	Aaa	2 <b>,</b> 000	Portland, Oregon, Airport Way, Urban Renewa Allocation Refunding Bonds, Series A, 6% du
NR*	Aaa	3,305	Portland, Oregon, Sewer System Revenue Bond due 8/01/2020 (f)(j)
AAA	Aaa	2,440	Pennsylvania State Higher Education Assista Capital Acquisition, 6.125% due 12/15/2010
A	NR*	6,250	Pennsylvania State Higher Educational Facil Bonds (University of Pennsylvania Medical C Series A, 6% due 1/15/2031 Philadelphia, Pennsylvania, Authority for S Senior Living Revenue Bonds:
NR*	Baa2	1,000	(Arbor House Inc. Project), Series E,
NR*	Baa2	1,355	(Rieder House Project), Series A, 6.1
A-	NR*	9,280	Sayre, Pennsylvania, Health Care Facilities (Guthrie Health Issue), Series B, 7.125% du
70	NID +	1 750	Sayre, Pennsylvania, Health Care Facilities Refunding Bonds (Guthrie Healthcare System)
			6.25% due 12/01/2018
A- 	NK* 	1,000 =======	5.75% due 12/01/2021
BBB+	Baa2	2,450	Medical University, South Carolina, Hospita Facility Revenue Refunding Bonds, 6.50% due
BBB	Baa2	5,000	Richland County, South Carolina, Environmer Refunding Bonds (International Paper), AMT,
B-	B1	2,000	York County, South Carolina, Industrial Rev Celanese Corporation), AMT, 5.70% due 1/01,
BB	Ba2	2 <b>,</b> 000	McMinn County, Tennessee, IDB, Solid Waste FacilityCalhoun Newsprint), AMT, 7.40% du
A-	А3	6,500	Shelby County, Tennessee, Health, Education Board, Hospital Revenue Refunding Bonds (Me 6.50% due 9/01/2026
	BBB  BBB-  BBB-  NR*  A AAA AAA AAA AAA AAA AAA AAA AAA AA	BBB       Baa3         BBB-       Baa2         NR*       Aa2         AAAA       A2         AAAA       A2         AAAA       A2         AAAA       A2         AAAA       A2         AAAA       A2         ABB       Ba1         AAA       NR*         NR*       Aaa         AAAA       Aaa         AAAA       Aaaa         AAAA       Aaaa         AAAA       Aaaa         AAAA       Aaaa         AAAA       Aaaa         BBB+       Baa2         BBB+       Baa2         BBB       Baa2         BBB       Baa2         BBB       Baa2	BBB Baa2 3,300  NR* Aa2 7,875  A A2 7,150 AAA A2 520 AAA Aaa 380 AAA A2 1,680 AAA A2 5,110 A A2 3,410  AAA A2 3,450  BB Bal 1,000 AAA NR* 11,875  NR* Aaa 2,000  NR* Aaa 3,305  AAA Aaa 3,305  AAA Aaa 2,440 A NR* 6,250  NR* Baa2 1,000  NR* Baa2 1,355 A- NR* 9,280  A- NR* 1,750 A- NR* 1,750 A- NR* 1,000  BBB Baa2 5,000  BBB Baa2 5,000  BBB Baa2 5,000  BBB Baa2 5,000  BBB Baa2 5,000

MUNIVEST FUND, INC.

AUGUST 31, 2004

[LOGO] Merrill Lynch Investment Managers

Schedule of Investments (continued)

(in Thousands)

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State	S&P Ratings+	Moody's Ratings+	Face Amount	Municipal Bonds
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Texas19.6%				Austin, Texas, Convention Center Revenue Bo
	BBB-	Baa3	\$ 6,000	Enterprises Inc.), First Tier, Series A: 6.70% due 1/01/2028
	BBB-	Baa3	1,290	6.70% due 1/01/2032
				Brazos River Authority, Texas, PCR, Refundi
	BBB	Baa2	3,000	(Texas Utilities Electric Company Pro due 5/01/2029
	BBB	Baa2	3,055	(Texas Utility Company), Series A, 7.
	BBB	Baa2	12,300	(Utilities Electric Company), Series
	A-	A3	11,460	Brazos River, Texas, Harbor Navigation Dist Environmental Revenue Refunding Bonds (Dow Project), AMT, Series A-7, 6.625% due 5/15/
	AA	NR*	3,000	Gregg County, Texas, Health Facilities Deve Hospital Revenue Bonds (Good Shepherd Medic 6.875% due 10/01/2020 (g)
	AA-	Aa3	10,250	Guadalupe-Blanco River Authority, Texas, Se Disposal Facility Revenue Bonds (E. I. du P Company Project), AMT, 6.40% due 4/01/2026
	BBB	Baa2	4,000	Gulf Coast, Texas, IDA (Champion Internatio 7.125% due 4/01/2010
	BBB	Baa2	3,000	Gulf Coast, Texas, Waste Disposal Authority (International Paper Company), AMT, Series
	AAA	Aaa	5,500	Harris County, Houston, Texas, Sports Autho Bonds, Senior Lien, Series G, 5.75% due 7/1
	NR*	Aa3	10,385	Harris County, Texas, Health Facilities Dev
	NR*	Baa3	1,800	Revenue Refunding Bonds, RITR, Series 6, 9. Houston, Texas, Industrial Development Corp (Air Cargo), AMT, 6.375% due 1/01/2023
	AAA	Aaa	2,030	Mansfield, Texas, Independent School Distri 6.625% due 2/15/2015
	BBB	Baa2	9,855	Matagorda County, Texas, Navigation Distric Refunding Bonds (Centerpoint Energy Project
	NR*	Aaa	5 <b>,</b> 225	Midway, Texas, Independent School District, due 8/15/2014
	B-	Ba3	5,400	Port Corpus Christi, Texas, Revenue Refundi Project), Series A, 6.45% due 11/01/2030
	B-	Ba3	5,000	Red River Authority, Texas, PCR, Refunding Series B, 6.70% due 11/01/2030
	NR*	Aa1	6 <b>,</b> 250	San Antonio, Texas, Electric and Gas Revenu Series 469x, 9.91% due 2/01/2014 (j)
Vermont0.2%	BBB+	NR*	1,000	Vermont Educational and Health Buildings Fi Developmental and Mental Health Revenue Bon Human Services), Series A, 6.375% due 6/15/
Virginia1.1%	BBB+	A3	1,425	Chesterfield County, Virginia, IDA, PCR (Vi Company), Series A, 5.875% due 6/01/2017
	BBB	Baa2	1,500	Isle of Wight County, Virginia, IDA, Solid Revenue Bonds (Union Camp Corporation Proje

	AAA	Aaa	3,320	due 4/01/2024 Virginia State, HDA, Commonwealth Mortgage Sub-Series J-1, 5.20% due 7/01/2019 (c)
Washington8.6%				Energy Northwest, Washington, Electric Revenue DRIVERS (j):
	AAA	NR*	5,330	Series 248, 9.885% due 7/01/2018 (c)
	AAA	NR*	3,510	Series 255, 10.38% due 7/01/2018 (h)
	AAA	NR*	7,350	Series 256, 10.384% due 7/01/2017 (c)
	NR*	NR*	2,460	Seattle, Washington, Housing Authority Reve
				Housing Project), 6.125% due 12/01/2032
	AAA	Aaa	8,100	Washington State, GO, Trust Receipts, Class
				due 1/01/2014 (i)(j)
	AA-	Aa1	14,320	Washington State Public Power Supply System
				(Nuclear Project Number 1), Series B, 7.125