

BLACKROCK MUNIVEST FUND INC  
Form N-PX  
August 27, 2009

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

**FORM N-PX**

**ANNUAL REPORT OF PROXY VOTING RECORD OF REGISTERED MANAGEMENT  
INVESTMENT COMPANY**

Investment Company Act file number 811-05611

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

Fund Address: 100 Bellevue Parkway, Wilmington, DE 19809

Name and address of agent for service: Anne Ackerley, Chief Executive Officer, BlackRock MuniVest Fund, Inc.,  
40 East 52<sup>nd</sup> Street, New York City, NY 10022.

Registrant's telephone number, including area code: (800) 882-0052, Option 4

Date of fiscal year end: 08/31

Date of reporting period: 07/01/2008 - 06/30/2009

Item 1 Proxy Voting Record There were no matters relating to a portfolio security considered at any shareholder meeting held during the period ended June 30, 2009 with respect to which the registrant was entitled to vote.

Pursuant to the requirements of the Investment Company Act of 1940, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

BlackRock MuniVest Fund, Inc.

By: /s/ Anne Ackerley  
Anne Ackerley  
Chief Executive Officer of  
BlackRock MuniVest Fund, Inc.

Date: August 7, 2009

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