

RIVERNORTH MANAGED DURATION MUNICIPAL INCOME FUND, INC.
SCHEDULE OF INVESTMENTS
March 31, 2024 (Unaudited)

Shares/Description	Value
CLOSED-END FUNDS (62.99%)	
86,316 abrdn National Municipal Income Fund	\$ 894,234
239,631 Blackrock Investment Quality Municipal Trust, Inc.	2,973,821
177,536 BlackRock MuniAssets Fund, Inc.	1,967,099
541,579 BlackRock Municipal 2030 Target Term Trust	11,405,654
647,642 BlackRock Municipal Income Fund, Inc.	7,810,563
250,797 BlackRock Municipal Income Quality Trust	2,909,245
440,715 BlackRock Municipal Income Trust	4,552,586
846,359 BlackRock Municipal Income Trust II	9,191,459
315,186 BlackRock MuniHoldings California Quality Fund, Inc.	3,470,198
501,399 BlackRock MuniHoldings Fund, Inc.	6,056,900
19,968 BlackRock MuniHoldings New Jersey Quality Fund, Inc.	232,228
190,057 BlackRock MuniHoldings New York Quality Fund, Inc.	2,012,704
326,207 BlackRock MuniHoldings Quality Fund II, Inc.	3,320,787
386,392 BlackRock MuniVest Fund II, Inc.	4,215,537
860,558 BlackRock MuniVest Fund, Inc.	6,075,539
734,290 BlackRock MuniYield Fund, Inc.	8,121,247
175,223 BlackRock MuniYield Michigan Quality Fund, Inc.	2,016,817
487,326 BlackRock MuniYield New York Quality Fund, Inc.	5,126,669
160,331 BlackRock MuniYield Quality Fund II, Inc.	1,685,079
614,778 BlackRock MuniYield Quality Fund III, Inc.	7,045,356
748,024 BlackRock MuniYield Quality Fund, Inc.	9,163,294
70,853 BlackRock New York Municipal Income Trust	751,042
295,214 BNY Mellon Strategic Municipal Bond Fund, Inc.	1,729,954
341,123 BNY Mellon Strategic Municipals, Inc.	2,080,850
33,255 DWS Municipal Income Trust	300,293
270,230 Eaton Vance Municipal Bond Fund	2,796,880
139,132 Eaton Vance Municipal Income Trust	1,426,103
241,450 Invesco Advantage Municipal Income Trust II	2,052,325
501,452 Invesco Municipal Opportunity Trust	4,879,128
478,172 Invesco Municipal Trust	4,638,268
2,432 Invesco Pennsylvania Value Municipal Income Trust	24,928
655,053 Invesco Quality Municipal Income Trust	6,340,913
201,170 Invesco Trust for Investment Grade Municipals	1,983,536
258,154 Invesco Value Municipal Income Trust	3,097,848
460,361 MFS High Income Municipal Trust	1,671,110
32,114 MFS High Yield Municipal Trust	106,940
98,003 Neuberger Berman Municipal Fund, Inc.	1,026,091
722,217 Nuveen AMT-Free Municipal Credit Income Fund	8,774,937
144,282 Nuveen AMT-Free Municipal Value Fund	1,947,807
1,124,611 Nuveen AMT-Free Quality Municipal Income Fund	12,449,444
22,898 Nuveen California Municipal Value Fund	206,082
146,673 Nuveen California Quality Municipal Income Fund	1,616,336
528,650 Nuveen Municipal Credit Income Fund	6,470,676
1,068,678 Nuveen Municipal Value Fund, Inc.	9,308,185
53,846 Nuveen New Jersey Quality Municipal Income Fund	650,460
81,393 Nuveen New York AMT-Free Quality Municipal Income Fund	884,742
95,963 Nuveen New York Municipal Value Fund	798,412
1,044,604 Nuveen Quality Municipal Income Fund	11,971,162
16,867 Nuveen Select Maturities Municipal Fund	151,634
71,756 PIMCO California Municipal Income Fund	671,636
133,147 PIMCO California Municipal Income Fund II	768,258
68,248 PIMCO Municipal Income Fund II	580,108
230,581 Pioneer Municipal High Income Advantage Fund, Inc.	1,879,235
77,177 Western Asset Intermediate Municipal Fund	611,242
750,467 Western Asset Managed Municipals Fund, Inc.	7,842,380

Shares/Description			Value	
CLOSED-END FUNDS (continued)				
289,491	Western Asset Municipal High Income Fund, Inc.			\$ 1,965,644
TOTAL CLOSED-END FUNDS				204,701,605
(Cost \$197,867,033)				
Principal Amount/Description		Rate	Maturity	Value
U.S. CORPORATE BONDS (0.60%)				
Consumer, Non-cyclical (0.60%)				
\$ 2,500,000	Stetson University, Inc.	4.09%	12/01/59	\$ 1,959,732
TOTAL U.S. CORPORATE BONDS				1,959,732
(Cost \$2,500,000)				
Principal Amount/Description		Rate	Maturity	Value
MUNICIPAL BONDS (92.03%)				
California (16.22%)				
\$ 7,000,000	California State University, Revenue Bonds ^(a)	5.25%	11/01/53	\$ 7,918,852
15,000,000	City of Los Angeles Department of Airports, Revenue Bonds ^(a)	5.00%	05/15/46	15,169,707
1,000,000	Regents of the University of California Medical Center Pooled Revenue, Revenue Bonds	5.00%	05/15/47	1,097,345
12,000,000	Sacramento Municipal Utility District ^(a)	4.00%	08/15/45	12,068,830
12,000,000	San Diego County Regional Airport Authority, Revenue Bonds ^(a)	5.00%	07/01/56	12,890,504
3,500,000	San Francisco City & County Airport Comm-San Francisco International Airport, Revenue Bonds ^(a)	5.00%	05/01/46	3,538,946
				<u>52,684,184</u>
Connecticut (2.70%)				
8,565,000	State of Connecticut, General Obligation Unlimited Bonds ^(a)	4.00%	04/15/38	8,774,447
Florida (5.17%)				
9,000,000	County of Broward FL Tourist Development Tax Revenue, Revenue Bonds ^(a)	4.00%	09/01/47	8,701,755
7,500,000	School District of Broward County, General Obligation Unlimited Bonds ^(a)	5.00%	07/01/51	8,107,662
				<u>16,809,417</u>
Illinois (11.05%)				
10,000,000	Chicago O'Hare International Airport, Revenue Bonds ^(a)	5.25%	01/01/45	10,748,526
6,000,000	Macon County School District No 61 Decatur, General Obligation Unlimited Bonds ^(a)	4.00%	12/01/36	6,090,922
18,000,000	State of Illinois, General Obligation Unlimited Bonds ^(a)	5.00%	11/01/29	19,089,437
				<u>35,928,885</u>

Principal Amount/Description		Rate	Maturity	Value
Kansas (3.06%)				
\$ 9,670,000	Kansas City Industrial Development Authority, Revenue Bonds ^(a)	5.00%	03/01/57	\$ 9,949,968
Massachusetts (5.79%)				
12,000,000	Commonwealth of Massachusetts Transportation Fund Revenue, Revenue Bonds ^(a)	5.00%	06/01/53	12,887,448
5,500,000	Massachusetts School Building Authority, Revenue Bonds ^(a)	5.00%	08/15/45	5,937,505
				<u>18,824,953</u>
Michigan (6.88%)				
10,000,000	Holly Area School District, General Obligation Unlimited Bonds ^(a)	5.25%	05/01/52	10,761,108
10,000,000	State of Michigan Trunk Line Revenue, Revenue Bonds ^(a)	5.50%	11/15/44	11,581,583
				<u>22,342,691</u>
Nevada (1.66%)				
5,000,000	Las Vegas Valley Water District, General Obligation Limited Bonds ^(a)	5.00%	06/01/53	5,393,629
New Jersey (1.62%)				
5,000,000	New Jersey Transportation Trust Fund Authority, Revenue Bonds ^(a)	5.00%	06/15/50	5,263,679
New York (12.82%)				
10,000,000	New York New York A-1 Revenue Bonds ^(a)	5.25%	09/01/40	11,449,616
6,800,000	New York State Dormitory Authority, Revenue Bonds ^(a)	5.00%	03/15/41	7,523,616
10,000,000	Port Authority of New York & New Jersey, Revenue Bonds ^(a)	5.50%	08/01/52	10,861,655
11,250,000	Triborough Bridge & Tunnel Authority, Revenue Bonds ^(a)	5.00%	11/15/43	11,828,539
				<u>41,663,426</u>
North Carolina (5.93%)				
4,000,000	Greater Asheville Regional Airport Authority, Revenue Bonds ^(a)	5.50%	07/01/52	4,341,747
14,000,000	North Carolina Turnpike Authority, Revenue Bonds	5.00%	01/01/58	14,925,194
				<u>19,266,941</u>
Pennsylvania (4.75%)				
11,250,000	Pennsylvania State University, Revenue Bonds ^(a)	5.00%	09/01/43	11,872,555
3,185,000	Southeastern Pennsylvania Transportation Authority, Revenue Bonds ^(a)	5.25%	06/01/43	3,566,130
				<u>15,438,685</u>
Puerto Rico (3.91%)				
2,000,000	Commonwealth of Puerto Rico, Series 2022 A-1, General Obligation Unlimited Bonds	4.00%	07/01/35	1,966,092

Principal Amount/Description	Rate	Maturity	Value
Puerto Rico (continued)			
\$ 2,500,000 Puerto Rico Commonwealth Aqueduct & Sewer Authority, Revenue Bonds ^(b)	4.00%	07/01/42	\$ 2,384,374
2,465,000 Puerto Rico Commonwealth Aqueduct & Sewer Authority, Revenue Bonds ^(b)	4.00%	07/01/42	2,350,992
6,032,000 Puerto Rico Sales Tax Financing Corp. Sales Tax Revenue, Series Restructured Series A-2, Revenue Bonds	4.78%	07/01/58	6,016,928
			<u>12,718,386</u>
South Carolina (2.23%)			
6,500,000 South Carolina Public Service Authority, Revenue Bonds ^(a)	5.75%	12/01/52	<u>7,240,199</u>
Tennessee (1.63%)			
5,000,000 Tennessee Energy Acquisition Corporation Gas Revenue Bonds, Revenue Bonds ^{(a)(c)}	5.00%	05/01/52	<u>5,283,982</u>
Utah (2.45%)			
7,750,000 City of Salt Lake City UT Airport Revenue, Revenue Bonds ^(a)	5.00%	07/01/43	<u>7,974,384</u>
Virgin Islands (0.72%)			
2,250,000 Matching Fund Special Purpose Securitization Corp., Revenue Bonds	5.00%	10/01/39	<u>2,352,917</u>
Washington (3.44%)			
10,230,000 Washington Metropolitan Area Transit Authority Dedicated Revenue, Revenue Bonds ^(a)	5.00%	07/15/48	<u>11,163,249</u>
TOTAL MUNICIPAL BONDS			299,074,022
(Cost \$291,502,383)			
Shares/Description			Value
SHORT-TERM INVESTMENTS (4.27%)			
13,868,406 BlackRock Liquidity Funds MuniCash (7 Day Yield 3.296%)			<u>\$ 13,869,793</u>
TOTAL SHORT-TERM INVESTMENTS			13,869,793
(Cost \$13,869,200)			
TOTAL INVESTMENTS (159.89%)			\$ 519,605,152
(Cost \$505,738,616)			
Floating Rate Note Obligations (-62.19%)^(d)			(202,105,000)
Other Assets In Excess Of Liabilities (2.30%)			7,473,137
NET ASSETS (100.00%)			\$ 324,973,289

- (a) All or portion of the principal amount transferred to a Tender Option Bond ("TOB") Issuer in exchange for TOB Residuals and cash.
- (b) Security exempt from registration under Rule 144A of the Securities Act of 1933. Such securities may normally be sold to qualified institutional buyers in transactions exempt from registration. The total value of Rule 144A securities amounts to \$4,735,366, which represents 1.46% of net assets as of March 31, 2024.
- (c) Variable rate investment. Interest rates reset periodically. Interest rate shown reflects the rate in effect at March 31, 2024. For securities based on a published reference rate and spread, the reference rate and spread are indicated in the description above. Certain variable rate securities are not based on a published reference rate and spread but are determined by the issuer or agent and are based on current market conditions. These securities do not indicate a reference rate and spread in their description above.
- (d) Face value of Floating Rate Notes issued in TOB transactions.

Futures Contracts Sold:

Description	Contracts (Short)	Expiration Date	Notional Value	Value and Unrealized Appreciation
10-Yr U.S. Treasury Note Futures	(1,700)	June 2024	\$ 188,354,688	\$ (933,634)
US T-Bond Future	(350)	June 2024	42,153,125	(605,260)
			<u>\$ 230,507,813</u>	<u>\$ (1,538,894)</u>

1. ORGANIZATION

RiverNorth Managed Duration Municipal Income Fund, Inc. (the “Fund”) was organized as a Maryland corporation on March 18, 2019, pursuant to its Articles of Incorporation, which were amended and restated on June 20, 2019 (“Articles of Incorporation”). The Fund had no operations until July 25, 2019 (commencement of operations), other than those related to organizational matters and the registration of its shares under applicable securities laws.

The Fund is a diversified, closed-end management investment company registered under the Investment Company Act of 1940, as amended (the “1940 Act”). The Articles of Incorporation permit the Board of Directors (the “Board” or “Directors”) to authorize and issue fifty million shares of common stock with \$0.0001 par value per share. The Fund is considered an investment company and therefore follows the Investment Company accounting and reporting guidance of the Financial Accounting Standards Board (“FASB”) Accounting Standards Codification (“ASC”) 946 – Investment Companies.

The Fund will terminate on or before July 25, 2031; provided, that if the Board believes that under then-current market conditions it is in the best interests of the Fund to do so, the Fund may extend the Termination Date once for up to one year, and once for an additional six months. The Fund may be converted to an open-end investment company at any time if approved by the Board and the shareholders. Within twelve months prior to the termination date, the Fund may conduct a tender offer to purchase 100% of the then outstanding shares. Following the completion of the tender offer, the Fund must have at least \$100 million of net assets. The Board may then eliminate the termination date and convert the Fund to a perpetual structure upon the affirmative vote of a majority of the Board.

The Fund’s investment adviser is RiverNorth Capital Management, LLC (the “Adviser”) and the Fund’s sub-adviser is MacKay Shields, LLC (the “Sub-adviser”). The Fund’s primary investment objective is to seek current income exempt from regular U.S. federal income taxes (but which may be includable in taxable income for purposes of the Federal alternative minimum tax). The Fund’s secondary investment objective is total return.

2. SIGNIFICANT ACCOUNTING POLICIES

The following is a summary of significant accounting policies followed by the Fund. These policies are in conformity with generally accepted accounting principles in the United States of America (“U.S. GAAP”). The financial statements are prepared in accordance with U.S. GAAP, which requires management to make estimates and assumptions that affect the reported amounts and disclosures, including the disclosure of contingent assets and liabilities, in the financial statements during the reporting period. Management believes the estimates and security valuations are appropriate; however, actual results may differ from those estimates, and the security valuations reflected in the financial statements may differ from the value the Fund ultimately realizes upon sale of the securities. The financial statements have been prepared as of the close of the New York Stock Exchange (“NYSE”) on March 31, 2024.

The Fund invests in closed end funds (“CEFs”), each of which has its own investment risks. Those risks can affect the value of the Fund's investments and therefore the value of the Fund's shares. To the extent that the Fund invests more of its assets in one CEF than in another, the Fund will have greater exposure to the risks of that CEF.

Security Valuation: The Fund’s investments are generally valued at their fair value using market quotations. If a market value quotation is unavailable a security may be valued at its estimated fair value as described in Note 3.

Security Transactions and Investment Income: The Fund follows industry practice and records securities transactions on the trade date basis. The specific identification method is used for determining gains or losses for financial statements and income tax purposes. Dividend income is recorded on the ex-dividend date, and interest income and expenses are recorded on an accrual basis. Discounts and premiums on securities purchased are amortized or accreted using the effective interest method over the life of the respective securities.

3. SECURITIES VALUATION AND FAIR VALUE MEASUREMENTS

Fair value is defined as the price that the Fund might reasonably expect to receive upon selling an investment in a timely transaction to an independent buyer in the principal or most advantageous market of the investment. U.S. GAAP establishes a three-tier hierarchy to maximize the use of observable market data and minimize the use of unobservable inputs and to establish classification of fair value measurements for disclosure purposes.

Inputs refer broadly to the assumptions that market participants would use in pricing the asset or liability, including assumptions about risk, for example, the risk inherent in a particular valuation technique used to measure fair value including using such a pricing model and/or the risk inherent in the inputs to the valuation technique. Inputs may be observable or unobservable. Observable inputs are inputs that reflect the assumptions market participants would use in pricing the asset or liability developed based on market data obtained from sources independent of the reporting entity. Unobservable inputs are inputs that reflect the reporting entity’s own assumptions about the assumptions market participants would use in pricing the asset or liability developed based on the best information available in the circumstances.

Various inputs are used in determining the value of the Fund's investments. These inputs are summarized in the three broad levels listed below.

Level 1 – Unadjusted quoted prices in active markets for identical, unrestricted assets or liabilities that a Fund has the ability to access at the measurement date;

Level 2 – Quoted prices which are not active, quoted prices for similar assets or liabilities in active markets or inputs other than quoted prices that are observable (either directly or indirectly) for substantially the full term of the asset or liability; and

Level 3 – Significant unobservable prices or inputs (including the Fund's own assumptions in determining the fair value of investments) where there is little or no market activity for the asset or liability at the measurement date.

The inputs used to measure fair value may fall into different levels of the fair value hierarchy. In such cases, for disclosure purposes, the level in the fair value hierarchy within which the fair value measurement falls in its entirety is determined based on the lowest level input that is significant to the fair value measurement in its entirety.

Equity securities, including CEFs, are generally valued by using market quotations, but may be valued on the basis of prices furnished by a pricing service when the Adviser or Sub-adviser believes such prices more accurately reflect the fair market value of such securities. Securities that are traded on any stock exchange are generally valued by the pricing service at the last quoted sale price. Lacking a last sale price, an exchange-traded security is generally valued by the pricing service at its last bid price. Securities traded in the NASDAQ over-the-counter market are generally valued by the pricing service at the NASDAQ Official Closing Price. When using the market quotations or close prices provided by the pricing service and when the market is considered active, the security will be classified as a Level 1 security. Sometimes, an equity security owned by the Fund will be valued by the pricing service with factors other than market quotations or when the market is considered inactive. When this happens, the security will be classified as a Level 2 security. When market quotations are not readily available, when the Adviser or Sub-adviser determines that the market quotation or the price provided by the pricing service does not accurately reflect the current fair value, or when restricted or illiquid securities are being valued, such securities are valued as determined in good faith by the Adviser, as the Fund's valuation designee, in conformity with guidelines adopted by and subject to review by the Board. These securities will be categorized as Level 3 securities.

Investments in mutual funds, including short term investments, are generally priced at the ending NAV provided by the service agent of the funds. These securities will be classified as Level 1 securities.

Fixed income securities, including municipal and corporate bonds, are normally valued at the mean between the closing bid and asked prices provided by independent pricing services. Prices obtained from independent pricing services typically use information provided by market makers or estimates of market values obtained from yield data relating to investments or securities with similar characteristics. These securities will be classified as Level 2 securities.

Futures contracts are normally valued at the settlement price or official closing price provided by independent pricing services. These securities will be classified as Level 1 securities.

Effective September 8, 2022, and pursuant to the requirements of Rule 2a-5 under the 1940 Act, the Board approved updated valuation procedures for the Fund and designated the Adviser as the Fund's valuation designee to make all fair valuation determinations with respect to the Fund's portfolio investments, subject to the Board's oversight.

In accordance with the Fund's good faith pricing guidelines, the Adviser is required to consider all appropriate factors relevant to the value of securities for which it has determined other pricing sources are not available or reliable as described above. No single standard exists for determining fair value, because fair value depends upon the circumstances of each individual case. As a general principle, the current fair value of an issue of securities being valued by the Adviser would appear to be the amount which the owner might reasonably expect to receive for them upon their current sale. Methods which are in accordance with this principle may, for example, be based on (i) a multiple of earnings; (ii) discounted cash flow models; (iii) weighted average cost or weighted average price; (iv) a discount from market of a similar freely traded security (including a derivative security or a basket of securities traded on other markets, exchanges or among dealers); or (v) yield to maturity with respect to debt issues, or a combination of these and other methods. Good faith pricing is permitted if, in the Adviser's opinion, the validity of market quotations appears to be questionable based on factors such as evidence of a thin market in the security based on a small number of quotations, a significant event occurs after the close of a market but before the Fund's NAV calculation that may affect a security's value, or the Adviser or the Sub-adviser is aware of any other data that calls into question the reliability of market quotations.

Good faith pricing may also be used in instances when the bonds in which the Fund invests default or otherwise cease to have market quotations readily available.

The following is a summary of the inputs used at March 31, 2024 in valuing the Fund's assets and liabilities:

Investments in Securities at Value*	Level 1 - Quoted Prices	Level 2 - Other Significant Observable Inputs	Level 3 - Significant Unobservable Inputs	Total
Closed-End Funds	\$ 204,701,605	\$ –	\$ –	\$ 204,701,605
U.S. Corporate Bonds	–	1,959,732	–	1,959,732
Municipal Bonds	–	299,074,022	–	299,074,022
Short-Term Investments	13,869,793	–	–	13,869,793
Total	\$ 218,571,398	\$ 301,033,754	\$ –	\$ 519,605,152
Other Financial Instruments**				
Assets:				
Future Contracts	\$ (1,538,894)	\$ –	\$ –	\$ (1,538,894)
Total	\$ (1,538,894)	\$ –	\$ –	\$ (1,538,894)

* Refer to the Fund's Schedule of Investments for a listing of securities by type.

** Other financial instruments are derivative instruments reflected in the Schedule of Investments. Futures contracts are reported at their unrealized appreciation/depreciation.

The Fund did not hold Level 3 securities during the period ended March 31, 2024.

The Fund holds liabilities for floating rate note obligations, which are not reflected in the table above. The fair value of the Fund's liabilities for floating rate note obligations approximates their liquidation values. Floating rate note obligations are generally classified as Level 2.

4. DERIVATIVE FINANCIAL INSTRUMENTS

The following discloses the Fund's use of derivative instruments. The Fund's investment objective not only permits the Fund to purchase investment securities, but also allow the Fund to enter into various types of derivative contracts such as futures. In doing so, the Fund will employ strategies in differing combinations to permit it to increase, decrease, or change the level or types of exposure to market factors. Central to those strategies are features inherent to derivatives that make them more attractive for this purpose than equity or debt securities; they require little or no initial cash investment, they can focus exposure on only selected risk factors, and they may not require the ultimate receipt or delivery of the underlying security (or securities) to the contract. This may allow the Fund to pursue its objective more quickly and efficiently than if it were to make direct purchases or sales of securities capable of affecting a similar response to market factors.

On October 28, 2020, the Securities and Exchange Commission ("SEC") adopted Rule 18f-4 under the 1940 Act providing for the regulation of the use of derivatives and certain related instruments by registered investment companies. Rule 18f-4 prescribes specific value-at-risk leverage limits for certain derivatives users. In addition, Rule 18f-4 requires certain derivatives users to adopt and implement a derivatives risk management program (including the appointment of a derivatives risk manager and the implementation of certain testing requirements) and prescribes reporting requirements in respect of derivatives. Subject to certain conditions, if a fund qualifies as a "limited derivatives user," as defined in Rule 18f-4, it is not subject to the full requirements of Rule 18f-4. In connection with the adoption of Rule 18f-4, the SEC rescinded certain of its prior guidance regarding asset segregation and coverage requirements in respect of derivatives transactions and related instruments. With respect to reverse agreements, tender option bonds or other similar financing transactions in particular, Rule 18f-4 permits a fund to enter into such transactions if the fund either (i) complies with the asset coverage requirements of Section 18 of the 1940 Act, and combines the aggregate amount of indebtedness associated with all tender option bonds or similar financing with the aggregate amount of any other senior securities representing indebtedness when calculating the relevant asset coverage ratio, or (ii) treats all tender option bonds or similar financing transactions as derivatives transactions for all purposes under Rule 18f-4. The Fund was required to comply with Rule 18f-4 beginning August 19, 2022 and has adopted procedures for investing in derivatives and other transactions in compliance with Rule 18f-4.

Market Risk Factors: In pursuit of its investment objectives, the Fund may seek to use derivatives to increase or decrease its exposure to the following market risk factors:

Equity Risk: Equity risk relates to the change in value of equity securities as they relate to increases or decreases in the general market.

Interest Rate Risk: Interest rate risk relates to the risk that the municipal securities in the Fund's portfolio will decline in value because of increases in market interest rates.

Risk of Investing in Derivatives

The Fund's use of derivatives can result in losses due to unanticipated changes in the market risk factors and the overall market. Derivatives may have little or no initial cash investment relative to their market value exposure and therefore can produce significant gains or losses in excess of their cost. This use of embedded leverage allows the Fund to increase its market value exposure relative to its net assets and can substantially increase the volatility of the Fund's performance.

Additional associated risks from investing in derivatives also exist and potentially could have significant effects on the valuation of the derivative and the Fund. Typically, the associated risks are not the risks that the Fund is attempting to increase or decrease exposure to, per its investment objective, but are the additional risks from investing in derivatives.

Examples of these associated risks are liquidity risk, which is the risk that the Fund will not be able to sell the derivative in the open market in a timely manner, and counterparty credit risk, which is the risk that the counterparty will not fulfill its obligation to the Fund.

In the ordinary course of business, the Fund may enter into transactions subject to enforceable International Swaps and Derivatives Association, Inc. master agreements or other similar arrangements ("netting agreements"). Generally, the right to offset in netting agreements allows the Fund to offset certain securities and derivatives with a specific counterparty, when applicable, as well as any collateral received or delivered to that counterparty based on the terms of the agreements.

Futures

The Fund may invest in futures contracts in accordance with its investment objectives. The Fund does so for a variety of reasons including for cash management, hedging or non-hedging purposes in an attempt to achieve the Fund's investment objective. A futures contract provides for the future sale by one party and purchase by another party of a specified quantity of the security or other financial instrument at a specified price and time. A futures contract on an index is an agreement pursuant to which two parties agree to take or make delivery of an amount of cash equal to the difference between the value of the index at the close of the last trading day of the contract and the price at which the index contract was originally written. Futures transactions may result in losses in excess of the amount invested in the futures contract. There can be no guarantee that there will be a correlation between price movements in the hedging vehicle and in the portfolio securities being hedged. An incorrect correlation could result in a loss on both the hedged securities in a fund and the hedging vehicle so that the portfolio return might have been greater had hedging not been attempted. There can be no assurance that a liquid market will exist at a time when a fund seeks to close out a futures contract or a futures option position. Lack of a liquid market for any reason may prevent a fund from liquidating an unfavorable position, and the fund would remain obligated to meet margin requirements until the position is closed. In addition, a fund could be exposed to risk if the counterparties to the contracts are unable to meet the terms of their contracts. With exchange-traded futures, there is minimal counterparty credit risk to the Fund since futures are exchange-traded and the exchange's clearinghouse, as counterparty to all exchange-traded futures, guarantees the futures against default. The Fund is party to certain enforceable master netting arrangements, which provide for the right of offset under certain circumstances, such as the event of default.

When a purchase or sale of a futures contract is made by a fund, the fund is required to deposit with its custodian (or broker, if legally permitted) a specified amount of liquid assets ("initial margin"). The margin required for a futures contract is set by the exchange on which the contract is traded and may be modified during the term of the contract. The initial margin is in the nature of a performance bond or good faith deposit on the futures contract that is returned to the Fund upon termination of the contract, assuming all contractual obligations have been satisfied. These amounts are included in Deposit with broker for futures contracts on the Statement of Assets and Liabilities. Each day the Fund may pay or receive cash, called "variation margin," equal to the daily change in value of the futures contract. Such payments or receipts are recorded for financial statement purposes as unrealized gains or losses by the Fund. Variation margin does not represent a borrowing or loan by the Fund but instead is a settlement between the Fund and the broker of the amount one would owe the other if the futures contract expired. 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.