Ohio Public Employees Retirement System

Fixed Income Policy
March 2023
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I. SCOPE

This Policy applies to investments in the Fixed Income Asset Class of the Ohio Public Employees Retirement System (“OPERS”) Defined Benefit Fund (“DB Fund”) and Health Care 115 Trust Funds (“HC Fund”).

II. PURPOSE

This Policy provides the broad strategic investment framework for managing investments in the Fixed Income Asset Class.

III. INVESTMENT PHILOSOPHY

OPERS seeks to obtain broad exposure to fixed income assets in order to diversify assets and provide a return and a hedge for long-term liabilities in the DB Fund and rising health care costs in the HC Fund. This is accomplished utilizing multiple credit qualities, durations, and currencies. The Fixed Income Asset Class is structured to include managers that seek to exploit those opportunities with the expectation that the overall Asset Class produce risk-adjusted returns in excess of the benchmark, net of fees.

IV. ALLOCATION

DB and HC Funds’ assets are invested in sub-asset classes of the Fixed Income Asset Class as outlined in their respective Investment Objectives and Asset Allocation Policy.

Those Policies provide for investments in Fixed Income sub-asset classes of Core Fixed, Investment Grade Credit, Emerging Markets Debt, Securitized Debt, TIPS, High Yield, and U.S. Treasury with target allocations and ranges around those targets.

V. PERMISSIBLE INSTRUMENTS

Fixed income assets may be invested in any and all types of instruments intended to obtain fixed income-like returns. Instruments used may be exchange-traded or non-exchange-traded and may be physical securities or derivatives. Additional security type constraints may be applied in investment manager portfolio guidelines.
VI. THIRD-PARTY MARKETING

OPERS expects its general partners and investment managers to behave legally and ethically. OPERS requires that third-party marketers used by general partners or investment managers be regulated by appropriate legal authorities and subject to disciplinary actions by them. OPERS will confirm in its side letter, investment management agreement or other contractual arrangement, that a manager being engaged by OPERS has a requirement to provide the details of marketing arrangements, political contributions, or similar payments involving individuals, placement agents, third-party marketers and the like with respect to OPERS investments with the manager.

VII. PERFORMANCE OBJECTIVES

The performance benchmarks for each of the sub-asset classes are shown in the table in Section VIII. The underlying managers within each sub-asset class may be assigned benchmarks that are different from the overall sub-asset class benchmarks. The Annual Investment Plan, which is approved by the OPERS Retirement Board, shall include the expected outperformance for each sub-asset class.

VIII. RISK MANAGEMENT

The primary approach to managing risk is to monitor principal quantitative and qualitative risk factors relative to benchmarks while continuing to pursue active returns. The following sub-sections identify the key risk areas with risk management parameters.

A. Active Risk

Active Risk or tracking error is a statistical measure of the potential variability of a portfolio’s return relative to that of the assigned benchmark. The expected tracking error statistics for the Fixed Income Asset Class is to range between 0 and 200 basis points from the custom benchmark determined by target weighting the underlying sub-asset class allocations.

The following table provides the tracking error ranges for the Fixed Income sub-asset classes solely for informational purposes – it would be considered acceptable for the tracking error of one sub-asset class to exceed its range if the tracking error for the entire Fixed Income asset class is below 200 basis points.
<table>
<thead>
<tr>
<th>Sub-Asset Class</th>
<th>Benchmark</th>
<th>Tracking Error Range (in basis points)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Core Fixed</td>
<td>Bloomberg U.S. Aggregate Index</td>
<td>0-150</td>
</tr>
<tr>
<td>Investment Grade Credit</td>
<td>Bloomberg U.S. Corporate Bond Index</td>
<td>0-150</td>
</tr>
<tr>
<td>Emerging Markets Debt</td>
<td>Custom benchmark of the following indices:</td>
<td>0-800</td>
</tr>
<tr>
<td></td>
<td>- 50% JP Morgan Emerging Markets Bond Index Global</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 50% JP Morgan Government Bond Index-Emerging Markets Global Diversified</td>
<td></td>
</tr>
<tr>
<td>Securitized Debt</td>
<td>Custom benchmark of the following indices:</td>
<td>0-400</td>
</tr>
<tr>
<td></td>
<td>- 50% Bloomberg Non-Agency Investment Grade CMBS:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BBB Total Return Index Unhedged USD</td>
<td></td>
</tr>
<tr>
<td></td>
<td>- 50% Bloomberg Non-Agency CMBS Agg Eligible Total Return Index Value Unhedged USD</td>
<td></td>
</tr>
<tr>
<td>TIPS</td>
<td>Bloomberg U.S. TIPS Index</td>
<td>0-50</td>
</tr>
<tr>
<td>High Yield</td>
<td>Bloomberg U.S. High Yield Index</td>
<td>0-700</td>
</tr>
<tr>
<td>U.S. Treasury</td>
<td>Bloomberg U.S. Treasury Index</td>
<td>0-50</td>
</tr>
</tbody>
</table>

**B. Interest Rate Risk**

Interest rate risk will be managed by limiting the average option-adjusted duration of fixed income portfolios. The Fixed Income Asset Class duration will be within 20% of the option-adjusted duration of the aggregate market value weighted Fixed Income sub-asset class benchmarks.

**C. Credit Risk**

Credit risk will be managed by limiting the non-investment grade securities held in the fixed income portfolios.
The percentage by market value of non-investment grade securities in the Fixed Income Asset Class will not exceed 15 percentage points of the percentage by market value of non-investment grade securities in the Fixed Income Aggregate Benchmark.

Non-investment grade securities are defined as securities rated below Baa3 by Moody’s and securities rated below BBB- by S&P and Fitch. If a majority of Moody’s, S&P, or Fitch rate a security non-investment grade, it will be considered non-investment grade. Securities that have not been rated will be considered non-investment grade.

D. Liquidity Risk

Investment structure impacts liquidity. Therefore, consideration is given to separate accounts over commingled accounts as well as with internally managed accounts given their greater control and transparency.

E. Currency Risk

The percentage by market value of non-U.S. dollar based securities in the Fixed Income Asset Class will not exceed 15 percentage points of the percentage by market value of non-U.S. dollar based securities in the Fixed Income Aggregate Benchmark. Currency management, including currency derivatives and cross-hedging, may be used to manage OPERS’ exposure to currency risk.

F. Non-U.S. Issuer Risk

The percentage by market value of securities of non-U.S. issuers in the Fixed Income Asset Class will not exceed 15 percentage points of the percentage by market value of non-U.S. issuers in the Fixed Income Aggregate Benchmark.

G. Sector Risk

The sub-asset classes are expected to be broadly diversified and may have deviations from the benchmark sector weightings. Sector exposures will be monitored by Investment Staff (“Staff”) to identify the under/over-allocations and for performance attribution analysis. The tracking error constraints, in conjunction with the use of broad-based asset class benchmarks, will have the effect of limiting sector concentration.

H. Manager Risk

The allocation to a single active external manager in the Fixed Income Asset Class is limited to 15% of the Asset Class.
I. Derivatives Risk

Derivatives usage and limitations as well as risk management are specified in manager guidelines and shall comply with OPERS’ Derivatives Policy.

J. Leverage Risk

Leverage usage and limitations as well as risk management are specified in manager guidelines and shall comply with OPERS’ Leverage Policy.

IX. ROLES AND RESPONSIBILITIES

A. OPERS Retirement Board

The OPERS Retirement Board (“Board”) is responsible for reviewing and approving this Policy and any changes to it.

In addition, the Board is responsible for reviewing reports related to this Policy.

B. Investment Staff

The Board delegates authority to the Chief Investment Officer (“CIO”) to implement this Policy. Staff is responsible for monitoring the Policy and recommending changes to the Board. Staff is also responsible for managing the Fixed Income assets within the framework of the Board approved Policy and within the goals and objectives adopted by the Board in the Annual Investment Plan.

Staff shall ensure that all manager guidelines for external and internal portfolios are set in accordance with OPERS’ Policies.

All members of Staff are accountable to the CIO. The CIO is responsible for all Staff actions relative to the management of OPERS’ investments. In this regard, it is the responsibility of the CIO to satisfy himself/herself that all Policies and directives of the Board are implemented.

C. Investment Compliance

The Investment Compliance area of Investment Accounting, Operations and Compliance (“IC”) is responsible for monitoring compliance with this Policy (except for tracking error measurements), including guidelines established pursuant to it. If IC determines that an exception to this Policy has occurred, IC shall notify Staff, the CIO, the Executive Director and the Board.

D. Investment Advisor

The role of the Investment Advisor is specified in the Investment Objective and Asset Allocation Policies.
X. MONITORING AND REPORTING

To ensure monitoring and compliance with this Policy, the following reports will be reviewed with the Board:

A. Quarterly

   Performance reports – Investment Advisor and/or Staff

   Report on compliance – Investment Compliance Staff

B. Annually

   OPERS Annual Investment Plan – Staff