Ohio Public Employees Retirement System

Risk Parity Policy
March 2023
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Revision History

Risk Parity Policy Established February 20, 2013
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I. SCOPE

This Policy applies to investments in the Risk Parity Asset Class within 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 framework for managing investments in the Risk Parity Asset Class.

III. INVESTMENT PHILOSOPHY

OPERS seeks to diversify assets through the Risk Parity allocation by obtaining exposure to global capital market assets in a risk-aware manner. This requires investing in multiple asset types and leveraging exposures to global markets in order to obtain the desired risk-aware mix. The Risk Parity allocation is structured to achieve roughly balanced risk exposure across equities, nominal fixed income, and inflation sensitive assets, targeting a total volatility level comparable to that of the DB Fund and HC Fund.

IV. ALLOCATION

The allocation to Risk Parity is specified in the Investment Objectives and Asset Allocation Policy for the DB Fund and HC Fund. Investments within the Risk Parity Asset Class may be made across multiple asset classes. For asset allocation measurement purposes, those exposures are only reflected within the Risk Parity allocation.

Exposure can be obtained through externally managed and internally managed approaches. Managers’ portfolios may have unique asset allocations, strategies and definitions of approaches for targeting balanced risk exposures.

V. PERMISSIBLE INSTRUMENTS

Risk Parity assets may be invested in all types of instruments intended to obtain exposure to a wide variety of asset types including equities, fixed income (both sovereign and credit based exposures), inflation-linked bonds, commodities and other asset types. Instruments used may be exchange-traded or over-the-counter and may be physical securities or derivatives, and a degree of leverage may be employed. Additional security type constraints may be applied in investment manager portfolio guidelines or comparable governing documents.
VI. THIRD-PARTY MARKETING

OPERS expects its general partners to behave legally and ethically. OPERS requires that third-party marketers used by general partners 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 overall benchmark for the Risk Parity Asset Class is a market value weight of the underlying benchmarks. The performance benchmarks for the Risk Parity strategies are shown in the table in Section VIII. The Annual Investment Plan, which is approved by the OPERS Retirement Board, shall include the performance expectation for Risk Parity.

VIII. RISK MANAGEMENT

Risk is managed through a combination of quantitative and qualitative constraints. The following sections identify the most significant risks with Risk Parity investments:

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. Externally managed strategies do not lend themselves to traditional quantitative measures of risk such as tracking error due to the use of a peer-based index as a benchmark. Individual external managers within the Risk Parity Asset Class typically do not target a specific level of tracking error relative to the assigned peer-based benchmark.

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Benchmark</th>
<th>Tracking Error Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>External Managers</td>
<td>Custom HFR Risk Parity Index</td>
<td>0-200 basis points (ex post over rolling three-year periods)</td>
</tr>
<tr>
<td>Internal Global Risk Parity</td>
<td>S&amp;P Risk Parity Index 10% Vol Target (USD)</td>
<td>0-60bps</td>
</tr>
</tbody>
</table>
B. Liquidity Risk

Investment structure for externally managed portfolios impacts liquidity. Investment Staff (“Staff”) will consider liquidity provisions including withdrawal restrictions at both the asset class and individual manager level. Derivatives may introduce additional liquidity risk; however, cash holdings mitigate this risk.

C. Currency Risk

Risk Parity strategies employ some non-U.S. Dollar denominated instruments which expose the Funds to currency risk.

D. Manager Risk

By allocating capital to both internally managed strategies and multiple external Risk Parity managers, concentration risk to any one manager is limited. Staff may work with the Investment Advisor to identify managers, using a process approved by the Chief Investment Officer (“CIO”). In addition to the investment due diligence process, each external manager undergoes an operational due diligence review prior to funding to evaluate non-investment related risk factors.

E. Derivatives Risk

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

F. Leverage Risk

Risk Parity strategies generally incorporate leverage in order to achieve the desired risk allocations and volatility characteristics. The use of a volatility target limits the amount of leverage that may be undertaken. In addition, strategy specific leverage limitations and asset class exposure maximums may be specified within manager guidelines or governing documents to further constrain the use of leverage. Risks may include a loss of a significant portion of the original investment.

G. Legal Risk

Risk Parity strategies have unique characteristics which require legal expertise including the use of outside counsel. Limitations include:

- All external managers exercising investment discretion must be (i) registered with the United States Securities and Exchange Commission or with a similar regulator if they are domiciled outside of the United States or (ii) a bank regulated by a United States regulatory body.
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 Risk Parity investments within the framework of the Board-approved Policy and within the goals and objectives adopted by the Board in the Annual Investment Plan.

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 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