COMMONWEALTH OF PENNSYLVANIA
PUBLIC SCHOOL EMPLOYEES' RETIREMENT SYSTEM

Liquidity Policy

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Revision History

Liquidity Policy Established	**March 6, 2020**
Policy Revised	**March 5, 2021**
Policy Revised	**May 24, 2023**

I. SCOPE

This Policy addresses liquidity management within the asset allocation of the Pennsylvania Public School Employees' Retirement System ("PSERS") Defined Benefit Fund ("The Fund").

II. PURPOSE

This Policy provides the broad strategic framework for managing the Fund's liquidity involving investment assets, investment-related liabilities and short-term obligations including benefit payments.

III. ROLES AND RESPONSIBILITIES

Roles and Responsibilities related to this Policy are identified within PSERS' Investment Policy Statement ("IPS").

IV. PHILOSOPHY

In general, liquidity refers to the capacity to use and, if necessary, generate cash. Since most obligations are satisfied with cash, rather than other assets, this capacity is of paramount importance to PSERS.

For an asset or collection of assets, liquidity is a term used to characterize the capacity of the asset(s) to be efficiently converted into cash. "Efficiently" considers (1) the time involved in the conversion, (2) the price at which the conversion occurs and (3) the transaction costs. More liquid assets generally require less time to be converted into cash, can be converted into cash at or above "fair value", and involve low transaction costs. Conversely, less liquid assets generally require more time to be converted into cash, may require discounting below "fair value" to be converted, and may involve high transaction costs.

Liquidity is valued by the markets and, therefore, comes at a cost. Generally, the more liquid an asset is, the lower the expected return from it. For example, physical cash itself provides no future expected return.

In its asset allocation, PSERS seeks to balance the long-term usage of illiquid, or potentially illiquid assets, and leverage to help manage risk while generating targeted returns with the ability to raise and hold cash for short-term obligations, which is always the first priority of the System. During periods of market dislocations in which asset liquidity becomes impaired, maintaining the long-term asset allocation is a secondary priority relative to the immediate cash flow needs for benefit payments.

The term liquidity may also be used more broadly, referring to the capacity to satisfy short-term obligations in which both asset liquidity and liabilities are considered. In this context, liquidity management refers to the process of balancing available assets relative to liabilities. It is a complex process that may be impacted by many variables, including conditions which affect asset liquidity as well as those conditions which affect liabilities. Investment-related liabilities include notional exceeding capital and unfunded commitments.

V. SOURCES OF LIQUIDITY RISK

Liquidity risk is the potential for loss resulting from the diminished capacity, or inability of the Fund to efficiently meet its benefit and investment-related payment obligations. Four broad areas of liquidity risk are considered below.

A. Employer Contribution Receipts

PSERS is funded by employee and employer contributions which represent a significant source of liquidity. Employee contributions have been received as projected over the history of PSERS. Employer contributions are actuarially determined and can be projected for a number of years in the future. However, employer contributions are subject to the Commonwealth of Pennsylvania's (Commonwealth) budgetary constraints and may not be fully paid in any given year. This represents a significant risk to the projected liquidity of the Fund.

In the past, PSERS has gone through a protracted period where the actuarially-required employer contributions were not made by the Commonwealth. Act 120 of 2010 implemented a funding plan to slowly raise employer contributions to the actuarily required amount. During fiscal year 2017, a major funding milestone was reached as employers funded 100% of the actuarially required contributions to PSERS for the first time in fifteen years. Should the employer contributions be legislatively decreased in the future below the actuarily required contributions, the resulting decrease will increase liquidity risk for PSERS.

B. Benefit Payments

Many factors influence the liquidity risk associated with PSERS' benefit obligations. These include the structural characteristics of the System, including benefits offerings, contribution rates, and member demographics. PSERS is currently considered to be a mature plan, i.e., a plan with a lower ratio of active members to retirees, in which cash outflows (benefit payments) exceed cash inflows (contributions).

This Policy relates only to the ultimate, short-term cash flow requirements associated with the cash payment of the benefits and not to PSERS' structural benefit characteristics.

C. Assets

Asset liquidity is dependent upon several factors including:

- Market conditions (trading volumes, volatility, relative values of securities) at near normal levels;
- How quickly an asset can be bought and sold (this includes contractual

provisions, such as gates, which may limit the ability to transact);

- Pricing efficiency; and
- Transaction costs.

Generally speaking, and with consideration of the variables above, the level of liquidity of the investments can be characterized, under normal market conditions, along a spectrum:

Illiquid **Liquid**

Non-Traditional Investments (e.g., Private: Equity, Real Estate, Credit, Infrastructure, etc.)

Absolute Return and Funds

Traditional Investments (e.g., Public: U.S. and Non-U.S. Equity, Fixed Income, Real Assets, etc.)

D. Investment-Related Liabilities and Cash Needs

Investment-related liabilities are those obligations resulting from investment activity and include:

- Derivatives related obligations including margin collateralization and other payment obligations;
- Transactional obligations; and
- Other contractual obligations.

Potential cash needs include the following:

- Asset allocation and Fund-level rebalancing activities;
- Internally managed portfolio fundings and transitions;
- Cash related to leveraged positions;
- Externally managed public and private markets portfolio capital commitments and transitions.

These liabilities and cash needs may also be impacted by market conditions and contractual provisions.

VI. RISK MANAGEMENT

In order to achieve its investment objectives, the Board has sought a balance of risk and return in its asset allocation. As part of that balance, the Board has elected to make allocations to Non-Traditional Investments and other illiquid asset classes and asset structures. This balance of risk and return is addressed by this policy which seeks to provide a roadmap of how PSERS considers both liquidity risk and returns, while recognizing that any allocation that seeks returns will appear sub-optimal in the midst of a crisis. Therefore, it is necessary to build the liquidity strategy in advance of the need for it.

A number of approaches are used to measure and manage the Fund's liquidity risks, including a combination of controls in policies, portfolio guidelines, account structures, procedures, and operative legal and governing documents.

A. Assets

The asset allocation is the primary determinant of the Fund's liquidity. The liquidity characteristics of different asset classes are along a spectrum, as summarized in the table in Section V.C., with additional detail provided below. Limitations on less liquid asset classes are driven by the top-down allocation and ranges which are included in the Asset Allocation within the IPS.

PSERS maintains a dedicated allocation to Cash, including low risk/high quality liquid securities, within the Asset Allocation. This allocation is reviewed annually during the Asset Allocation analysis and is managed by IOP on a daily basis to provide for all near-term cash needs.

Public fixed income assets are held, in part, for liquidity management purposes and may be utilized to satisfy liquidity needs. Specifically, Treasury securities are held in the following allocations and may be accessed as needed:

- US Long Treasury
- US Inflation Protected
- US Core Fixed

PSERS also has a Tail Risk Mitigation Strategy, as defined in the Tail Risk Mitigation Strategy Policy, that is designed to provide significant payoffs in the event of severe equity market drawdowns, thereby serving as a source of liquidity.

B. Investment-Related Liabilities

The primary investment-related liabilities include:

1. **Unfunded capital commitments and contingent capital commitments**
   Non-Traditional Investments (i.e., Private Equity, Private Credit, Private Real Estate, and Private Infrastructure) require the commitment of a pool of capital which is then drawn, or funded, over time as needed (i.e., as investments are made). This unused (and unfunded) portion of capital, referred to as unfunded committed capital, represents a form of liability. At the time the manager calls for capital, investors must be prepared to provide cash to satisfy the call.

   Similarly, contingent capital commitments, whereby a commitment is approved for a fund to be drawn at a later date, typically to be a liquidity provider during a crisis, represents a form of liability.

The contingent liquidity requirements of Non-Traditional Investment commitments are closely monitored and managed accordingly via the annual pacing plan as prepared for each Non-Traditional Investments asset class.

2. Derivatives

Usage of derivatives may result in additional liquidity needs, such as clearinghouse margining, collateralization with OTC derivative counterparties, and derivative settlements.

3. Investment Expenses

These include items paid from PSERS' assets such as external management fees and related expenses; internal management expenses; and consultant, custody, legal, and related fees and expenses.

C. Contingency Plan

During a liquidity event – the unlikely circumstance where market conditions are severe enough such that immediate liquidity needs are greater than the liquidity normally available from the Fund's asset allocation – the CIO may take certain contingency measures, as expressly described below, to either preserve or generate additional liquidity to satisfy the Fund's liquidity needs. Given the short time typically available for executing such measures, Board approval prior to execution may not be feasible; however, the full Board, the Board's General Investment Consultant, PSERS Executive Director, and PSERS Chief Counsel will be notified by the CIO as soon as practicable after executing such measures and no later than within 24 hours. The CIO will also provide a more formal report to the full board two weeks after such measures have taken effect, or by way of the next Board meeting (should such meeting occur sooner). Any such contingency measures will be considered temporary and may not extend longer than three months without receiving Board approval. The Board, at its sole discretion, may choose to limit or extend the duration of such measures to a period shorter or greater than three months.

The contingency measures may include the following actions:

- Temporary suspension of one or more approved Target Ranges included in the IPS, to allow actual allocations to move (by way of market changes or actions directed by the CIO) beyond the range(s) stipulated in the IPS.
- Liquidating specific securities from an account irrespective of benchmark. For example, selling U.S. Treasuries from a Core Fixed Income account benchmarked to the Bloomberg Barclays U.S. Aggregate resulting in a temporary, significant overweight to the remaining issues.
- Temporary suspension of certain derivatives used for asset allocation, currency hedging, or other strategy specific purposes, even where such action may bring actual allocations outside the Target Ranges stipulated within the IPS.

VII. MONITORING AND REPORTING

See Monitoring and Reporting section of the IPS.