

Liquidity Allocation Recommendation and Introduction to Treasury Management

Investment Office
Financial Office

November 12, 2013

Content

Objectives and Session Overview

Recommended Liquidity Allocation Background

Peer Group Liquidity Allocation

Treasury Management

Session Overview

Today's Objectives

- Recommend a change in the strategic allocation to the Liquidity asset class from 4% to 2%
- Provide an introduction to Treasury Management

Content

Objectives and Session Overview

Recommended Liquidity Allocation Background

Peer Group Liquidity Allocation

Treasury Management

CalPERS Liquidity Allocation History

- Pre 2009 – No Liquidity Allocation
- May 2009 – Interim Asset Allocation Review
 - 2% target and 0-5% range
- December 2010 – Established Liquidity Asset Class
 - 4% target and 1-7% range

Why?

Opportunity Cost

- 1% of PERF approximately \$ 2.7 Billion
- Expected Liquidity return 1.95%
 - Shortfall to Total Fund expectation 5%+ (\$ 135.0 M)
 - Shortfall to Global Fixed Income 1.5%+ (\$ 40.5 M)
 - Shortfall to ARS 3.9%+ (\$ 105.3 M)

Why?

Reduced Demands

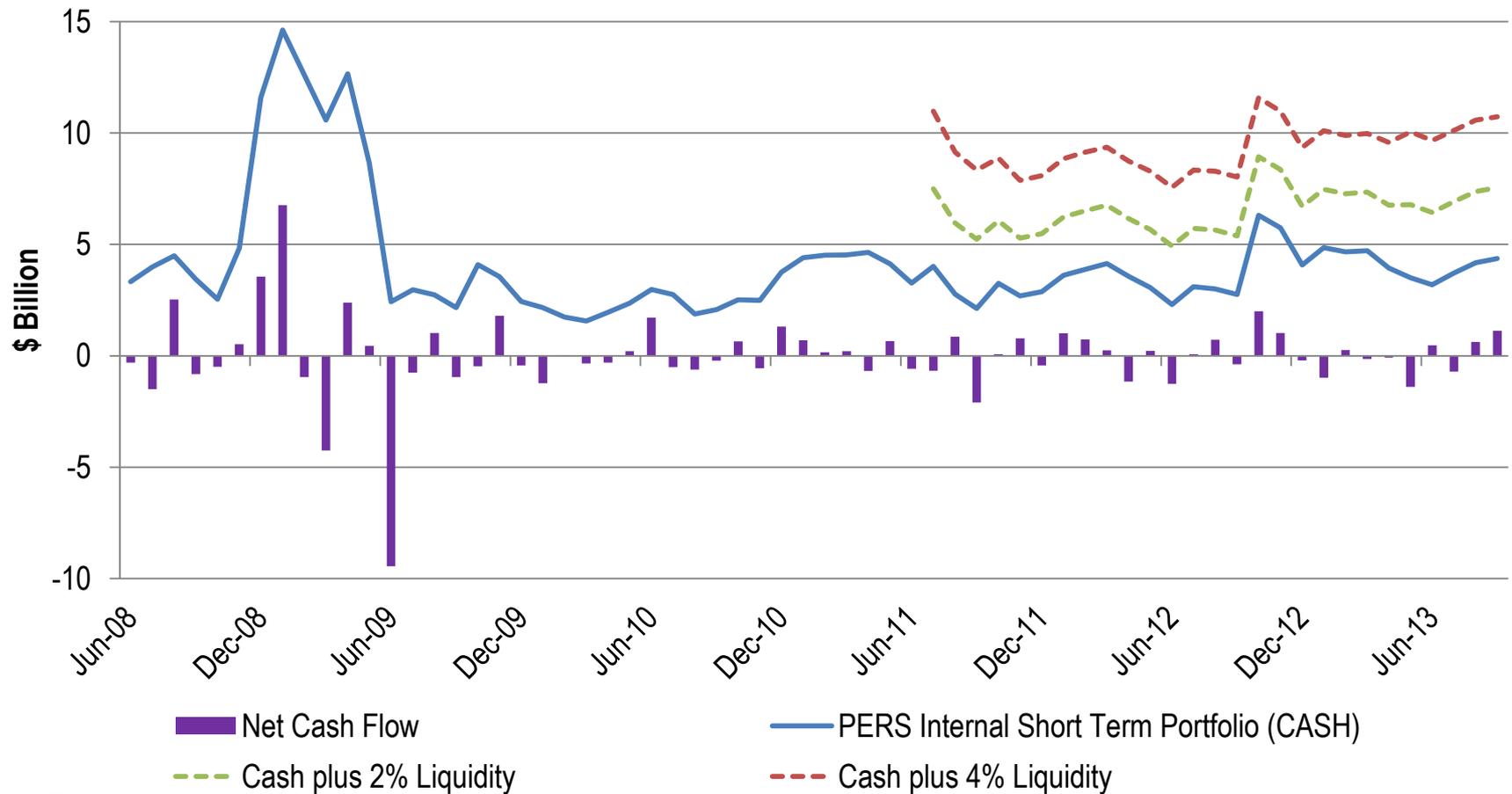
- Security Lending “On-loan” Balances
 - 2008 \$ 33.9 B
 - 2013 \$ 10.8 B
- Committed (Undrawn) Capital
 - 2008 \$ 42.5 B
 - 2013 \$ 18.7 B

Why?

Management Changes

- Establishment of Investment Strategy Group
 - Enhanced Communication
 - Explicit liquidity management
- Collateral Management
 - Internalized
 - Radical risk reduction
 - ✓ 2008: 23% matures < 30 days
 - ✓ 2013: 90% matures < 30 days

Why 2% is the Right Allocation Now



Content

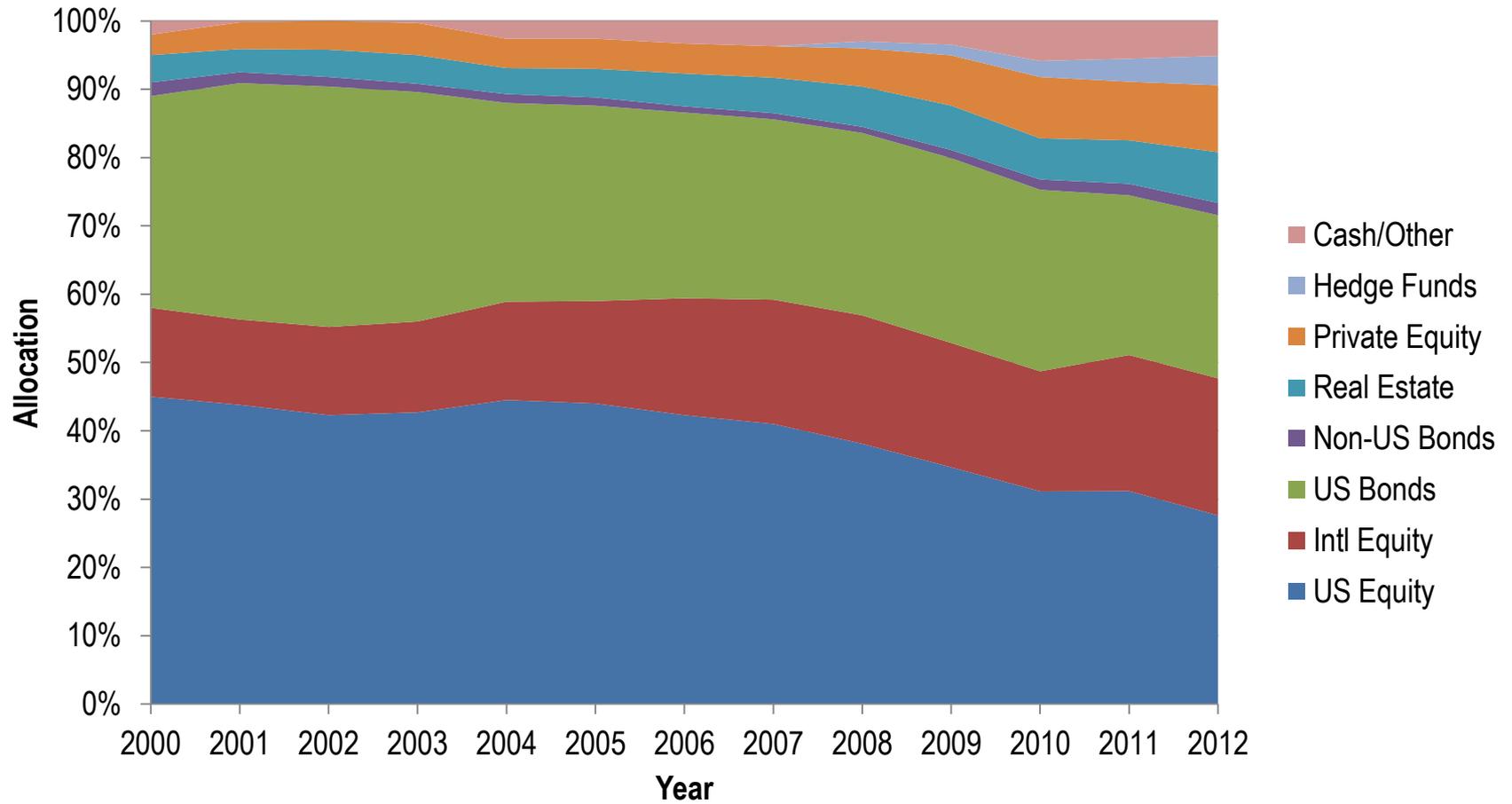
Objectives and Session Overview

Recommended Liquidity Allocation Background

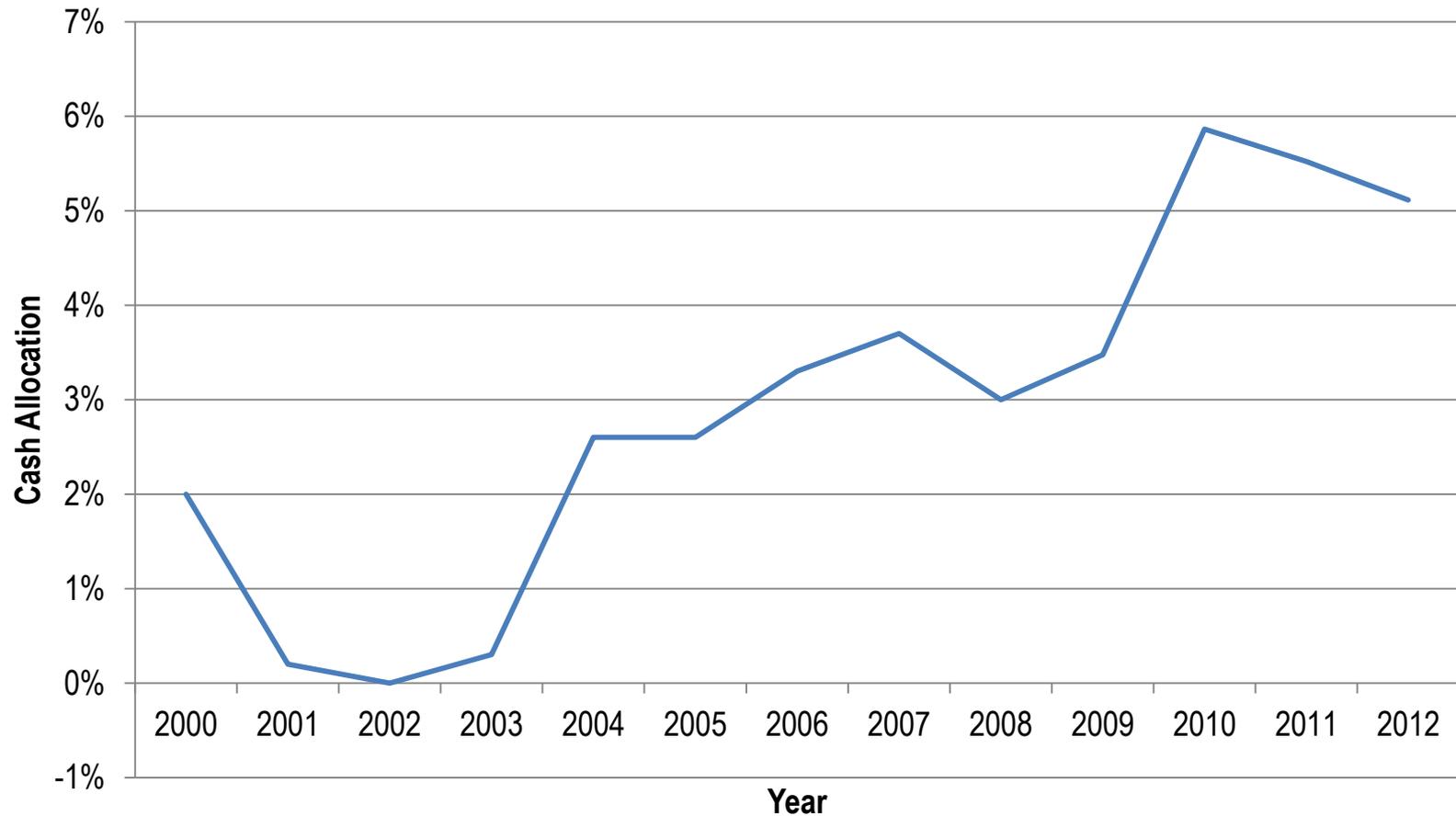
Peer Group Liquidity Allocation

Treasury Management

State Defined Benefit Plan Average Asset Allocation



State Defined Benefit Plan Average Cash Allocation



Content

Objectives and Session Overview

Recommended Liquidity Allocation Background

Peer Group Liquidity Allocation

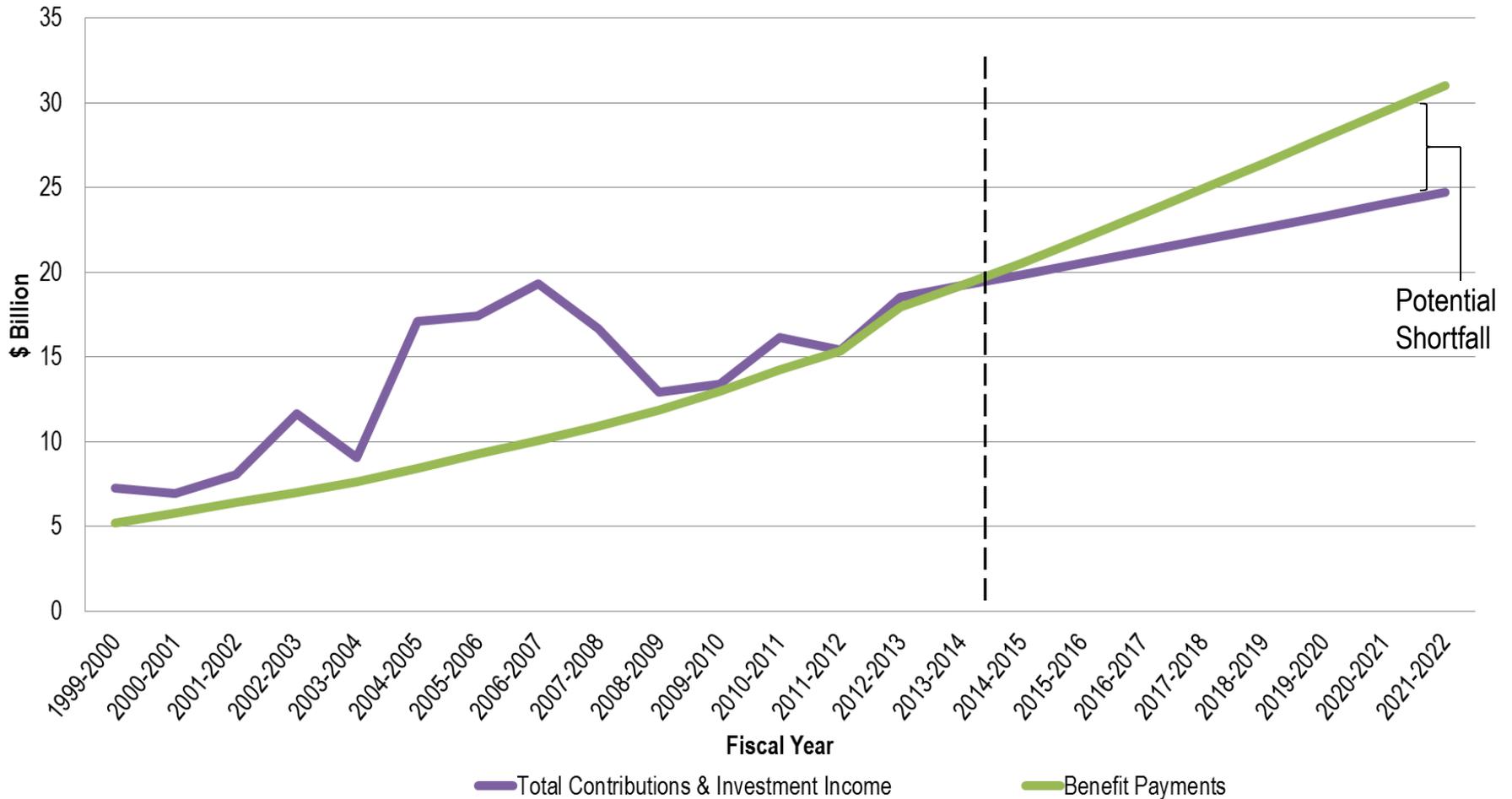
Treasury Management

Significance of Treasury Management Today

- Why are we talking about cash and liquidity now?
 - Lessons from the 2008 liquidity crisis
 - Increasing cash-flow shortfall

CalPERS Investment Belief 1: Liabilities must influence the asset structure.

Historic & Projected PERF Cash Flow Analysis



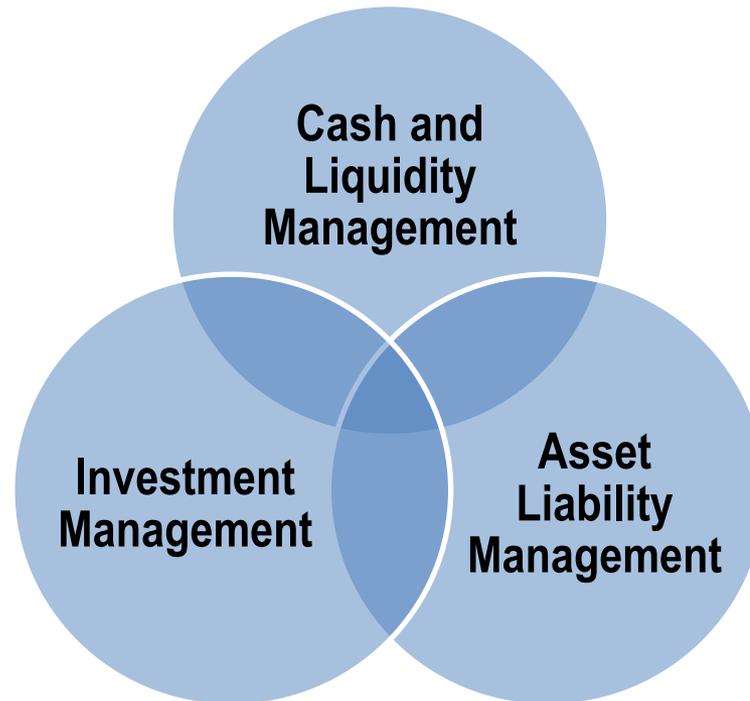
Why Treasury Management is Important

- Risks are identified early and mitigated
- Transactions costs minimized
- Avoid future liquidity problems
- Facilitates better decision-making
- Strengthen internal controls

Treasury Management Function Development – A Long-Term Journey

Treasury Management Objectives

An enterprise-wide program achieved through the collaboration of multiple functional areas to ensure the financial soundness of each trust while managing operational, financial, and reputational risk

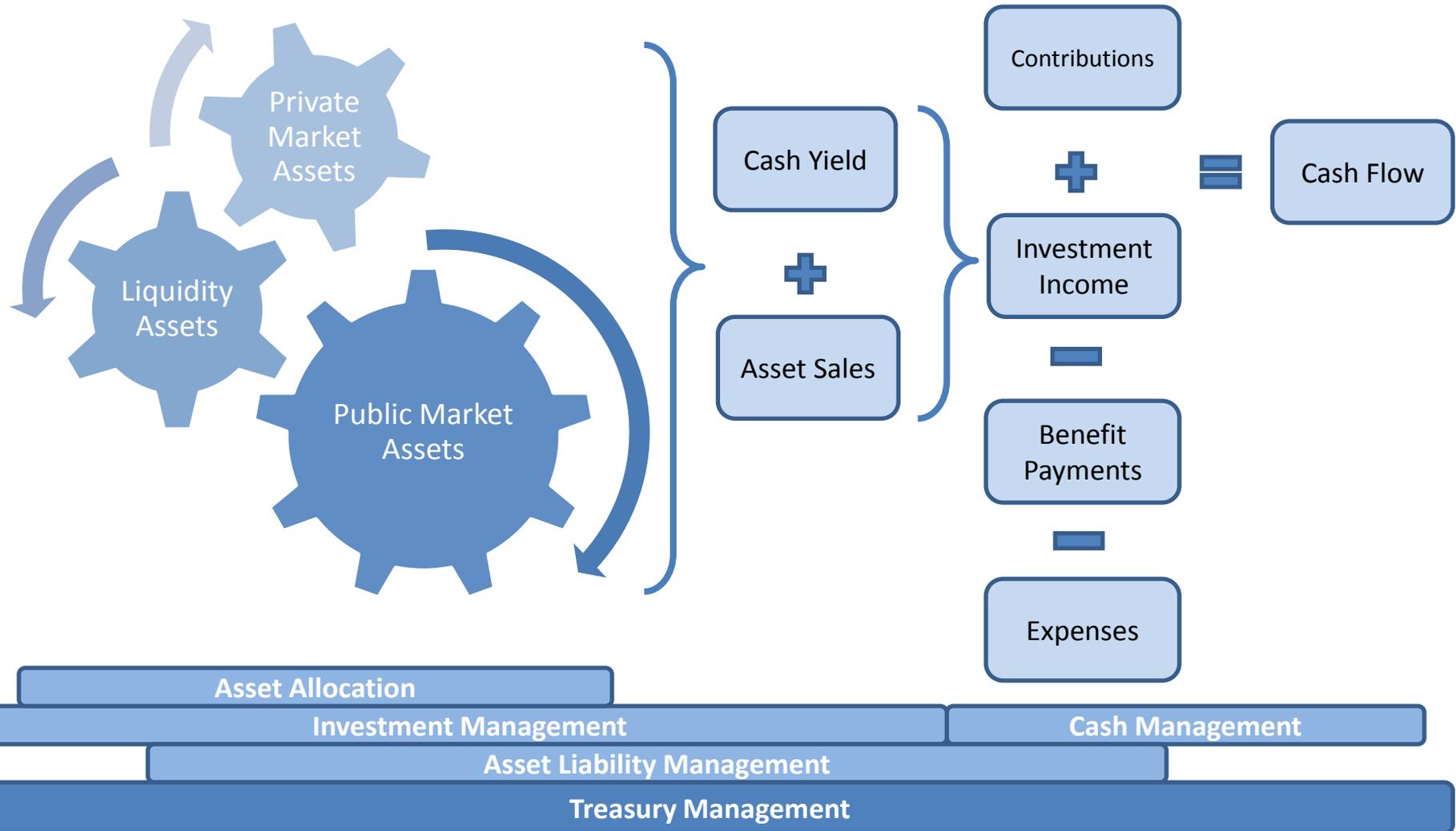


Treasury Management is an Enterprise Function

- **Cash and Liquidity Management**
 - Optimize cash flows and minimize idle cash
 - Timely disbursements of payments
 - Debt and accounts receivable management
 - Ensure adequate liquidity to meet obligations and support business
- **Governance**
 - Ensure accurate accounting of Treasury transactions
 - Implement and manage treasury policies and procedures
- **Risk Management**
 - Operational and Strategic risks
 - Underfunding, Legislative and Regulatory Risk

Treasury Management is an Enterprise Function

- **System Infrastructure**
 - Manage relationship with control agencies, custodian and banks
 - Ensure Treasury function is understood and valued within the business
 - Accounting infrastructure and reporting
- **Planning and Operations**
 - Cash flow forecasting
 - Risk forecasting
 - Operate treasury systems
 - Ensure quality standards of service providers
- **Funding**
 - Ensure adequate liquidity to meet obligations and support business



Next Steps

- Enhance our understanding of cash flow and liquidity needs and opportunity cost of our capital
- Centrally manage liquidity for the Total Fund
- Establish a valuation framework to inform us about relative pricing of income and capital appreciation
- Implement improved processes to ensure:
 - Consistent practices to fund non-investment cash outflows
 - Consistent practices to manage cash flows across asset classes