
March 19, 2018

Item Name: Terminated Agency Pool Rebalance

Program: Trust Level Portfolio Management

Item Type: Information Consent

Executive Summary

This agenda item reports the current market value of assets and an analysis of the structure of the immunized segment of the Terminated Agency Pool (TAP) investment program designed to match the anticipated cash flows derived from the TAP liabilities.

Strategic Plan

This agenda item supports the CalPERS Strategic Plan goal of improving long-term pension and health benefit sustainability.

Investment Beliefs

This agenda item supports CalPERS' Investment Belief 1 that liabilities must influence the asset structure.

Background

The TAP program exists to provide benefit payments to members who are employees of agencies that have terminated their contract with CalPERS. Given the TAP program's limited funding sources, the primary performance objective of the TAP portfolio is to minimize funding risk.

The TAP portfolio consists of an immunized portfolio and a surplus account. The immunized portfolio is designed to minimize the likelihood of underfunding by matching the projected future benefit payments with low risk, U.S. government issued securities. The immunized portfolio contains Treasury Inflation Protected Securities (TIPS) and Separate Trading of Registered Interest and Principal Securities (STRIPS) which are invested to match the liability cash flows across a range of conservative inflation scenarios. The immunized portfolio also holds two years of projected benefit payments in a cash reserve account. The second segment, the surplus account, constitutes assets in excess of those required to fund the immunized portfolio and cash reserve account, and is invested in the same way as the rest of the Public Employees' Retirement Fund (PERF).

Analysis

Performance Update

For the fiscal year (FY) ending June 30, 2017, cash flows generated from the immunized portfolio were sufficient to meet the annual benefit payments of \$5.4 million. During that time, the market value of assets attributable to the TAP grew by 14% from \$223 million to \$253 million which includes investment gains as well as new entrants to the TAP. The assets in the TAP consist of the following:

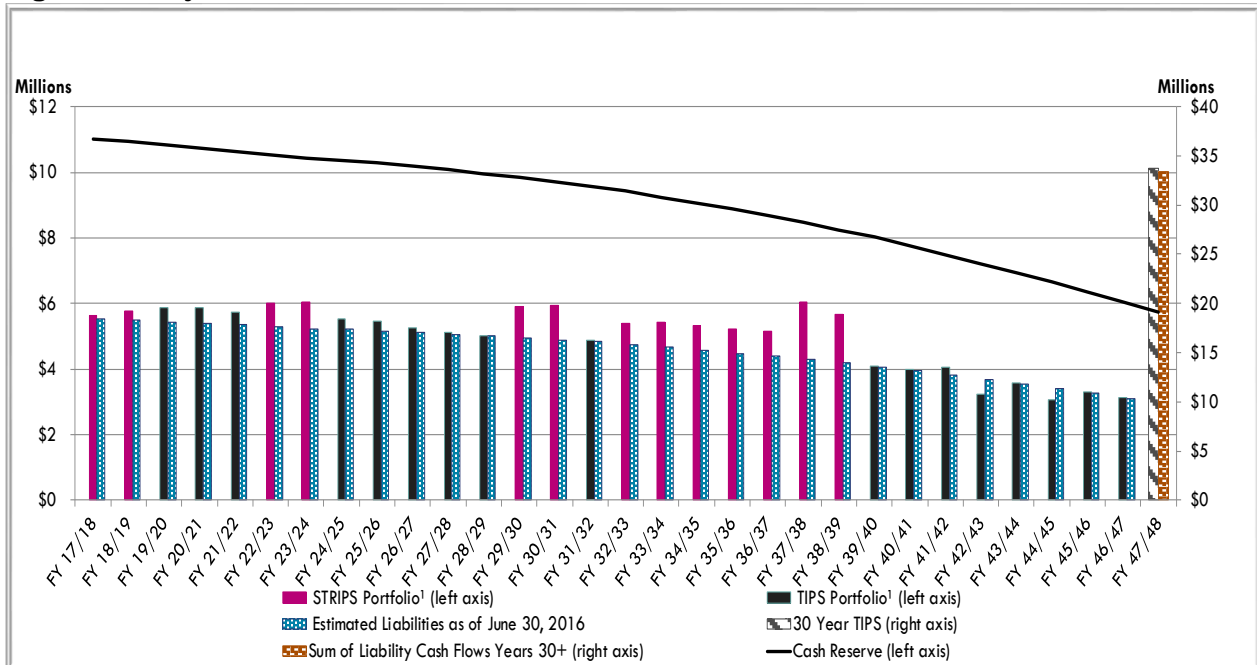
1. Immunized portfolio:
 - \$110.6 million invested in TIPS and STRIPS
 - \$8.2 million invested in Short Term Investment Fund
2. Surplus portfolio:
 - \$134.4 million invested alongside the PERF

Rebalance Update

Staff has analyzed the immunized portfolio’s ability to meet the TAP Program’s projected benefit payments growing over a range of conservative inflation scenarios ranging from 1.76% to 4%.

Figure 1 illustrates that the cash flows generated by the immunized portfolio should be sufficient to cover the projected benefit payments under an inflation assumption of 1.76%. The inflation assumption used in the Actuarial Valuation for the TAP, presented to the Finance and Administration Committee in September 2017, was 1.76%. Due to uncertainties in any inflation forecast, STRIPS were evaluated to cover benefit payments growing up to a 4% inflation rate. Accordingly, Figure 1 shows excess cash flows for those years where STRIPS were used to meet the projected benefit payments that grow at an annual rate of 1.76%. Figure 1 further illustrates an important challenge in immunizing the portfolio, as the maturities of available US Treasury securities are from 1 year to 30 years, whereas TAP program liabilities are expected to extend to almost 100 years. The 30 year TIPS maturing in FY 2048 shown in Figure 1 represents the amount staff estimates will be sufficient to meet TAP’s estimated benefit payments due after 30 years.

Figure 1: Projected Asset & Benefit Cash Flows



As the portfolio is rebalanced each year, staff will reassess the inflation hedge necessary to immunize the TAP program’s future benefit payments and will extend the duration of the immunized portfolio by rolling the 30 year TIPS into the longest currently available 30 year TIPS, at the time of the rebalance.

Budget and Fiscal Impacts

Not Applicable

Benefits and Risks

Despite the conservative approach used to immunize the TAP program's future expected liabilities, there are still risks that the actual future benefit payments may be greater than the cash generated from the immunized portfolio. This is due to the challenges in matching TAP's assets to future benefit payments which include:

- Uncertainties in inflation forecasts
- Mismatch in the duration of the liabilities compared to the assets:
 - Maturities of available US Treasury securities are from 1 year to 30 years while TAP program liabilities extend significantly beyond 30 years
- Actuarial risks due to assumptions such as mortality and salary increases
- Dilution risk as a result of a large employer or a group of small employers entering the TAP program and diluting the funded status

The rebalancing processes governing the TAP program have been designed to reduce the risks of forecasting inflation and the mismatch in duration of assets and liabilities. Specifically, the rebalance processes incorporate conservative inflation scenarios when matching assets and liability cash flows, and extend the duration of the immunized portfolio to include the longest currently available 30 year bond.

The Total Fund Investment Policy (Policy) governing the Terminated Agency Pool further mitigates the risks described above. The Policy outlines the management and reporting requirements by CalPERS Trust Level Portfolio Management team as well as separate monitoring by CalPERS Investment Compliance team. The Policy requires:

- The maintenance of a cash reserve to meet projected benefit payments
- Annual updates on current market value of TAP assets and an analysis of the adequacy of the TAP program allocation to meet the forecasted TAP program liabilities
- A review of the asset allocation policy for the TAP program following any significant change in the assets and liabilities as a result of the addition of a large employer or group of small employers entering the TAP program and diluting the funded status

Eric Baggesen

Managing Investment Director
Trust Level Portfolio Management

Theodore Eliopoulos

Chief Investment Officer

