Agenda Item 6b

December 15, 2014

ITEM NAME: Terminated Agency Pool Program Update

PROGRAM: Terminated Agency Pool

ITEM TYPE: Asset Allocation, Performance & Risk – Information

EXECUTIVE SUMMARY

This agenda item provides an update on the performance and rebalance of the Terminated Agency Pool (TAP) program in order to support the CalPERS Investment Committee (IC) in their oversight capacity. At the December 10, 2012 IC meeting, staff was directed to minimize the funding risk of the TAP program by establishing an asset allocation approach with two independent segments: an immunized portfolio and a surplus account. These segments are described in detail in the Background section below.

During the fiscal year ending June 30, 2014, the TAP program met its performance objective of generating sufficient cash from the immunized portfolio to pay the benefit payments of the TAP program during this period. As of June 30, 2013 (most recent actuarial valuation), the market value of assets attributable to the TAP was $192.4 million[1] and the present value of actuarial liabilities attributable to the TAP was $78.1 million[2], resulting in a funded status of 246%. Benefit payments attributable to the TAP are expected to be under $5 million annually.

Given the TAP program's high funded status and conservative asset allocation approach, the most significant risk to the TAP program is the potential for dilution due to a large employer or group of smaller employers entering the TAP program. Accordingly, staff from the Actuarial, Financial, and Investment Offices will continue to work closely together to monitor the activity in the TAP program. In addition, the Terminated Agency Pool Statement of Investment Policy requires 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 new terminated agency.

STRATEGIC PLAN

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

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[1] Data is sourced from the CalPERS Financial Office.

[2] Estimated liabilities are obtained from the CalPERS Actuarial Office. Inflation is assumed to be 2.47% and the discount rate is 3.72%.

INVESTMENT BELIEFS
This agenda item supports CalPERS' Investment Belief 1, that liabilities must influence the asset structure by ensuring the ability to pay promised benefits.

BACKGROUND
The TAP program exists to provide benefit payments to members who are employees of agencies that have terminated their contract with CalPERS. Unlike active agencies, terminated agencies are generally not required to make additional contributions, except to the extent that the agency's assets are less than the agency's liabilities at the time of termination. Because of the TAP program's limited funding sources, the primary performance objective of the TAP portfolio is to minimize funding risk. The concept of adopting a more conservative asset allocation strategy for this program was recommended by the Chief Actuary and adopted by the Board on August 15, 2011.

The asset allocation strategy, approved on December 10, 2012, is composed 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 TIPS[1] and STRIPS[2] which are invested to match the liability cash flows across a range of conservative inflation scenarios. This approach reflects Investment Belief 1, in that the asset structure is driven by cash requirements and inflation-sensitive liabilities. 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).

This is the first rebalance and update on the performance of the TAP program since the immunized portfolio and surplus account were created on July 1, 2013. The rebalance and update on the performance of the TAP were delayed beyond the original deadline of June 30, 2014 in order to be able to incorporate the updated liabilities using the new actuarial assumptions adopted by the CalPERS Board on February 18, 2014. This was reported to the IC as a pending policy violation on June 12, 2014. The rebalance has been completed effective October 31, 2014.

The TAP program is a very mature fund[3].

- 69% are retired members with an average age of 77 years and an average annual benefit of $6,500.

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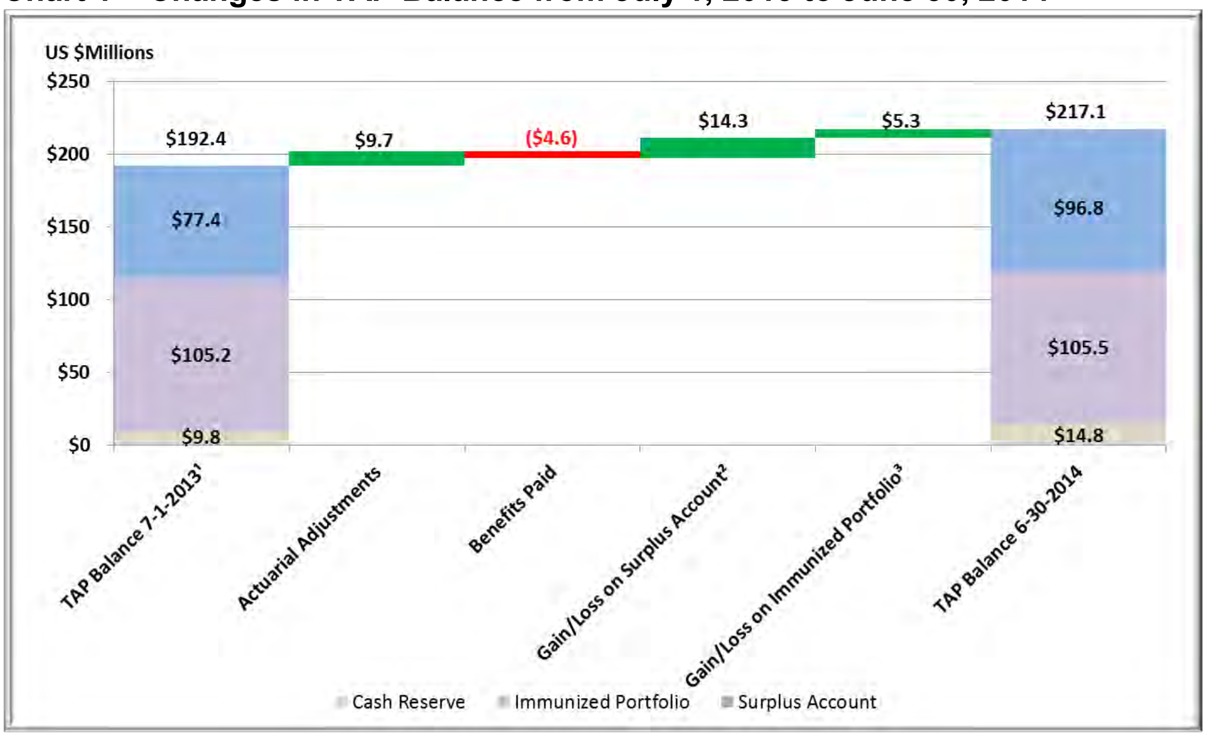
[1] TIPS is an acronym for "Treasury Inflation Protected Securities".
[2] STRIPS is an acronym for "Separate Trading of Registered Interest and Principal Securities".
[3] Statistics in this section is sourced from the CalPERS Actuarial Office.

- 23% are members that separated from service with an average age of 53 years and average covered pay of $41,000.
- 8% are members that are still working that have unfrozen wages with an average age of 49 years and average covered pay of $88,000.

ANALYSIS
Performance Update
For the fiscal year ending June 30, 2014, cash flows of $5.0 million generated from the immunized portfolio were sufficient to meet the annual benefit payments of $4.6 million. During that time, the market value of assets attributable to the TAP grew by 12.8% from $192.4 million to $217.1 million. Chart 1 below illustrates the composition of these changes.

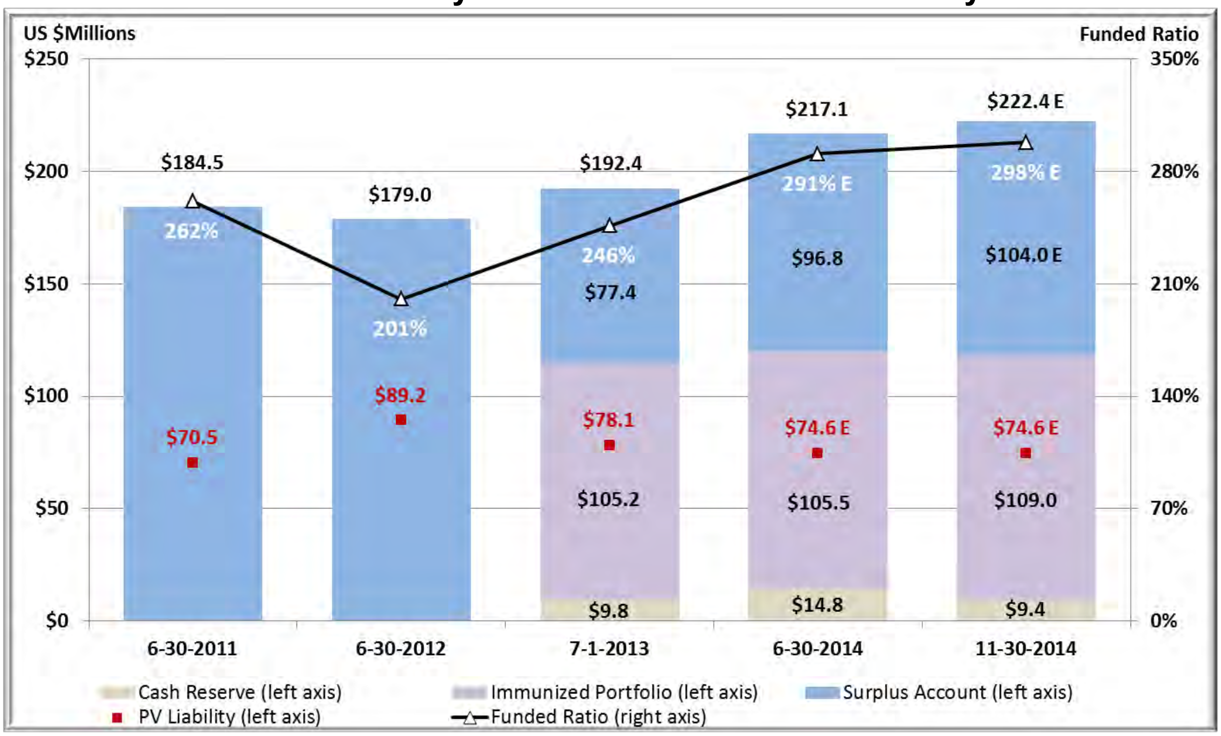
Chart 1 – Changes in TAP Balance from July 1, 2013 to June 30, 2014



[1] $115 million transferred to fund establishment of Immunized Portfolio and Cash Reserve on 7-1-2013.
[2] 18.4% return on surplus account.
[3] 4.6% return on immunized portfolio.

Based on current policy parameters, staff estimates that the funded status for the TAP program has continued to improve from 246% at the initial funding of the immunized portfolio, cash reserve, and surplus account to over 290% following the recent rebalance. This progression is illustrated in Chart 2 below.

Chart 2 – TAP Asset & Liability Balance Based on Current Policy Parameters



It is important to note that the methodology for setting the discount rate on the TAP program was established prior to the establishment of the immunized portfolio and will likely be reviewed. The discount rate of the TAP program is used to value the liabilities and is set by weighting the current yields of liquid, long dated U.S. Treasury securities in order to achieve a duration of the assets that matches the estimated duration of the pension liabilities of the TAP, at the date of determination. This methodology ignores the cost of hedging the inflation risk embedded in the TAP program[1] through the use of TIPS and STRIPS to cover the benefit payments under conservative inflation assumptions. The process used to hedge inflation is described in greater detail in the "Rebalance Update" below. Consequently, the yield on the immunized portfolio of 2.23%[2] is below the discount rate of 3.72% used to value the liabilities. Staff is expected to undergo a review of the policies for setting the TAP program discount rate in 2015.

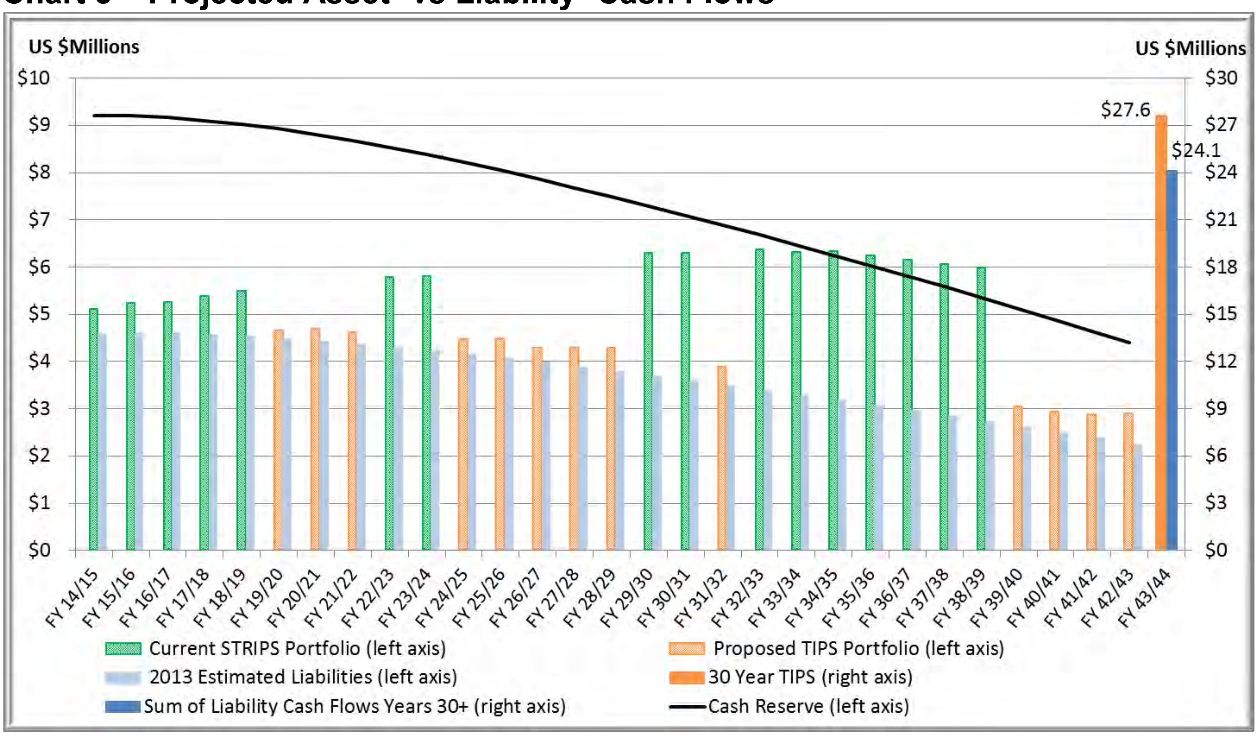
[1] Benefit payments are subject to cost of living adjustments and therefore carry inflation risk.
[2] Effective the date of the rebalance on October 31, 2014.

Rebalance Update

Staff has implemented a simple set of rebalancing rules to cover potential shortfalls in portfolio cash flows needed to meet benefit payments, to minimize trading costs and to reduce the monitoring requirements of staff. This methodology analyzes the immunized portfolio's ability to meet the TAP program's projected benefit payments growing over a range of conservative inflation scenarios ranging from 2% to 6%, in a cost effective manner.

Chart 3 below illustrates that the cash flows generated by the immunized portfolio should be sufficient to cover the projected benefit payments under an inflation assumption of 2.47%. Due to uncertainties in any inflation forecast, STRIPS were evaluated to cover benefit payments growing up to a 6% inflation rate. Accordingly, Chart 3 shows large excess cash flows for those years where STRIPS were used to meet the projected benefit payments that grow at an annual rate of 2.47%. Chart 3 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 2044 shown in Chart 3 represents the amount staff estimates will be sufficient to meet TAP's benefit payments due after 30 years.

Chart 3 – Projected Asset[1] vs Liability[2] Cash Flows



[1] Asset cash flow data from CalPERS Global Fixed Income.
[2] Estimated liabilities are obtained from the CalPERS Actuarial Office.

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/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 any inflation forecast.
- Mismatch in the duration of the liabilities compared to the assets. Maturities of available US Treasury securities are from 1 year to 30 years; TAP program liabilities extend significantly beyond 30 years.
- Actuarial risks remain 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.

Should the TAP become underfunded, member benefits may be negatively impacted.

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 risks described above are also mitigated by the Terminated Agency Pool Statement of Investment Policy, which is managed by the Asset Allocation and Risk Management team and separately monitored by CalPERS Investment Compliance team. The policy requires:

- Holding two years of estimated benefit payments in a cash reserve.
- Periodic updates of the TAP program estimated liabilities and rebalancing the portfolio to reflect changes in these liabilities.
- Requiring 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 new terminated agency.

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ERIC BAGGESEN
Senior Investment Officer
Asset Allocation and Risk Management

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THEODORE ELIOPOULOS
Chief Investment Officer

____
CHERYL EASON
Chief Financial Officer

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ALAN MILLIGAN
Chief Actuary