



Investment Committee Agenda Item 6a

April 18, 2016

Item Name: Health Care Fund Asset Allocation Review

Program: Affiliate Investment Program

Item Type: Action

Recommendation

Approve staff's recommendation to maintain the current asset allocation for the Public Employees' Health Care Fund (HCF) reserve fund in the Barclays U.S. Aggregate Bond Index.

Wilshire Associates' opinion letter is provided as Attachment 1.

Executive Summary

This agenda item reports the asset allocation study performed by staff on the HCF reserve fund, and staff seeks approval from the Investment Committee on its recommendation. Staff recommends maintaining the current asset allocation in the Barclays U.S. Aggregate Bond Index for the HCF reserve fund, given the liquidity requirement to fund health care claims, investment income to offset premium costs, and limited ability to absorb investment losses.

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, liabilities must influence the asset structure, and Investment Belief 6, strategic asset allocation is the dominant determinant of portfolio risk and return.

Background

The CalPERS Investment Policy for Public Employees' Health Care Fund, in conjunction with the CalPERS Total Fund Investment Policy, mandates a comprehensive asset allocation review every four years to be presented to the Investment Committee for review. The next review for HCF reserve fund is due before May 2016.

The HCF reserve fund was established as a safeguard for the self-funded Preferred Provider Organization (PPO) program if claims are higher than anticipated or upon any cash shortfalls during a potential PPO plan shutdown scenario. Its investment objective is to provide stability of principal, while avoiding large losses, enhance returns within prudent levels of risk, and maintain liquidity to meet cash needs. Since 1997, the HCF reserve fund has been 100% allocated to a U.S. fixed income program with the Barclays U.S. Aggregate Index as the benchmark. As of December 31, 2015, the HCF reserve fund amounts to \$423.4 million.

Analysis

Program Attributes

Health care benefits are currently funded through a pay-as-you-go approach, whereby annual health care premium levels are established annually, and are designed to be sufficient to pay expected annual benefits payments only, and not to pre-fund future liabilities.

The HCF reserve fund acts as a reserve for any unforeseeable health care claims and/or for cash flow coverage in a plan shutdown scenario. Accordingly, the HCF reserve fund needs to be invested in an asset class that is liquid, has a relatively stable value and generates modest income during the holding period.

Historical Performance

The HCF reserve fund has been 100% invested in a Barclays U.S. Aggregate Index bond fund, which consists of high quality investment grade bond securities such as U.S. Treasuries, agency, corporate, and securitized instruments (Figure 1 & Figure 2). In the last ten years, the HCF reserve fund has an average annual return of 4.8% and has experienced positive returns in all of those years, while the Barclays U.S. Aggregate Index has experienced an average annual return of 4.5% (Figure 3). As of 12/31/2015, the yield of the HCF reserve bond fund is 3.1%, which is the same as the yield from the Barclays U.S. Aggregate Bond Index.

Figure 1

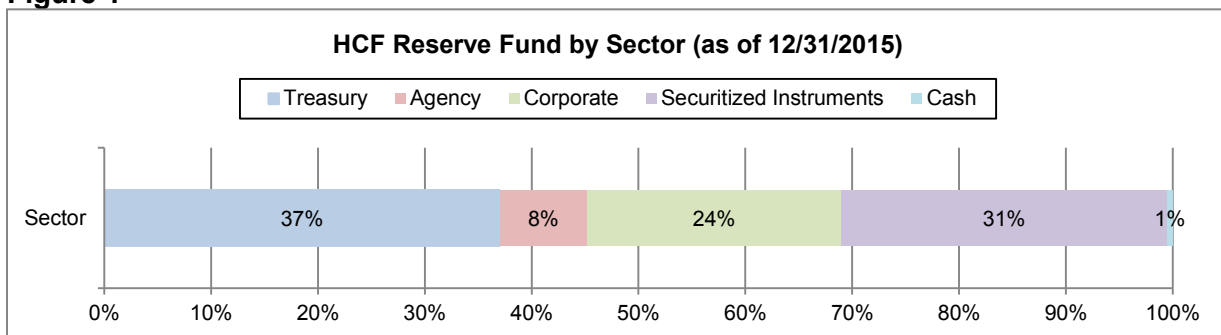


Figure 2

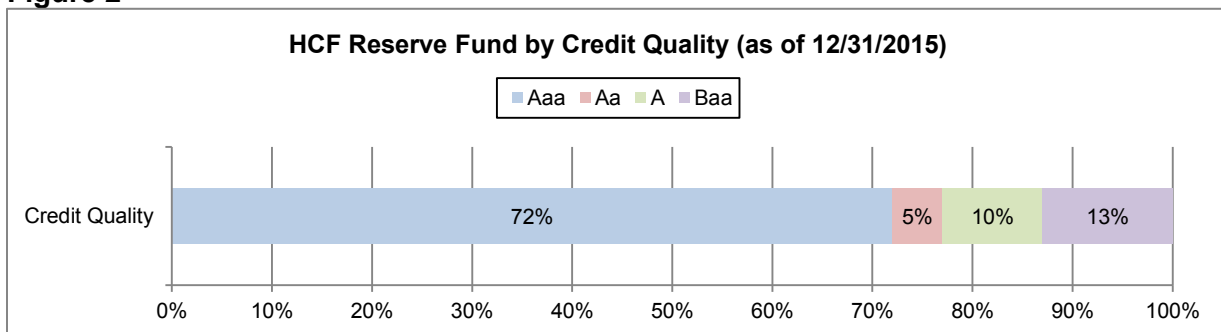


Figure 3

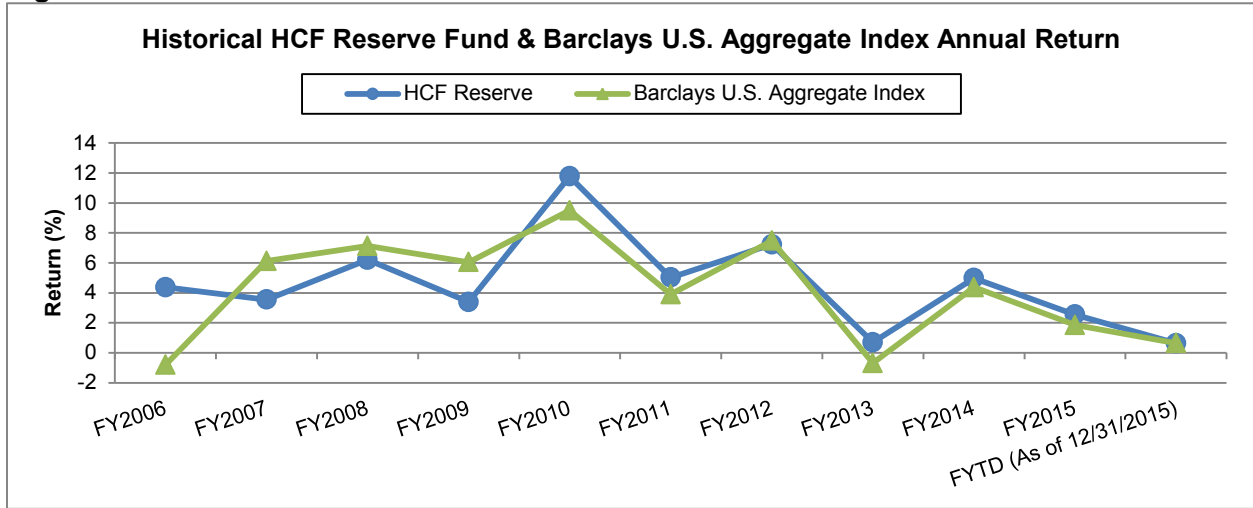


Table 1 summarizes the historical HCF reserve fund performance as of December 31, 2015.

Table 1 – HCF Reserve Fund Performance (As of December 31, 2015)

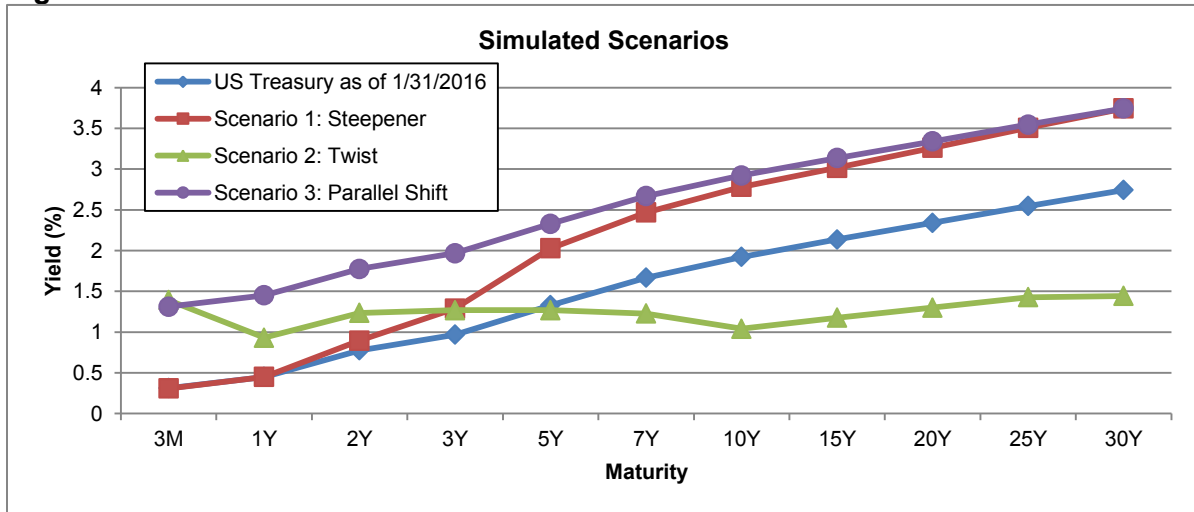
Performance Summary	FYTD	1 Year	3 Year	5 Year	10 Year
Net Return of HCF Reserve Fund	0.6%	0.6%	2.0%	3.8%	4.8%
Excess Return to Benchmark	-0.02%	0.09%	0.59%	0.56%	0.29%

Forecasted Performance

Staff constructed the following three scenarios to examine the price impact of possible rising interest rates, over a twelve months period, on the Barclays U.S. Aggregate Index bond fund (Figure 4):

1. A steepening of the yield curve by 1% at the 30-Year Maturity.
2. A twist of the yield curve with +1% on the 3-Month Maturity and -1% on the 30-Year Maturity.
3. A 1% upward parallel shift throughout all maturities.

Figure 4



The projected price impacts of the three scenarios are summarized in Table 2.

Table 2

	Scenario 1	Scenario 2	Scenario 3
Price Return	-3.7%	2.6%	-5.2%
Income Return (Yield)	3.5%	2.8%	3.9%
12 Months Total Return	-0.2%	5.4%	-1.3%

The duration of the Barclays U.S. Aggregate index is approximately five years, implying that if interest rates instantaneously increase by one percentage point, the HCF reserve fund value will be reduced by 5.2%, or \$22 million. However, if the impact is examined over a 12-month period, the income return component should alleviate the value reduction to 1.3%, or \$5.5 million¹.

Based on the BarraOne Risk Model, the Barclays U.S. Aggregate Bond Index is forecasted to maintain a low volatility of approximately 4.0%. Even throughout the last financial crisis, the HCF reserve fund retained a strong liquidity profile, and consistently generated positive cash flows. The current 100% allocation to the Barclays U.S. Aggregate Bond Index remains suitable for the HCF reserve fund given the need for liquidity to fund health care claims, the importance of investment income to offset health care premium costs, and the program's limited ability to absorb investment losses in the event that claims are substantially higher than expected.

Budget and Fiscal Impacts

Not Applicable

Benefits and Risks

The proposed Strategic Asset Allocation maintains a low level of expected volatility for the HCF reserve fund to minimize potential negative financial impact to the program, while generating modest income to offset health care premium costs and maintaining robust liquidity to fund health care claims.

The proposed recommendation carries risk that interest rates rise substantially at the same time that health care claims exceed premiums, forcing a drawdown on the HCF reserve fund and a realization of investment losses.

This risk is mitigated by:

- Maintaining a Risk Based Capital required reserve at 300% of the authorized control level¹
- The annual resetting of the health care premiums.

¹ The Risk Based Capital required reserve is independently developed by the National Association of Insurance Commissioners (NAIC). A level below 200% would require corrective actions.

Attachment

Attachment 1 – Wilshire Associates Opinion Letter

Eric Baggesen

Investment Managing Director
Asset Allocation and Risk Management

Theodore Eliopoulos

Chief Investment Officer



Thomas Toth, CFA
Managing Director

March 21, 2016

Mr. Henry Jones
Chair of the Investment Committee
California Public Employees' Retirement System
400 Q Street
Sacramento, CA 95814

Re: Health Care Reserve Fund Asset Allocation

Dear Mr. Jones:

In accordance with CalPERS Investment Policy to regularly review target asset allocations, Staff is presenting a recommendation to maintain the current Health Care Fund reserve (HCF) asset allocation in core fixed income with the Barclays U.S. Aggregate Index as the appropriate benchmark. This study is part of the regularly scheduled cycle for reviewing the asset allocation at least every four years.

Investment Strategy and Objectives

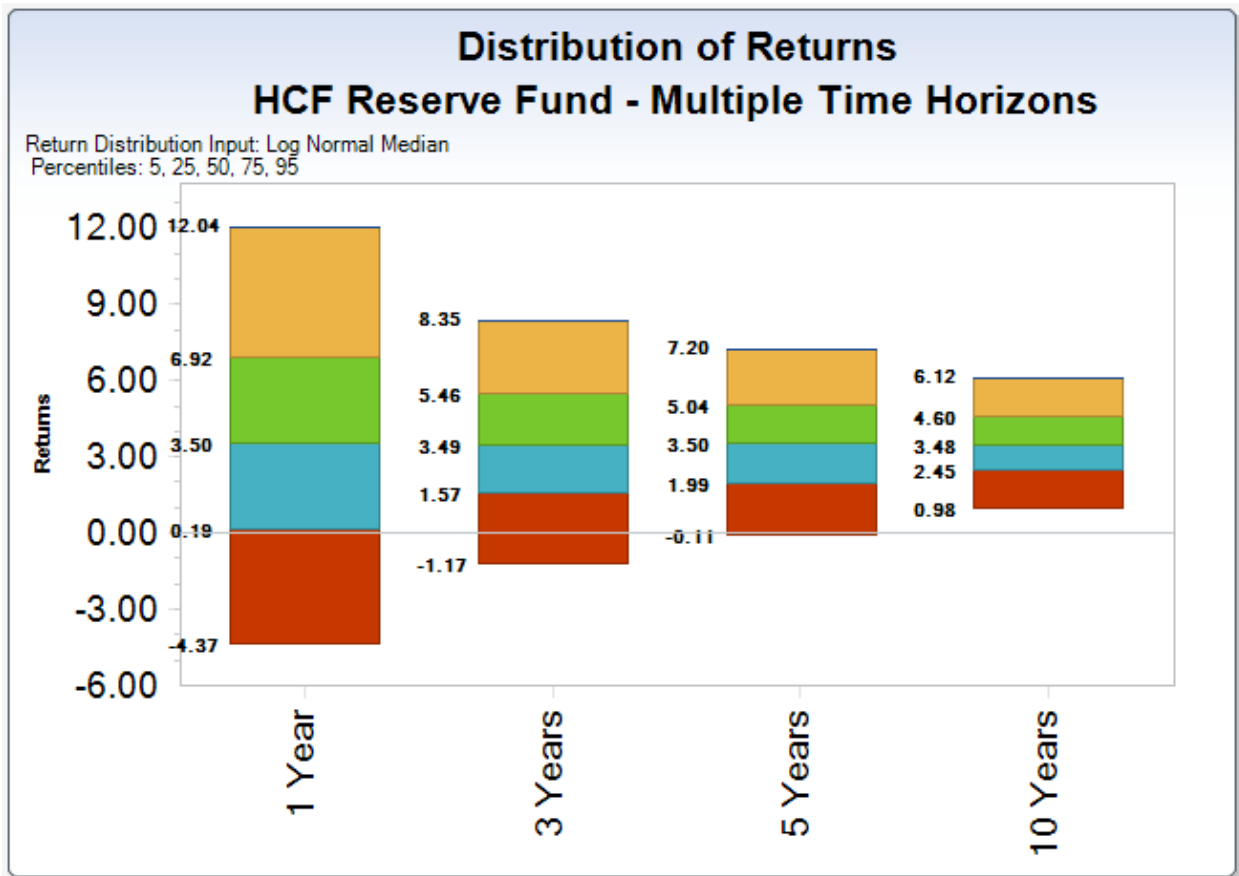
Health care benefits are pay-as-you-go for funding purposes through annually established health care premiums. The strategic role of the HCF reserve fund centers on providing stability of principal and liquidity along with a moderate level of income generation. The fund acts as a backstop for the self-funded Preferred Provider Organization program in the event that claims are higher than expected or a plan shuts down. This objective places a premium on investment in liquid, high quality, investment grade instruments which are appropriately characterized by the Barclays U.S. Aggregate Index.

Wilshire's core fixed income forward looking expectation for return is 3.5% with an expected volatility level of 5.0% over a 10 year horizon. Wilshire's forecast model begins with current market conditions, including inflation, and projects a gradual normalization of real yields as well as market spreads such that the historical equilibrium of maturity premiums and credit premiums are re-established. The core bond market is comprised of four major segments: Treasuries, Government-related, Corporate and Securitized. Wilshire has modeled each segment based on an environment of rising Treasury rates but also normalizing spreads versus



a historical average. The segments are then combined into a market duration portfolio to generate the core fixed income assumption.

Utilizing these forward looking assumptions, Wilshire examined the distribution of expected returns over multiple time horizons using Monte Carlo simulation with 5000 trials, shown in the graph below. Over intermediate to longer term time periods, the portfolio provides reasonably good principal protection. On top of this beta return, the HCF reserve fund has also managed to outperform the market over both short and longer periods as outlined in Staff’s letter.



Based on the information outlined in the Staff memo, Wilshire examined the portfolio exposure using independent analytical tools. We found similar results for the scenario analysis and the expectation for risk based on Wilshire’s proprietary Global Credit Risk Model.

	Scenario 1 - Steepener	Scenario 2 - Twist	Scenario 3 - Parallel
Price Return	-3.51	2.21	-5.35
Income (Yield) Return	3.47	2.39	3.80
Total Return	-0.04	4.60	-1.55



Wilshire's risk model also supports the low forecasted volatility over shorter time horizons with an expected risk level of 3.4% (vs. 4.0% forecast by the risk system Staff uses).

Conclusion

Wilshire concurs with the recommendation to maintain the current asset allocation given the HCF reserve fund's investment objective. The conservative positioning will help mitigate substantial asset drawdowns and produce moderate investment income, while maintaining a high level of liquidity.

Should you require anything further or have any questions, please do not hesitate to contact us.

Best regards,

A handwritten signature in black ink, appearing to be 'T. B.' or similar, enclosed in a rectangular box.

Managing Director