

February 24, 2022

Mr. David Miller
Chair of the Investment Committee
California Public Employees' Retirement System
400 P Street
Sacramento, CA95814

Re: Agenda Item 7b: Affiliate Funds Asset Allocation Review

Dear Mr. Miller:

You requested Wilshire's opinion as it relates to Staff's recommended asset allocation for the Affiliate Funds listed below. As of December 2021, these funds had approximately \$21.1B in assets. The last asset allocation study for the Affiliate Funds was conducted in 2018 and the current study reflects adherence to the regular four-year asset allocation cycle. Recommendations for the Supplemental Income Plans (SIP) Defined Contribution Funds are scheduled to be presented during the June Investment Committee meeting.

- Health Care Fund (HCF): \$519M
- Legislators' Retirement System Fund (LRS): \$123M
- Judges' Retirement System Fund (JRS): \$57M
- Judges' Retirement System II Fund (JRSII): \$2.5B
- CA Employers' Retiree Benefit Trust Fund (CERBT): \$17.7B (3 strategies)
- CA Employers' Pension Prefunding Trust Fund (CEPPT): \$72M (2 strategies)

The Process

Wilshire believes that the methods, inputs, and data used to perform the asset allocation study are appropriate and reasonable. Most asset class assumptions used in the process were approved by the IC during the November 2021 meeting, and were supplemented with a set of 10-year assumptions for the CEPPT. These 10-year forecasts were interpolated from the approved 5- and 20-year assumptions and compared to Staff's survey of 10-year assumptions for reasonability.

Where included in the asset class opportunity set, minimum constraints were established for TIPS (5%), Global REITs (8%), and Commodities (3%) to force a certain level of diversification into the candidate portfolios that might be underappreciated in a pure mathematically optimized framework. Wilshire is comfortable with these constraints given the instability of the underlying optimization assumptions, particularly as they relate to the inherent limitations of correlation estimates. This viewpoint is consistent with Investment Belief 9 (i.e., Risk to CalPERS is multi-faceted and not fully captured through measures such as volatility or tracking error).

In evaluating the candidate target policy portfolios, Staff followed the same quantitative approach of maximizing projected return at various levels of expected downside risk as was used in the PERF's recent asset allocation analysis. In addition, and where appropriate, Staff took into consideration demographic and fund characteristics in the recommendation process. These factors have important implications for the ultimate risk profile of the candidate portfolios. The consideration of liability information in the analysis is consistent with Investment Belief 1 (i.e., liabilities must influence the asset structure).

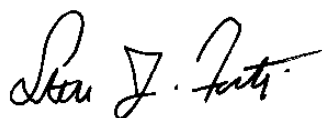
Selection of Asset Allocation Target Portfolios

In total, there are nine allocation recommendations (one each for HCF, LRS, JRS & JRSII, three for the CERBT, and two for the CEPPT) as well as a recommended mix of underlying asset classes within the Fixed Income Long Liability segment (FILL). The recommended asset mix within the FILL benchmark is designed to be consistent with the relative sub-asset class weights approved within the PERF's asset allocation. To ensure that this mix was appropriate for porting outside of the PERF for use within the Affiliate Funds, Wilshire asked Staff to perform some comparative checks against other combinations of these underlying fixed income classes. In reviewing that analysis, which has been provided to the Investment Committee within Attachment 1 of Staff's agenda materials, Wilshire is comfortable that it is reasonable and appropriate to utilize the PERFs' embedded Long Liability mix within various Affiliate Funds.

In shifting to the nine asset allocation portfolios, Wilshire believes that these recommended asset mixes are appropriately specified for each Fund and take into account relevant decision factors such as, for example, funding status and contribution rates where applicable. As Staff notes on page 8 of Attachment 1, and as has been discussed on several occasions during the PERF's ALM cycle, the current asset class return outlook is muted versus the forecasts used during the 2018 Affiliate's' asset allocation process. These conditions suggest that additional risk would be required to meet similar return targets from the 2018 asset allocation review. In response to these expectations, Staff's recommended portfolio allocations generally followed an approach of pursuing modestly higher levels of expected risk while accepting a small reduction in expected return. Wilshire is comfortable with these proposals and believes that Staff's recommendations appropriately balance the tradeoffs of return and risk within the current environment. In the case of HCF and JRS, which call for conservative portfolio allocations, Staff has recommended maintaining current allocations, 100% US Bonds and 100% Cash Equivalents, respectively. Wilshire is comfortable with the appropriateness of maintaining those allocation targets.

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

Best regards,



Steven J. Foresti
Chief Investment Officer, Asset Allocation & Research
Wilshire Advisors