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Managing Director & Principal

May 22, 2013

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

Re: Proposed Changes to the Global Fixed Income and Inflation Assets Benchmarks

Dear Mr. Jones:

You requested Wilshire's opinion with respect to Staff's proposed changes to the Global Fixed Income and Inflation Assets benchmarks. We will discuss each proposed change in turn. This was originally presented to the Investment Committee for comment at the May Investment Committee meeting.

Recommendation

Wilshire recommends that the Investment Committee approve the proposed benchmarks. These were discussed at length in the May meeting no changes have been made to the proposal since then. Wilshire believes the changes are appropriate and match the strategic intent of the underlying programs.

We note that changing the benchmark to broadening the investible universe will likely increase the portfolio exposure to debt of emerging market countries. While currency and default risk are present for all non-U.S. fixed income investments, historically, emerging market countries have been more susceptible to currency and default risk. While we recognize the potential diversification benefits from expanding the investible set, the Investment Committee should note that such an expansion may change (for better or worse) some characteristics of the portfolio.

We provided the following comments for the May discussion as our rationale for supporting the proposed changes.

First, the proposed change to the Global Fixed Income (GFI) benchmark is driven by the international component of the GFI benchmark. Staff is proposing a change from the Barclays International Fixed Income index to a GDP weighted version of the same index. Dollar weighted benchmarks in fixed income, such as the current Barclays index, cause concentrations in the most highly indebted issuers, when measured by total debt outstanding. While this does represent the investible opportunity set, concentrating portfolios in highly indebted issuers could increase the size of the risk of default in the portfolio. The proposed GDP weighted index links country weights to the size of the economy of the country, rather than how sizeable the debt is. Under this scenario, certain countries will have higher weights as their economies are larger than their share of total outstanding debt and others will have lower weights where the relative size of the country's debt outstrips the relative size of the economy.

Liquidity in some of the debt of smaller issuers might compromise such a strategy. However, Staff has reviewed this and do not feel it would be a constraint on successfully implementing the new benchmark. Additionally, this change would cause a meaningful increase in the percentage of the benchmark that would be targeted to emerging market countries (3% to 20%) and a significant decrease in the size of Japanese debt in the benchmark (from 41.8% to 18.1%). As emerging markets have matured, both economically and as debt markets, this does not present the same risk that it once did in terms of credit quality and perceived ability to repay.

Second, the proposed change to the Inflation Assets (IA) benchmark is also driven by the international component of the combined benchmark. Currently, the 75% of the IA benchmark that is tied to inflation linked bonds is split $\frac{2}{3}^{\text{rd}}$ to US TIPS and $\frac{1}{3}^{\text{rd}}$ to global inflation linked bonds in the countries of Canada, France, Italy, German and the U.K. The proposed change in this case would move to a broader benchmark, the Barclays Universal Government Inflation Linked Bond Index, consisting of sixteen developed and emerging market countries.

Staff has analyzed the potential impacts on risk and Wilshire views the changes as trivial – well within the estimation error of any risk model used to forecast across asset classes.

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 read 'Am Jin'.