Wilshire

Ali Kazemi
Managing Director

May 10, 2021

Ms. Theresa Taylor
Chair of the Investment Committee
California Public Employees' Retirement System
400 P Street
Sacramento, CA 95814

Re: Agenda Item 7c: Total Fund and Affiliate Fund Policies Updates

Dear Ms. Taylor:

You requested Wilshire's opinion regarding the proposed changes to the Total Fund and Affiliate Fund Policies. These changes are centered around the shift in focus for budgeting active risk as measured by Tracking Error (TE) for the respective portfolios. Wilshire and CalPERS' Staff have engaged in a steady dialogue with regards to this topic and Wilshire agrees that the proposed changes provide a definition of TE that is consistent with sound policy from a risk management standpoint. Wilshire is confident that this increases the usefulness of the TE metric for governance and holds Staff accountable for those activities over which they have direct authority. Further, this adjustment in the TE policy language limits does not change the approved asset allocation targets or ranges for private assets.

Total Fund Policy Changes

Conversations on this topic between Staff and Wilshire first took place in the summer of 2020 starting with a philosophical discussion about best practices with regards to the calculation of TE for an institutional portfolio. Staff wanted to revisit the efficacy of the current calculation, particularly the high contribution to TE from private asset classes.

Staff's initial work culminated in the introduction of a metric called "Actionable Tracking Error" which was first discussed with the Investment Committee in November 2020 and is reiterated below:

HEADQUARTERS

1299 Ocean Avenue, Suite 700
Santa Monica, CA 90401

Wilshire

Executive Summary

- Tracking Error (TE) is a metric that attempts to measure the difference between the portfolio and the benchmark, also known as “active risk”
- TE is only one of many risk management tools in use at CalPERS
- In theory TE can be useful for monitoring and constraining the degree to which staff-driven portfolio implementation decisions and tactical bets diverge from the Strategic Asset Allocation (embodied by the policy benchmark)
- In practice there are limits to TE’s effectiveness, as it relies heavily on modeling assumptions and precise data. In particular for private asset classes, TE is a flawed – even meaningless – metric
- TE as currently implemented at CalPERS is dominated by “noise” from private asset modeling and benchmark issues, limiting its potential as a monitoring and portfolio oversight tool
- We have started reporting an additional TE measure we label “Actionable TE” that excludes private assets to focus exclusively on the areas where TE works well, i.e. public asset classes and asset allocation
- We suggest some related enhancements to the Total Fund Investment Policy on TE that could improve portfolio governance

Actionable TE was introduced as a reporting item in the official Investment Committee reports, however, to facilitate the introduction of this new measure, Wilshire advocated that the previous metric continue to be included in reporting to provide the Committee appropriate context in monitoring differences between the two measures.

The current agenda item relates to formalizing the adoption of Actionable TE as the metric by which active risk is budgeted and it is comprised of ***three*** main changes in the policy:

Item 1) <u>Formally reference that TE will be measured versus the “Total Fund Actionable Tracking Error Metric”</u>

Wilshire is supportive of the concept of Actionable TE, as the previous calculation had two primary limitations in its use as a risk management tool:

a. Based on the challenges of benchmarking private market investments, the resulting TE contribution from the **private markets** completely dominated the overall calculation and is not a risk Staff can mitigate through any direct action.

b. The dominance of private markets TE contribution could potentially mask any material contribution coming from TE in the **public markets** – which is an area that Staff can control, and for which the Board would benefit from a

Wilshire

more focused lens through which to hold Staff accountable.

Item 2) Lower the overall limit for TE from 1.5% to 1.0%

Wilshire believes lowering the overall TE limit from 1.5% to 1.0% is prudent because of the elimination of the contributions from the private markets. Staff analyzed various scenarios to arrive at that number and was confident that the 1% limit sufficiently provides enough room to manage the portfolio, but not introduce an excessive amount of active risk. Wilshire agrees and is supportive of this proposed default limit on the amount of active risk, based on our observations as to the typical level of active risk set for CalPERS' peers in the institutional space. In November 2020, Staff also highlighted respective TE limits for other plans like CalPERS'. The 1.0% limit was within the range of those plans targets and it should be noted many of those limits were solely for public markets which excluded asset allocation deviation. Staff is including public markets *and* asset allocation deviation contributions in this language which is a fuller accounting for allowable excess risk.

Item 3) Eliminate a limit on the contribution to TE coming from asset allocations which is currently 0.75%

Wilshire supports the elimination of the asset allocation limit within the TE calculation. The Committee has established appropriate constraints on asset allocation deviations based on the defined rebalancing ranges that are provided within the policy (see below). **The 1% overall TE limit still includes contributions from asset allocation deviation (including private markets) and so the combination of the rebalancing ranges and this 1% limit provides the Committee with appropriate oversight on any allocation mismatch.**

Wilshire

Table 1: Strategic Asset Allocation Targets and Ranges

Asset Class	Asset Segment	Target Allocation	Range Relative to Target Allocation
Growth - Public Equity	**Total Public Equity**	**50%**	**+/-7%**
Public Equity Segment 1	*Cap Weighted*	*35%*	-
Public Equity Segment 2	*Factor Weighted*	*15%*	-
Growth - Private Equity	**Private Equity**	**8%**	**+/-4%**
Income	**Total Income**	**28%**	**+/-6%**
Income Segment 1	*Long Treasury*	*10%*	-
Income Segment 2	*Long Spread*	*15%*	-
Income Segment 3	*High Yield*	*3%*	-
Real Assets	**N/A**	**13%**	**+/-5%**
Inflation Assets	**N/A**	**0%**	**+3%/0%**
Liquidity	**N/A**	**1%**	**+3%/-6%**

Affiliate Fund Policy Changes

The proposed policy changes for the Judges and Legislators are rather straight forward. Currently the language in those policy documents link the TE limit from the Total Fund policy document so that there would be a consistent limit across portfolios. Given the implementation for both Judges and Legislators is passive in nature, the TE is much lower, and over the last 5 years those portfolios experienced 0.10% of realized excess risk. The 1% limit would not be relevant here and the proposed change in the two separate polices sets a target of "minimizing" tracking error. Wilshire is generally comfortable with this change as proposed.

Wilshire

Summary

In conclusion, Wilshire supports the changes in the policy documents. The proposed metric for calculating TE helps to eliminate the non-actionable distortions that result from including private market specific risk and focuses the limit on ensuring Staff stays within a constraint that relates to the actionable risk of which they have control over. It is important to specifically note that, even with these changes any over and underweights versus the policy index (including private market asset classes) continues to be included in the proposed tracking error calculation. Further, there are other tools, such as rebalancing ranges, that help ensure that the portfolio maintains a risk profile that is consistent with CalPERS' adopted strategic asset allocation.

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

Best regards,

Ali Kazemi
Managing Director