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MEMORANDUM

TO: Investment Committee, CalSTRS
FROM: Meketa Investment Group
CC: Chris Ailman
DATE: January 26, 2023
RE: Opinion Memo – ALM Study Capital Market Assumptions

Summary & Recommendation

Item Number 3: 2023 ALM Study – Capital Market Assumptions covers the first set of recommendations associated with the 2023 ALM Study. Specifically, the recommendations focus on key inputs into the modeling process: assumptions for the forward-looking behavior of CalSTRS' asset classes. Over the last few months, as is the normal course for a project of this scale, CalSTRS' Staff and Meketa have had significant back and forth dialogue about these assumptions resulting in broad agreement.

As discussed with the Investment Committee in November, significantly higher interest rates in 2022, and moderating equity valuations, will cause forward-looking return expectations to increase for the first time in several years. In Meketa's opinion, CalSTRS' Staff has taken a thoughtful approach to the new interest rate and valuation environment, and the uncertainty that it creates in the modeling process. The recommendations present the conclusion of a detailed analysis of expected returns, risk, and correlations. The recommendations incorporate quantitative factors, and qualitative judgements. Staff reviewed their assumptions in the context of those developed by others in the industry to assure that they were reasonable. In short, Meketa views Staff's process for developing Capital Market Assumptions and the results as thorough, thoughtful, and prudent.

In summary, after significant review and discussion, Meketa concurs with the recommended assumptions as displayed in Table 1 and Table 3 of Staff's memo. The remainder of this memo describes some of the key aspects and nuances associated with the proposed assumptions.

Discussion

Staff's memorandum provides significant detail on the progress of the 2023 ALM Study to date. As highlighted elsewhere during prior agenda items, discussions, and presentations, an ALM Study (and the decisions that it requires) is the most important set of decisions the Investment Committee will make over a typical work-plan cycle.

As described in the memo, these assumptions cover three main attributes of each asset class's long-term behavior: (i) expected long-term return, (ii) expected return volatility over time; and (iii) how the asset classes are expected to relate/correlate with other asset classes (i.e., its correlation to every other considered investment).

In arriving at its proposed assumptions, Staff undertook a multi-faceted process that included a few key steps. First, Staff gathered capital market assumptions from a variety of other practitioners, including consultants and well-known institutional investment managers. Estimates from these various experts provided a general point of reference as Staff considered their own unique assumptions for each specific asset class. Second, Staff applied well-known, industry-accepted economic models for building expected rates of return for each major asset class (see Attachment 2 for explanation). Each model provides a general framework for constructing a return estimate. Finally, for the risk and correlation estimates, Staff examined historical trends across the various asset classes and sought input from Meketa for its independent views and opinions.

After Staff completed its process, Meketa met with Staff to review each of the assumptions in detail. This was an iterative process with significant back and forth to reach a consensus. Attachment 1 shows how the expected returns changed from the prior ALM Study, conducted in 2019. The most noteworthy changes are to the fixed income class, reflecting the higher level of interest rates available in the market today in relation to four years ago. Meketa believes these shifts, along with the other adjustments, are reasonable and reflect consensus thinking about the trends in the various asset classes.

Staff also addresses how CalSTRS' asset classes (and sub asset classes) map over to "Strategic Risk Factors" – Economic Growth, Real Assets, Credit, and Diversifying. In future modeling exercises presented to the Committee, viewing the total portfolio through this lens may prove helpful in evaluating and thinking about risk. Staff also highlights how Private Credit is modeled as a part of the Credit factor.

If you have any questions, please feel free to contact us at (760) 795-3450.

SPM/MM/AE/jls