

August 15, 2025

Mr. David Miller Chair of the Investment Committee California Public Employees' Retirement System 400 P Street Sacramento, CA 95814

Re: Consultant Global Fixed Income Program Review

Wilshire's annual review of the CalPERS Global Fixed Income (GFI) Program is based on ongoing discussions with Managing Investment Directors and key staff throughout the year. These meetings provide insights into the team's structure, how portfolios are built and managed, and recent performance. This letter highlights our assessment and conclusions on the Global Fixed Income program, drawing on current data and recent developments, and concludes with an appendix outlining Wilshire's evaluation scores, consistent with our previous reviews.

Global Fixed Income

The CalPERS Global Fixed Income (GFI) Program is designed to diversify equity risk for the Total Fund and provide current income and liquidity. The review process included discussions with senior Staff members of each fixed income segment within the GFI Program. Review topics included Program investment process, personnel and resource management, as well as investment and risk management procedures.

As of June 30, 2025, the GFI portfolio managed \$168.6 billion in assets, representing 30.3% of CalPERS' Strategic Asset Allocation. About 77.4% of these assets were managed in-house, while the rest were handled by external managers. Additionally, the Short-Term Investment Fund (STIF) held \$20.9 billion, all managed internally. For fiscal year 2025, Treasuries returned a moderate 3.0%, rebounding from a challenging fiscal 2024. Mortgages and Investment Grade Corporates returned 6.9% and 6.5%, respectively. High Yield was the standout performer in absolute terms, up 9.3%. EM Sovereigns were also up 7.9% during the fiscal year, continuing a run of strong performance over the past two fiscal years.

As Staff's presentation highlights, Mortgages, Investment Grade Credit, and EM Sovereigns have performed in-line with return expectations since the 2021 ALM. Treasuries have underperformed return expectations but are within the expected distribution of returns. High Yield has continued to outperform expectations, similar to other riskier asset classes.

Team

We believe the Global Fixed Income Program is managed in an effective and risk-conscious manner, leveraging the deep expertise of the senior management team. The GFI team continues to emphasize strong internal processes, teamwork, and the resources needed to meet CalPERS'



objectives. Over the past year, the team has made hires in credit research and emerging market debt, and has prioritized professional growth through ongoing training and participation in industry events.

Currently, one Investment Manager and one Investment Officer position are open, which marks an improvement versus last year's review, though it reflects the removal of some positions within GFI. Total staffing levels remain relatively stable. Staff are engaged in cross-functional initiatives that yield valuable perspectives and underscores their commitment to the Total Fund's success. This demand for the Staff's time further highlights the importance of effective resource management, especially in terms of recruiting and retaining talent within the organization. The lengthy recruiting process and certain compensation restrictions, compared to the private sector, remain challenges to attracting skilled investment professionals. In our discussions with the team, they feel the quality of applicants has improved and bodes well for recruitment going forward.

The Global Fixed Income group has expanded the internal credit research and strategy team with experienced professionals. This will be an important component driving any additional risk taking within that portion of the broader fixed income portfolio. Given the stability of team size and enhancements in the research team, Wilshire has moderately increased the Team score.

Portfolio

The Global Fixed Income portfolio consists of five component segments: 1) Treasuries, 2) Mortgages, 3) Investment Grade Corporates, 4) Sovereign Emerging Market Debt, and 5) High Yield. Each segment's unique characteristics allow for strategic allocation and optimization, supporting CalPERS' long-term objectives.

Treasuries offer very high levels of liquidity and have offered solid protection against equity drawdowns but experience direct sensitivity to interest rate changes. Mortgages are similarly very liquid and, together with Treasuries, can offer a funding source for the leverage that is now incorporated into the asset allocation targets. Investment grade corporate bonds balance interest rate sensitivity with higher quality credit risk for additional income. Sovereign EMD, as a dedicated asset class, offer enhanced yields as well as diversification across different economies globally. High yield bonds behave more like equities in bear markets but offer a significant pickup in yield versus other instruments and provide some diversification in more typical markets.

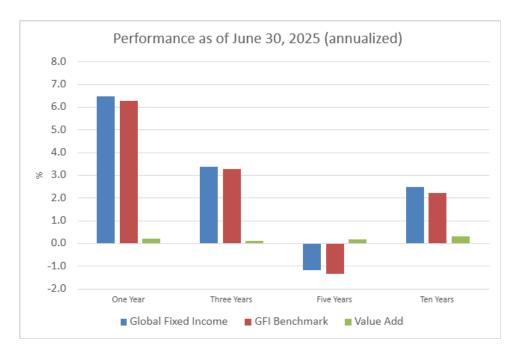
The team has demonstrated success in tactically adjusting allocations in response to market shifts. Importantly, they have maintained a disciplined approach to realizing gains when markets revert. This cross-asset relative value expertise would be helpful in a total portfolio approach framework.

Performance

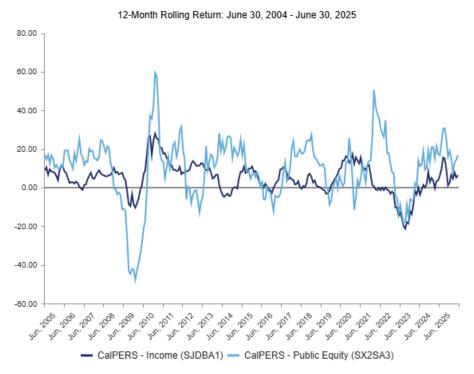
Fiscal year 2025 represented a reasonably strong period for fixed income asset returns, building off the improvement seen in fiscal year 2024. Performance across sectors was positive on an absolute basis, with Mortgages, High Yield and Emerging Market Debt all posting returns which exceeded the actuarial target rate. The chart below shows the Program's historical performance

Wilshire

relative to its benchmark. Global Fixed Income was buffeted by a historically difficult period for interest rate markets in fiscal year 2022, which continues to impact 5-year returns. The 3-year time horizon returns have recovered to generate positive results. The Global Fixed Income team has delivered positive active value-add relative to the index over 1, 5, and 10-year time horizons.

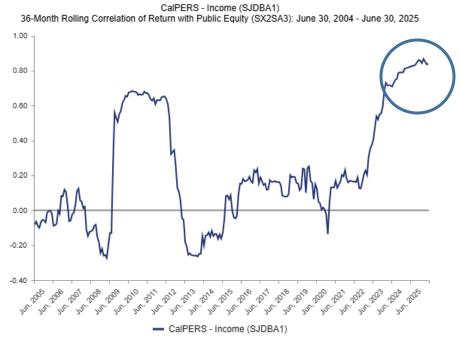


The 12-month rolling returns and 3-year rolling correlation with Global Equity are shown in the following charts. Together, these demonstrate the strategic role the GFI portfolio plays in diversifying equity returns over different market cycles throughout the past 20+ years. This relationship was tested over recent fiscal years, however. Fiscal year 2025 continued to shower higher than average levels of correlation, though that was because both equity and fixed income markets moved higher this year.



* Monthly data; Net of Investment Management Fees

The Board will note that the recent correlations between fixed income and equity are at the highest levels of the past 20 years, continuing a pattern from the prior fiscal year. This highlights a risk Wilshire communicated in previous discussions. With expectations for easing by the Federal Reserve increasing, Wilshire expects this elevated correlation to moderate and improve the portfolio diversification benefits of fixed income assets to be more in-line with historical experience. At the same time, as interest rates have moved higher over the previous couple of years, the expected return of fixed income has increased which boosts the utility of those assets in a diversified portfolio.

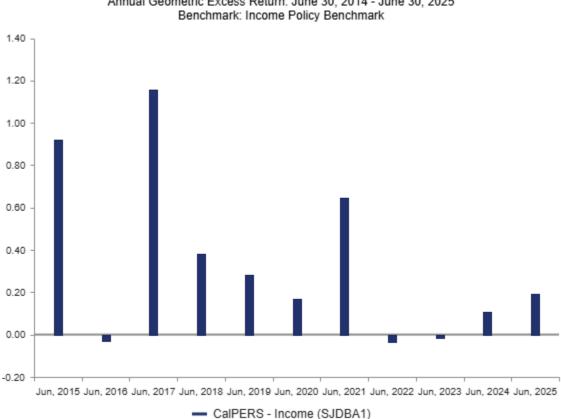


* Monthly data; Net of Investment Management Fees

From an active return perspective, the CalPERS GFI program exceeded the benchmark during the most recent one-year period. Over longer-term periods, the Global Fixed Income portfolio has been a consistent source of value-add for the portfolio. In the last fiscal year, all the active program segments outperformed their relevant indexes, while Treasuries matched the index. High Yield had the highest absolute return for the second straight fiscal year. Over the long term 5 and 10-year periods, the underlying active strategies in the fixed income portfolio have matched or exceeded benchmark performance.

The GFI portfolio has consistently demonstrated a level of forecasting success as evidenced by the positive relative returns for the aggregate portfolio over longer term time periods. FY25 performance was positive on a relative basis, continuing the positive momentum from FY24. Given the consistent level of active return generated by the team and the more flexible framework of the total portfolio approach, the GFI portfolio is gravitating to taking additional active risk. As additional active risk is utilized to drive higher levels of relative returns, Wilshire will adjust the forecasting score based on demonstrated success. That said, the forecasting score remains high given consistency on average over the last 10 years.

Wilshire



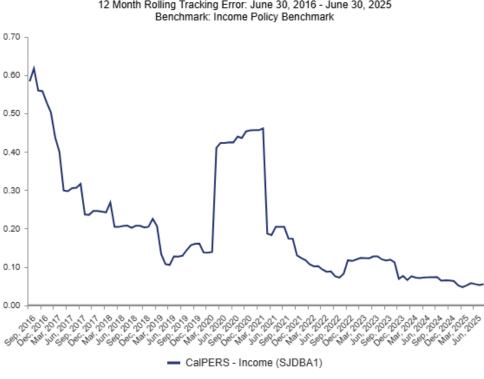
CalPERS - Income (SJDBA1)

Annual Geometric Excess Return: June 30, 2014 - June 30, 2025

Benchmark: Income Policy Benchmark

* Monthly data; Net of Investment Management Fees

The portfolio construction approach remains well aligned with Investment Beliefs #1 – Liabilities, #2 – Long-Term Horizon, and #3 – Risk vs. Reward. The high portfolio construction score reflects the dynamic approach to active risk positioning, which has not led to significant increases in the portfolio's overall tracking error. This indicates a well-defined risk budgeting process. Moving forward, the GFI team will continue to explore relative value opportunities across different segments.



CalPERS - Income (SJDBA1) 12 Month Rolling Tracking Error: June 30, 2016 - June 30, 2025

* Monthly data; Net of Investment Management Fees

The investment approach of the total GFI program remains consistent with its key strategic objective of providing income, stability, and equity risk diversification within the Total Fund. At the same time, GFI has outperformed its benchmark over longer time frames through both subsector relative value decisions and tactical positioning. GFI portfolios have taken advantage of opportunities in certain markets segments, while maintaining relatively tight active risk positioning over time. The team has continued to improve portfolio implementation through collaboration with the Investment Treasury Group, improved counter party relationships, and active discussions with external parties about targeting higher active returns. Going forward, GFI's role in portfolio construction in the total portfolio approach could lead to higher correlations of excess return with equities – i.e. when equities do well, riskier segments of global fixed income markets are likely to benefit at the same time. This risk will need to be monitored as part of the broader portfolio construction process.

Utilizing our standard manager research scoring framework, Wilshire's qualitative assessment of the Program places it in the 3rd decile overall and 2nd decile when evaluating the GFI program in isolation. The score includes a modest increase in the Team rating given relative consistency within the group. The program consistently demonstrates strong scores in portfolio construction and implementation. Overall, the score highlights the experienced team and their success in managing the portfolio with a focus on risk control over extended time horizons.

Letter

Tier



Appendix - Evaluation Scores for Global Fixed Income Program

CalPERS Global Fixed Income

Calpers Global Fixed Income		rier	Letter
GFI Program Independent Score (ex-Firm)		2nd	Α
Overall Score (including Firm)		3rd	В
	Weight	Tier	Letter
Organization	20%	5th	С
FIRM	50%	7th	D
Quality and Stability of Senior Management			
Quality of Organization			
Ownership/Incentives			
TEAM	50%	3rd	В
Stability of Investment Professionals			_
Quality of Team			
Commitment to Improvement			
Information Gathering	20%	3rd	В
Information Resources			
Depth of Information			
Breadth of Information			
		1	
Forecasting	20%	2nd	Α
Clear & Intuitive Forecasting Approach			
Repeatable Process			
Strength, Clarity, and Intuitiveness of Valuation Methodology			
Forecasting Success			
Unique Forecasting Approach			
Portfolio Construction	20%	2nd	Α
Risk Budgeting/Control			
Defined Buy/Sell Discipline			
Consistency of Portfolio Characteristics			
Implementation	10%	2nd	Α
Resources		<u> </u>	
Liquidity			
Compliance/Trading/Monitoring			
Attribution	10%	2nd	Α
Depth of Attribution			
Integration of Attribution			