



California State Teachers' Retirement System

2Q 2023

Semi-Annual Report



California State Teachers' Retirement System

Semi-Annual Report: Executive Summary

Introduction

The CalSTRS Total Portfolio had an aggregate value of \$315.6 billion as of June 30, 2023. During the latest six-month period, the Total Portfolio increased by \$13.5 billion (net of fees and contributions/benefits). Over the latest one-year period, the Total Portfolio increased by \$14.1 billion (net of fees and contributions/benefits).

Asset Allocation Trends

During the latest six-month period, the **Real Estate allocation decreased by (1%)**, and the **Global Equity and Private Equity allocations each increased by roughly 1%**. The allocations to **Fixed Income, Inflation Sensitive, Risk Mitigating, Innovative Strategies, Cash, and Strategic Overlay remained unchanged**.

During the latest 12-month period, the **Global Equity allocation increased by 2%**, the **Inflation Sensitive allocation increased by 1%**, the **Risk Mitigating Strategies allocation decreased by (1%)**, and the **Fixed Income allocation decreased by (1%)**. The allocations to **Real Estate, Private Equity, Innovative Strategies, Cash, and Strategic Overlay remained unchanged**.

Trailing Period Investment Performance (Net-of-Manager Fees)

	Performance vs. Policy Benchmark ¹			
	10 Year (%)	5 Year (%)	3 Year (%)	1 Year (%)
Total Portfolio	8.7	8.2	10.1	6.3
Policy Benchmark	8.4	7.5	9.1	6.3
Excess Return ²	↑0.3	↑0.7	↑1.0	↑0.0

	Performance vs. Median Fund ³			
	10 Year (%)	5 Year (%)	3 Year (%)	1 Year (%)
Total Portfolio	8.7	8.2	10.1	6.3
St. Street Median (>\$10B)	7.9	7.7	9.9	7.2
Excess Return (St. Street)	↑0.7	↑0.4	↑0.2	↓-1.0

¹ The Total Portfolio benchmark consists of passively managed strategic class portfolios held at policy weightings.

² Value discrepancies due to rounding.

³ State Street Universe – Public Funds > \$10 Billion. Mixture of net and gross-of-fees.

Capital Markets Outlook & Risk Metrics

As of June 30, 2023

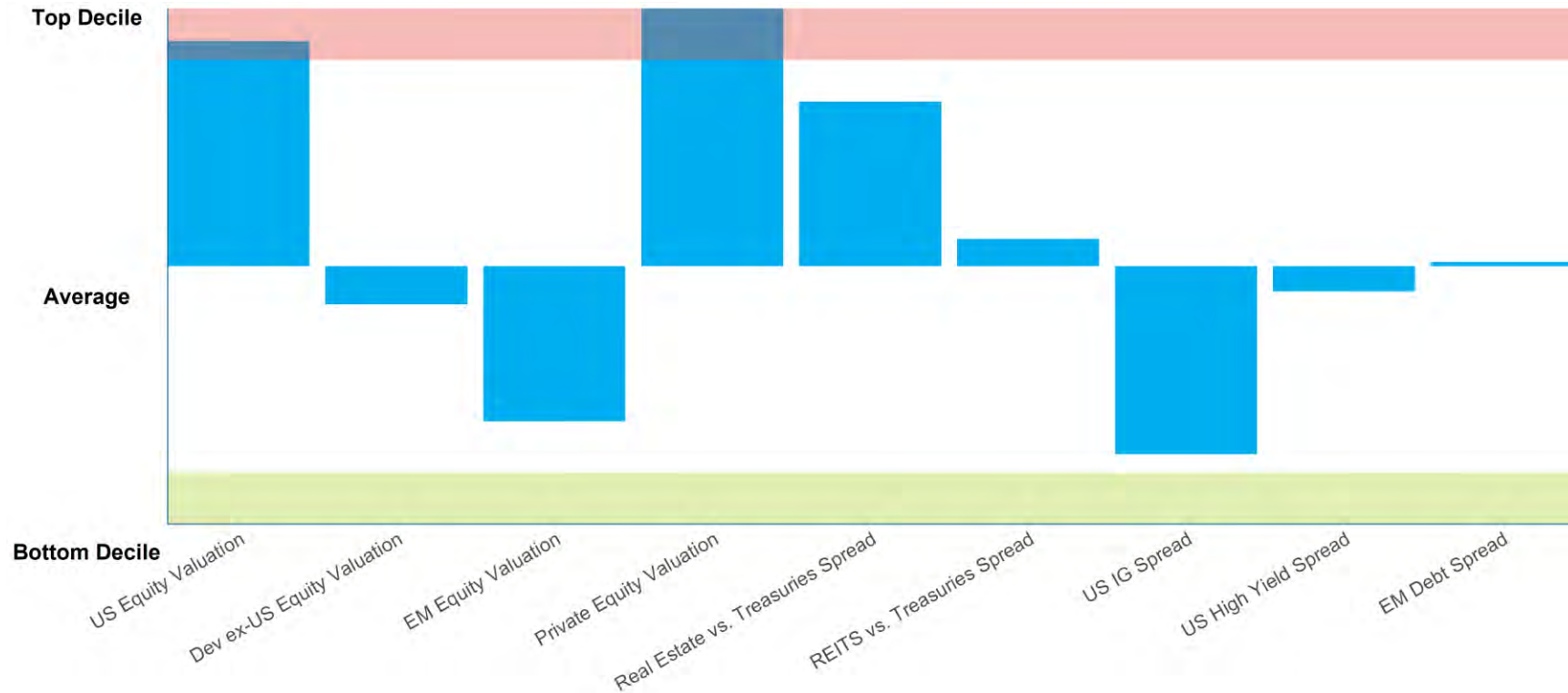
Capital Markets Outlook

- The Fed kept rates unchanged in June, arguing that the skip was consistent with their moderating pace of policy hikes, but they signaled that further rate increases may be forthcoming. Other central banks continued to raise rates in June. In general, global inflation indicators have continued to fall though they remain above policy targets.
- Economic data appears to indicate continued strong demand and tight labor markets that may imply the need for still higher rates in the future.
- Most equity markets posted strong performance in June, with many of these markets delivering strong Q2 returns in aggregate. However, fixed income markets experienced mixed results in June and Q2 due to elevated inflation and expectations for further rate increases.
- Chinese equities rallied in June, but negative performance for the second quarter reflect investors' shaken confidence in China's reopening.
- In spite of sputtering Chinese economic growth there were other bright spots in emerging markets. Emerging market equities and emerging market debt posted positive returns in June and year-to-date as dollar weakness earlier in the year and optimism on India's economic prospects boosted returns.
- US equities rallied in June and delivered one of the strongest starts to a year on modern record with large cap stocks leading the way.
- While higher quality bonds suffered negative returns in the second quarter, bank loan and high yield markets produced gains.

Capital Markets Outlook (continued)

- Although a deteriorating growth outlook weighed on commodities and natural resource stocks in early 2023, natural resource stock returns turned positive in June. Likewise, public real estate benefited from a reversal in investor sentiment, posting strong returns in June and the second quarter.
- After a strong retrenchment in share prices in 2023, US stocks are now trading well-above their long-run cyclically adjusted price-to-earnings ratio while non-US stocks continue to trade at a discount.

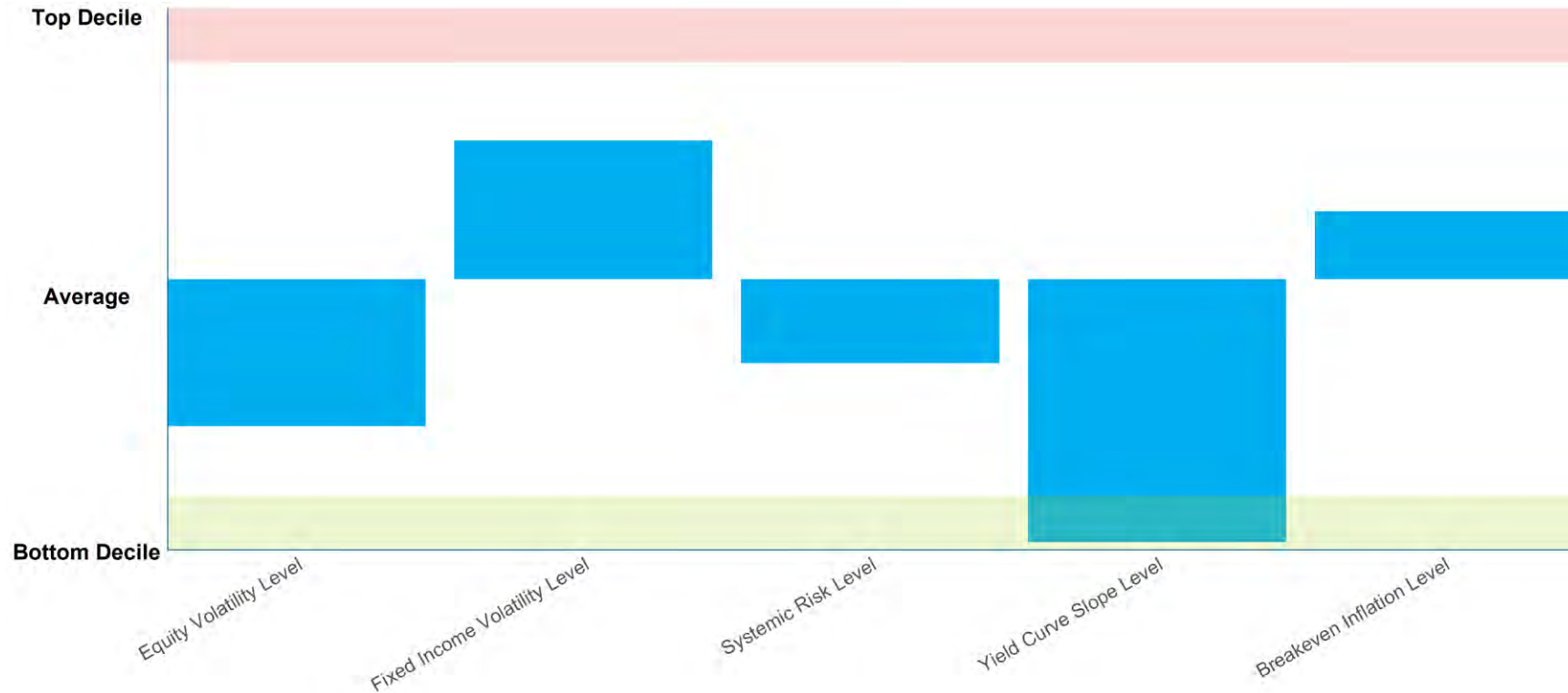
Risk Overview/Dashboard (1)
(As of June 30, 2023)¹



→ Dashboard (1) summarizes the current state of the different valuation metrics per asset class relative to their own history.

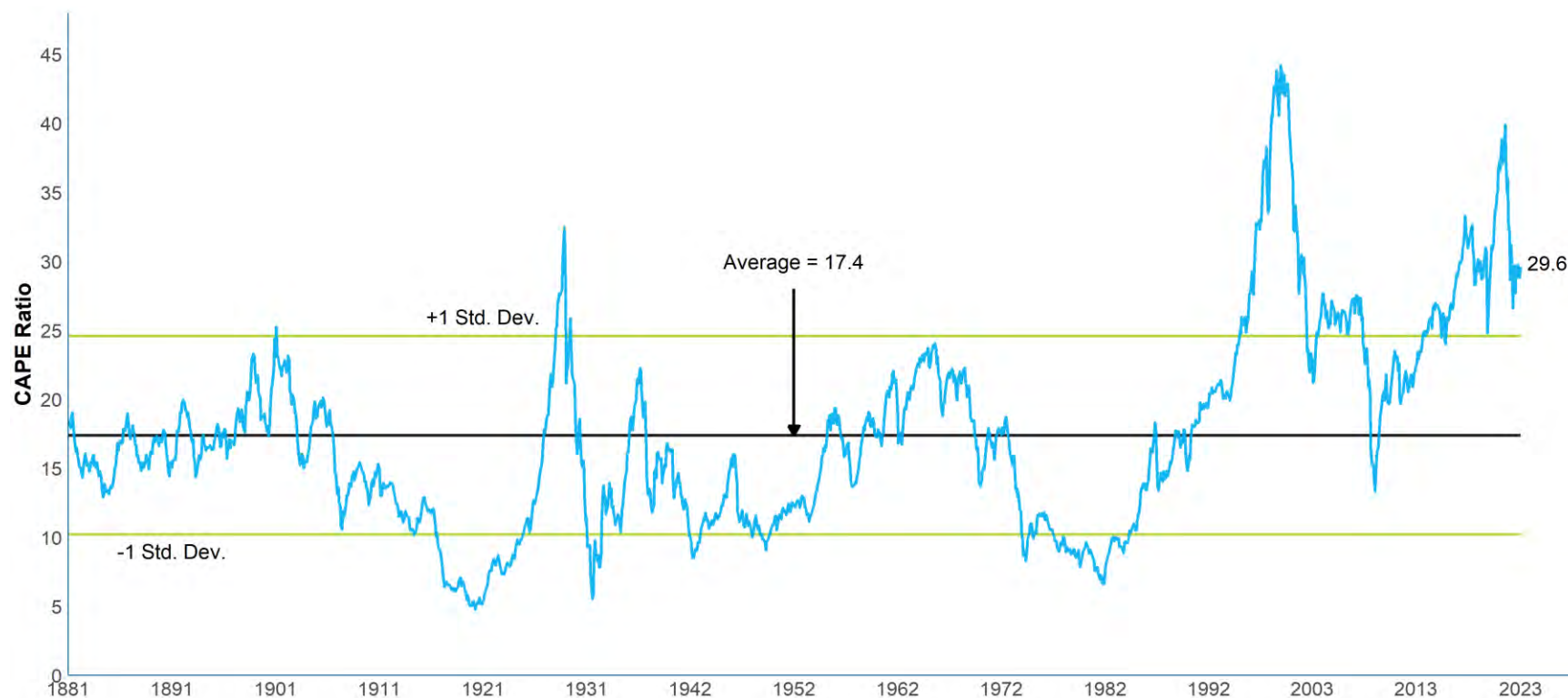
¹ With the exception of Private Equity Valuation, that is YTD as of December 31, 2022.

Risk Overview/Dashboard (2) (As of June 30, 2023)



→ Dashboard (2) shows how the current level of each indicator compares to its respective history.

US Equity Cyclically Adjusted P/E¹ (As of June 30, 2023)



→ This chart details one valuation metric for US equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ US Equity Cyclically Adjusted P/E on S&P 500 Index. Source: Robert Shiller, Yale University, and Meketa Investment Group.

Small Cap P/E vs. Large Cap P/E¹ (As of June 30, 2023)



→ This chart compares the relative attractiveness of small cap US equities vs. large cap US equities on a valuation basis. A higher (lower) figure indicates that large cap (small cap) is more attractive.

¹ Small Cap P/E (Russell 2000 Index) vs. Large Cap P/E (Russell 1000 Index) - Source: Russell Investments and Bloomberg. Prior months unavailable on Bloomberg are backfilled with last reported earnings. Earnings figures represent 12-month "as reported" earnings.



Growth P/E vs. Value P/E¹
(As of June 30, 2023)



→ This chart compares the relative attractiveness of US growth equities vs. US value equities on a valuation basis. A higher (lower) figure indicates that value (growth) is more attractive.

¹ Growth P/E (Russell 3000 Growth Index) vs. Value (Russell 3000 Value Index) P/E - Source: Bloomberg, MSCI, and Meketa Investment Group. Earnings figures represent 12-month "as reported" earnings.

Developed International Equity Cyclically Adjusted P/E¹ (As of June 30, 2023)



→ This chart details one valuation metric for developed international equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ Developed International Equity (MSCI EAFE Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.

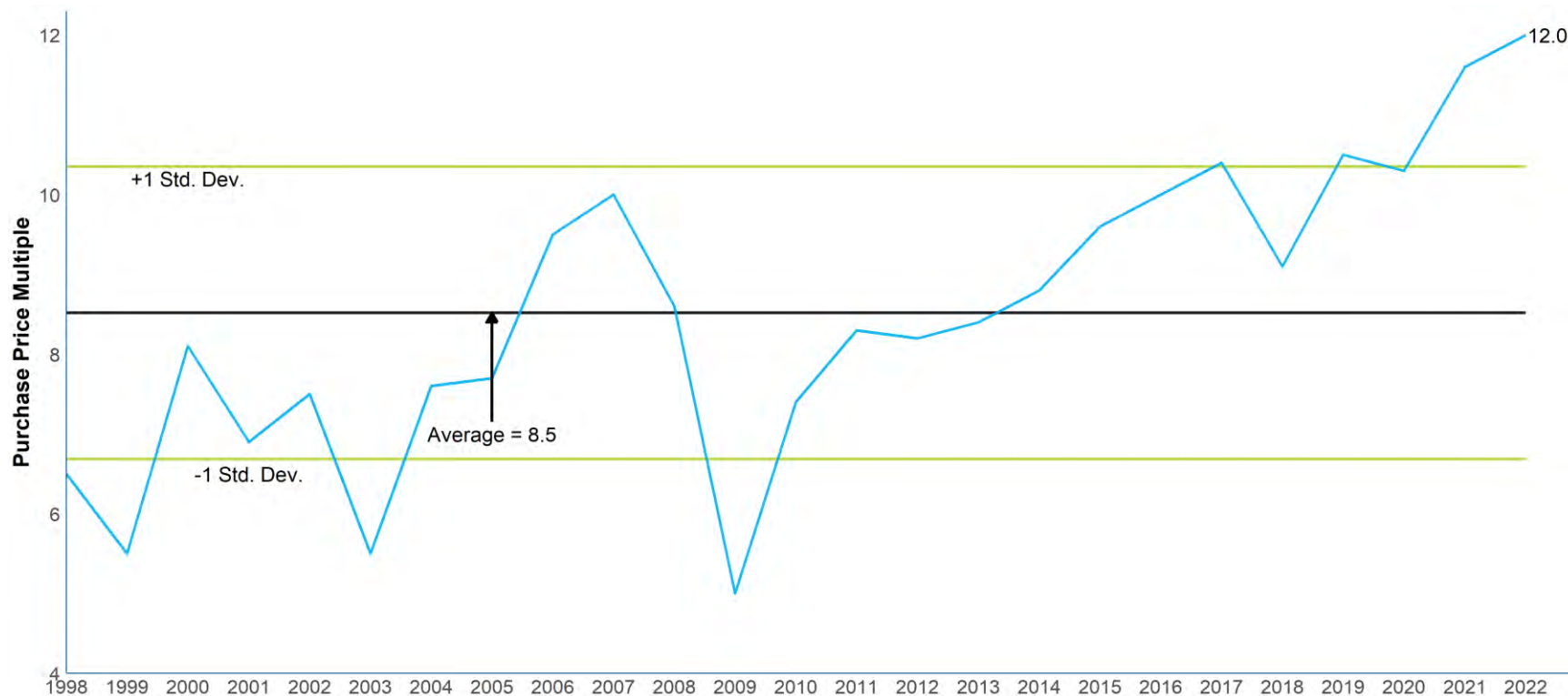
Emerging Market Equity Cyclically Adjusted P/E¹ (As of June 30, 2023)



→ This chart details one valuation metric for emerging markets equities. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ Emerging Market Equity (MSCI Emerging Markets Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.

Private Equity Multiples¹ (As of June 30, 2023)



→ This chart details one valuation metric for the private equity market. A higher (lower) figure indicates more expensive (cheaper) valuation relative to history.

¹ Private Equity Multiples – Source: Preqin Median EBITDA Multiples Paid in All LBOs.

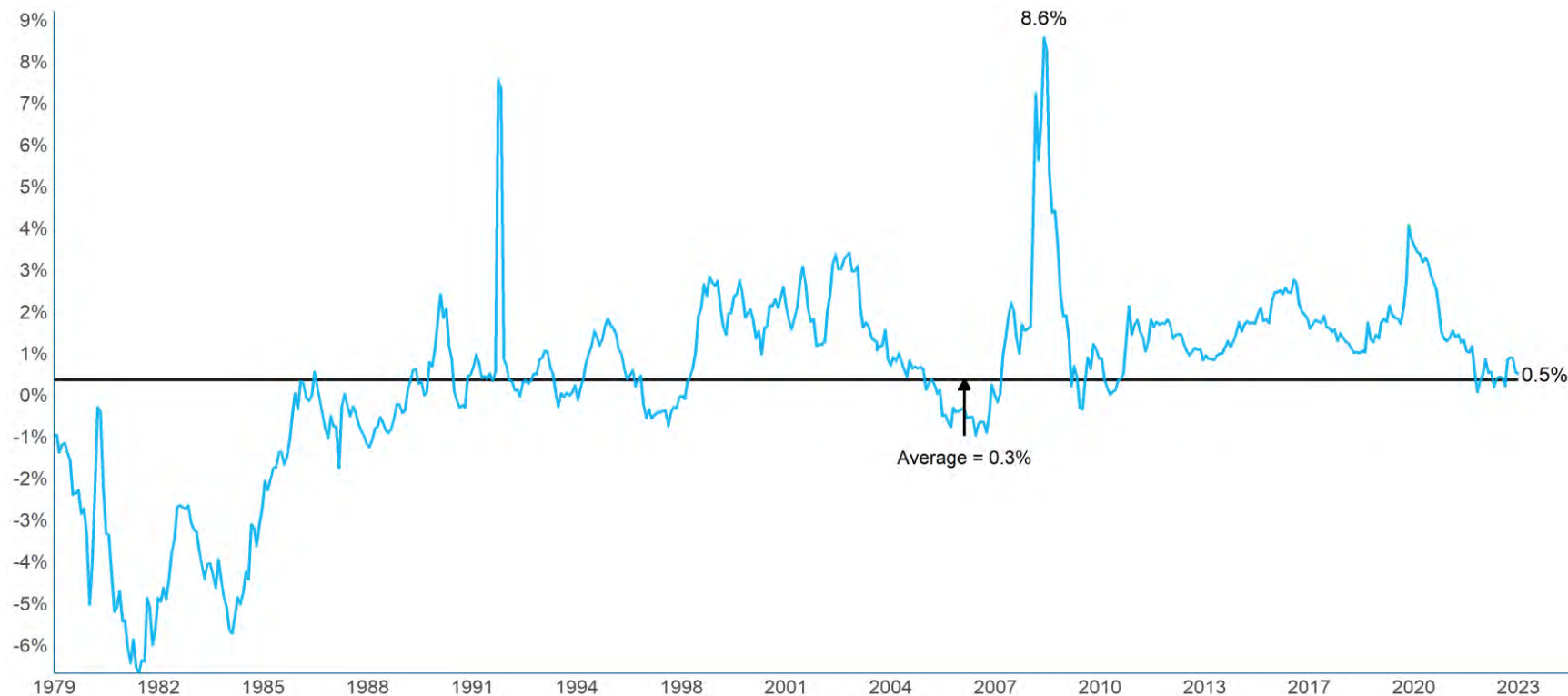
Core Real Estate Spread vs. Ten-Year Treasury¹ (As of June 30, 2023)



→ This chart details one valuation metric for the private core real estate market. A higher (lower) figure indicates cheaper (more expensive) valuation.

¹ Core Real Estate Spread vs. Ten-Year Treasury – Source: Real Capital Analytics, US Treasury, Bloomberg, and Meketa Investment Group. Core Real Estate is proxied by weighted sector transaction-based indices from Real Capital Analytics and Meketa Investment Group.

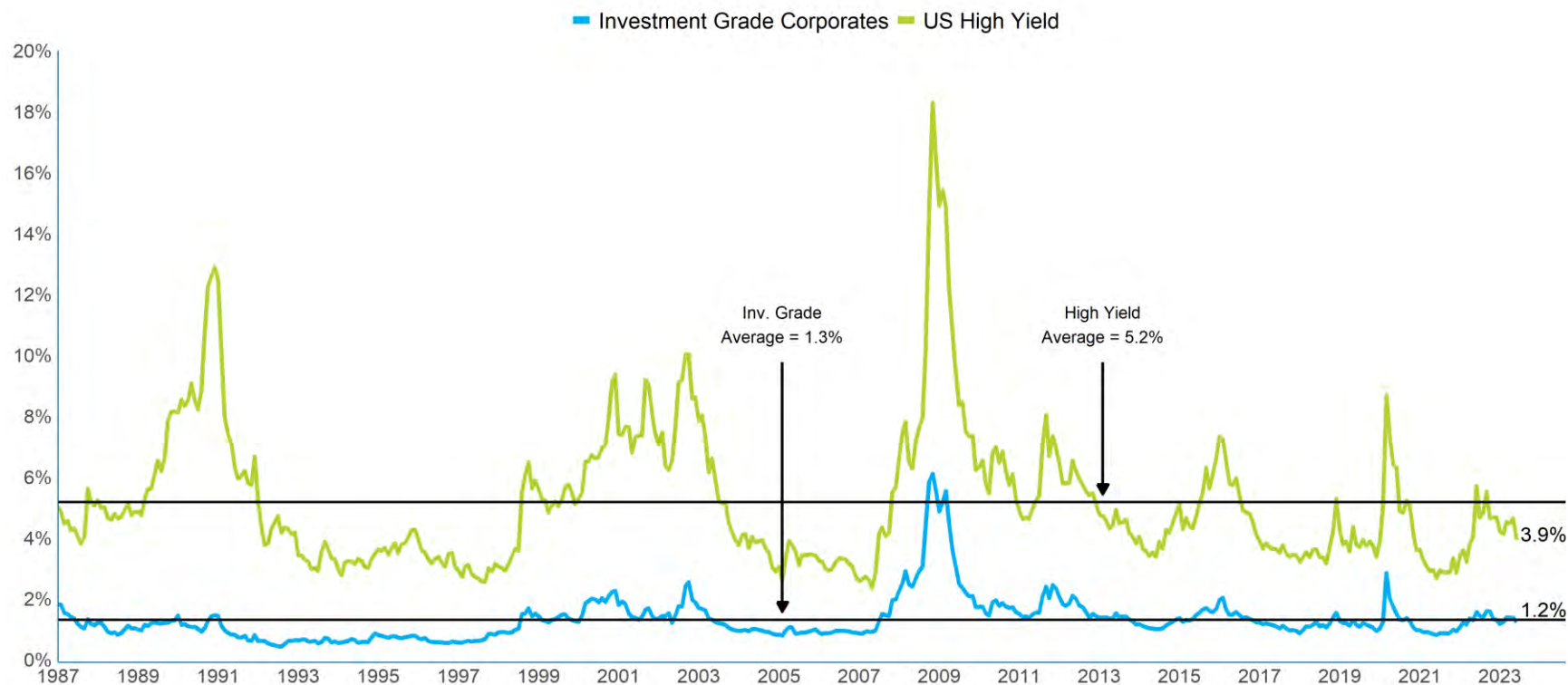
REITs Dividend Yield Spread vs. Ten-Year Treasury¹ (As of June 30, 2023)



→ This chart details one valuation metric for the public REITs market. A higher (lower) figure indicates cheaper (more expensive) valuation.

¹ REITs Dividend Yield Spread vs. Ten-Year Treasury – Source: NAREIT, US Treasury. REITs are proxied by the yield for the NAREIT Equity Index.

Credit Spreads¹ (As of June 30, 2023)



→ This chart details one valuation metric for the US credit markets. A higher (lower) figure indicates cheaper (more expensive) valuation relative to history.

¹ Credit Spreads – Source: Bloomberg. High Yield is proxied by the Bloomberg High Yield Index and Investment Grade Corporates are proxied by the Bloomberg US Corporate Investment Grade Index. Spread is calculated as the difference between the Yield to Worst of the respective index and the 10-Year US Treasury yield.

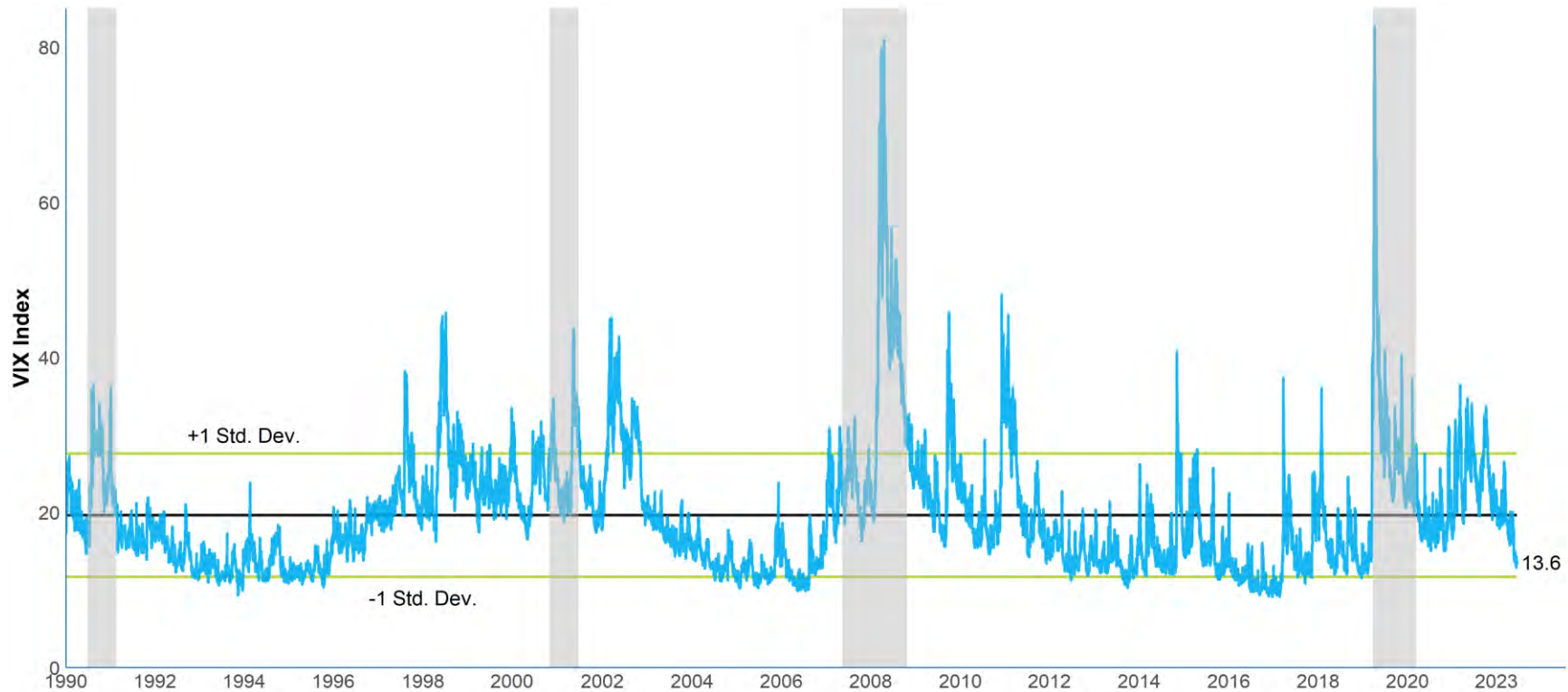
Emerging Market Debt Spreads¹ (As of June 30, 2023)



→ This chart details one valuation metric for the EM debt markets. A higher (lower) figure indicates cheaper (more expensive) valuation relative to history.

¹ EM Spreads – Source: Bloomberg. Option Adjusted Spread (OAS) for the Bloomberg EM USD Aggregate Index.

Equity Volatility¹
 (As of June 30, 2023)

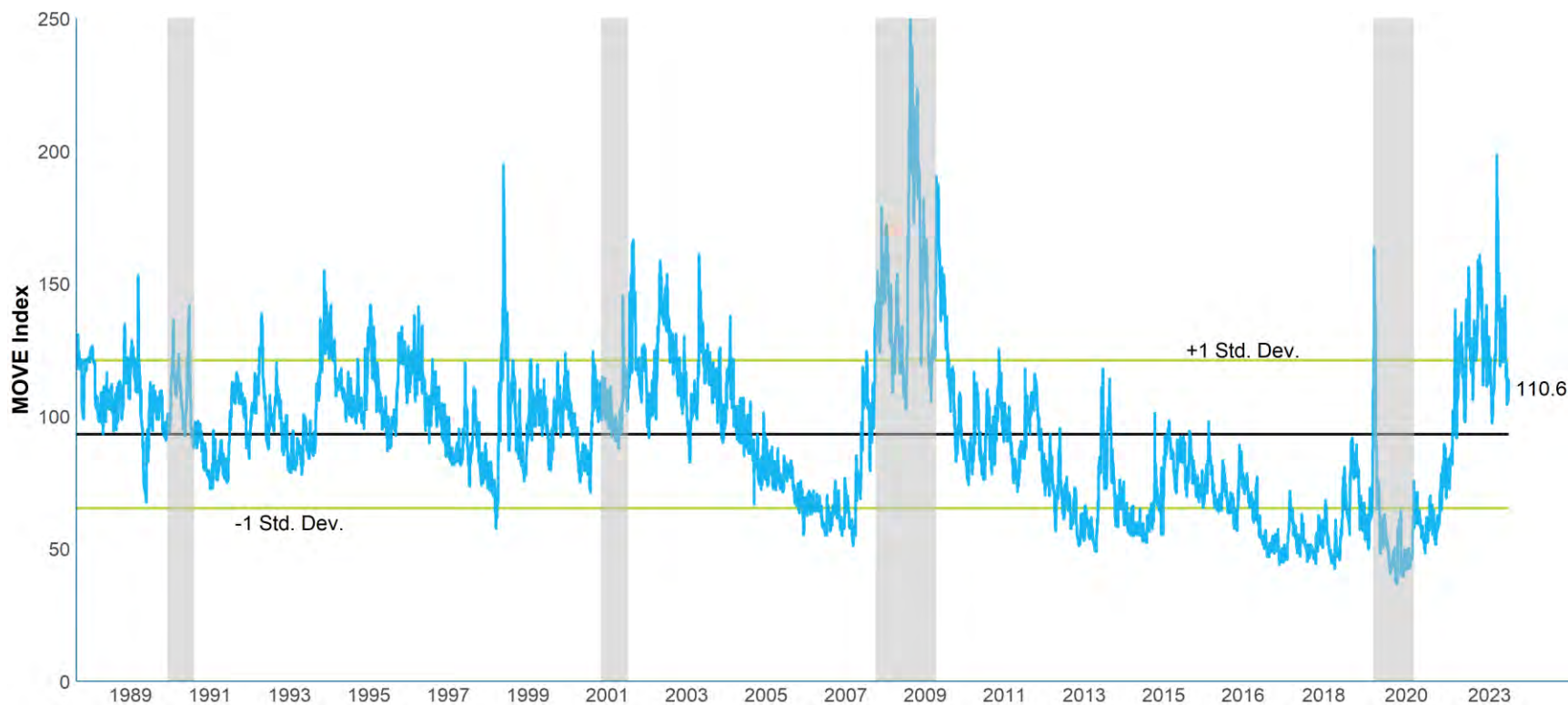


→ This chart details historical implied equity market volatility. This metric tends to increase during times of stress/fear and while declining during more benign periods.

¹ Equity Volatility – Source: Bloomberg, and Meketa Investment Group. Equity Volatility proxied by VIX Index, a Measure of implied option volatility for US equity markets.



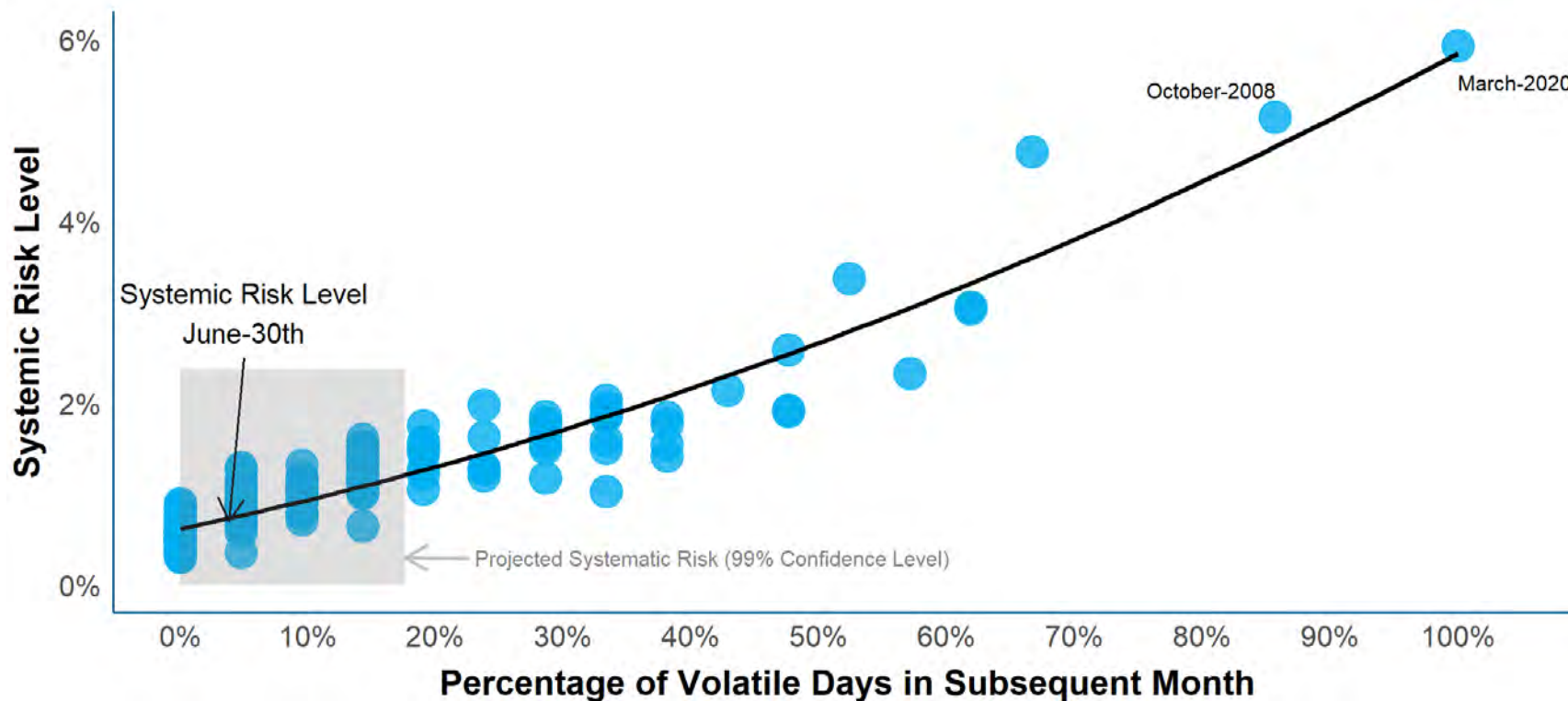
Fixed Income Volatility¹
(As of June 30, 2023)



→ This chart details historical implied fixed income market volatility. This metric tends to increase during times of stress/fear and while declining during more benign periods.

¹ Fixed Income Volatility – Source: Bloomberg, and Meketa Investment Group. Fixed Income Volatility proxied by MOVE Index, a Measure of implied option volatility for US Treasury markets.

Systemic Risk and Volatile Market Days¹
(As of June 30, 2023)



→ Systemic Risk is a measure of ‘System-wide’ risk, which indicates herding type behavior.

¹ Source: Meketa Investment Group. Volatile days are defined as the top 10 percent of realized turbulence, which is a multivariate distance between asset returns.

Yield Curve Slope (Ten Minus Two)¹ (As of June 30, 2023)



→ This chart details the historical difference in yields between ten-year and two-year US Treasury bonds/notes. A higher (lower) figure indicates a steeper (flatter) yield curve slope.

¹ Yield Curve Slope (Ten Minus Two) – Source: Bloomberg, and Meketa Investment Group. Yield curve slope is calculated as the difference between the 10-Year US Treasury Yield and 2-Year US Treasury Yield.

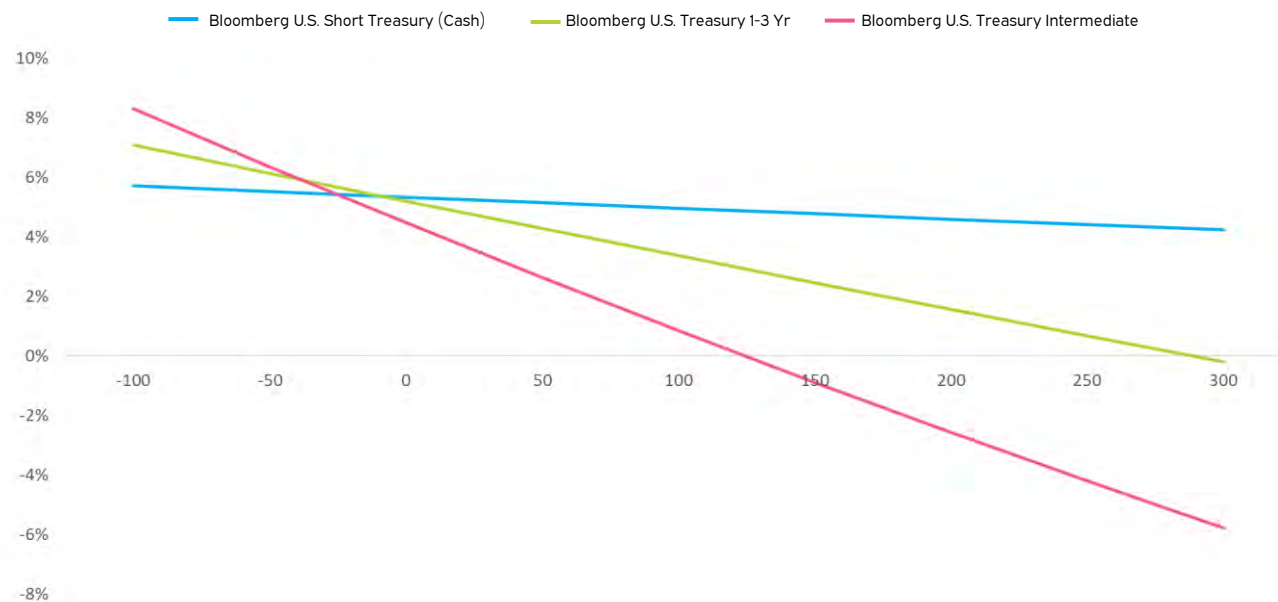
Ten-Year Breakeven Inflation¹ (As of June 30, 2023)



→ This chart details the difference between nominal and inflation-adjusted US Treasury bonds. A higher (lower) figure indicates higher (lower) inflation expectations.

¹ Ten-Year Breakeven Inflation – Source: US Treasury and Federal Reserve. Inflation is measured by the Consumer Price Index (CPI-U NSA).

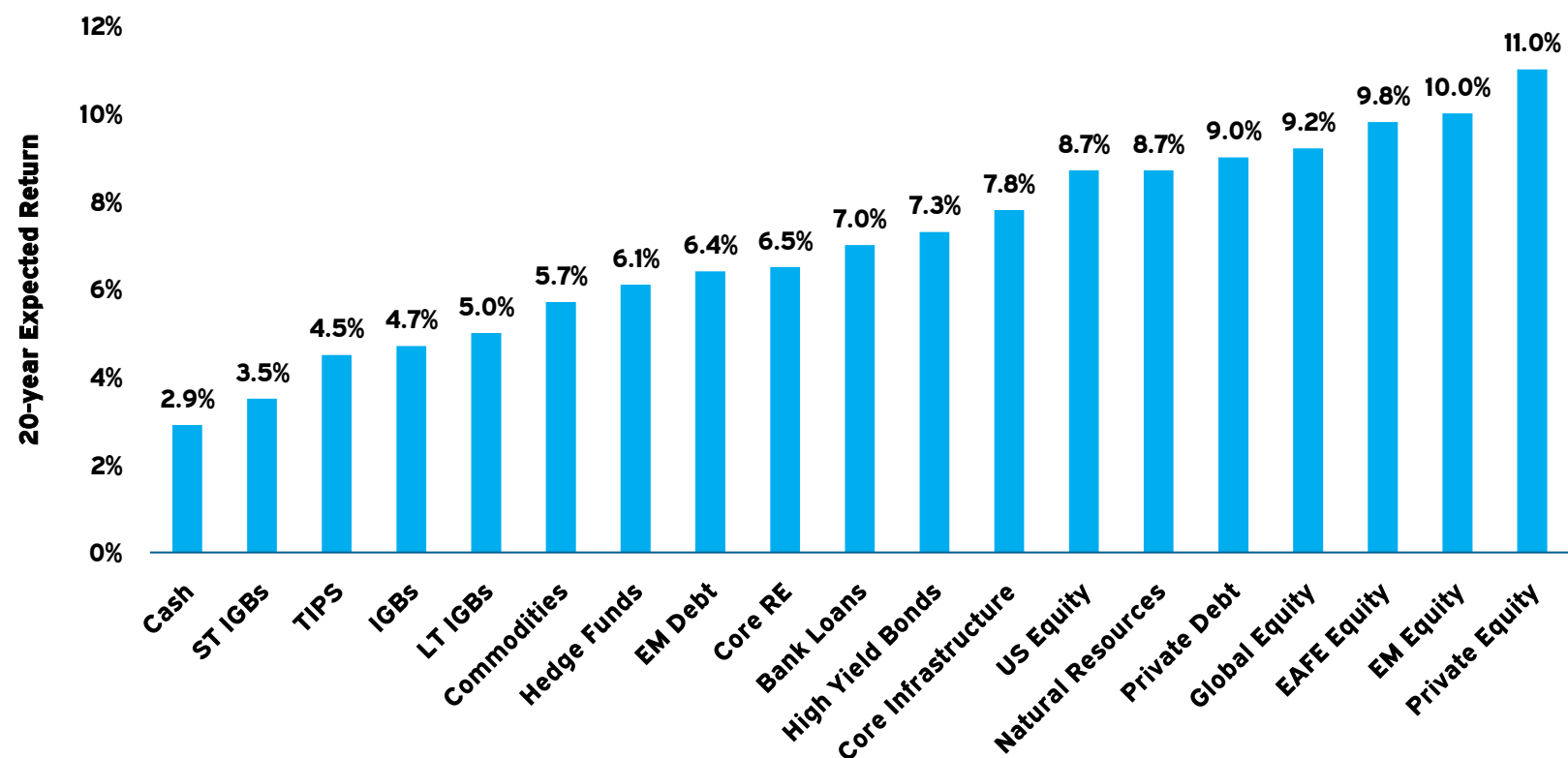
Total Return Given Changes in Interest Rates (bps)¹ (As of June 30, 2023)



	Total Return for Given Changes in Interest Rates (bps)									Statistics	
	-100	-50	0	50	100	150	200	250	300	Duration	YTW
Bloomberg US Short Treasury (Cash)	5.7%	5.5%	5.3%	5.1%	5.0%	4.8%	4.6%	4.4%	4.2%	0.37	5.33%
Bloomberg US Treasury 1-3 Yr.	7.1%	6.1%	5.2%	4.3%	3.4%	2.5%	1.6%	0.7%	-0.2%	1.86	5.20%
Bloomberg US Treasury Intermediate	8.3%	6.4%	4.5%	2.6%	0.8%	-0.9%	-2.6%	-4.2%	-5.8%	3.73	4.47%
Bloomberg US Treasury Long	21.6%	12.4%	4.0%	-3.6%	-10.3%	-16.2%	-21.3%	-25.6%	-29.0%	15.97	3.97%

¹ Data represents the expected total return from a given change in interest rates (shown in basis points) over a 12-month period assuming a parallel shift in rates. Source: Bloomberg, and Meketa Investment Group.

Long-Term Outlook – 20-Year Annualized Expected Returns¹



→ This chart details Meketa's long-term forward-looking expectations for total returns across asset classes.

¹ Source: Meketa Investment Group's 2023 Asset Study.



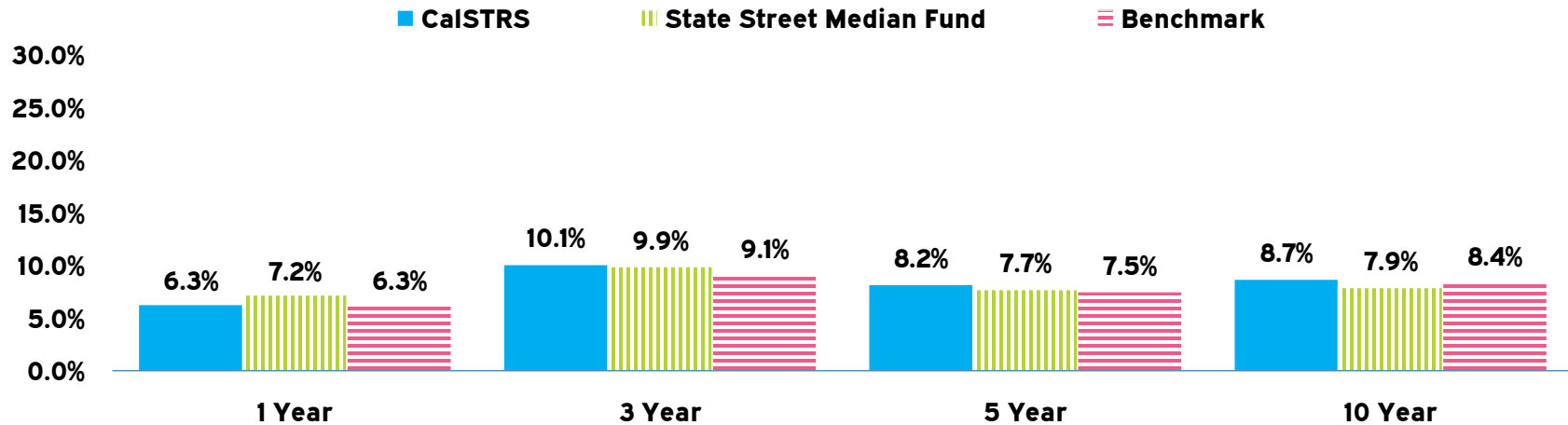
CalSTRS Portfolio Performance

This section includes an overview of the performance of the CalSTRS investment portfolio and a detailed analysis of strategic classes and specific mandates.

Portfolio Performance Overview (Net-of-Manager Fees)

Over the trailing one-year period ending June 30, 2023, the Total Portfolio generated a return of 6.3%, matching the policy benchmark¹ return, but trailing the State Street median fund² return of 7.2%. Over the trailing three-, five-, and ten-year periods, the Total Portfolio outperformed both the policy benchmark and the State Street median fund.

Trailing Periods Ending June 30, 2023 (Annualized for periods greater than one year)³



¹ The Total Portfolio benchmark consists of passively managed asset class portfolios held at policy weightings.

² State Street Universe – Public Funds > \$10 Billion. Mixture of net and gross-of-fees.

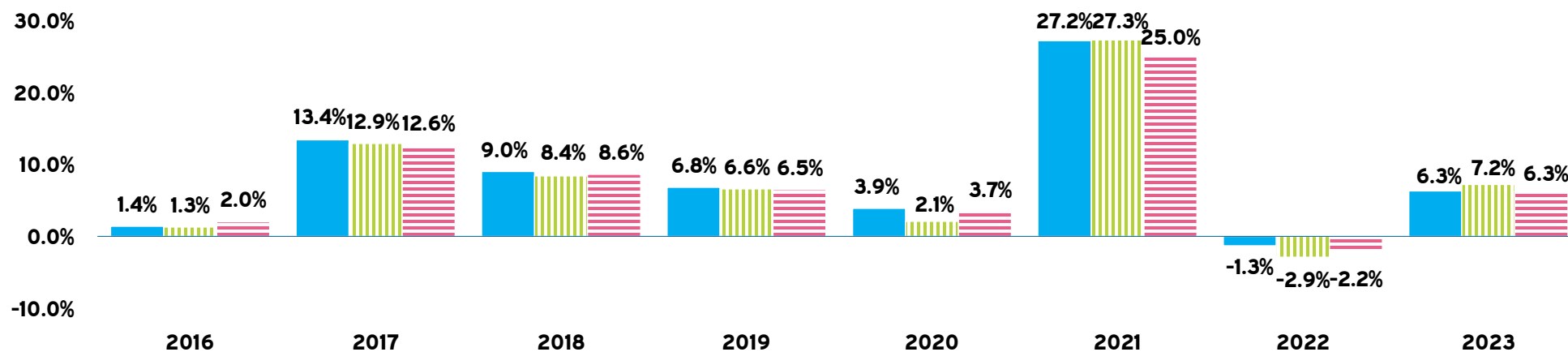
³ Source: State Street.

Portfolio Performance Overview (Net-of-Manager Fees) (continued)

The CalSTRS Total Portfolio generated positive absolute results over seven of the eight 12-month periods ending June 30. The Total Portfolio has matched or outperformed the policy benchmark in seven of the last eight years ending in June. Lastly, the Total Portfolio outperformed the median fund¹ in six of the last eight 12-month periods ending June 30.

Trailing 12-Month Performance (For year ended June 30th)¹

■ CalSTRS ■ Median Fund ■ Benchmark



¹ Source: State Street. Note: CMA Benchmark is not shown due to lack of comparability

Portfolio Valuation

The CalSTRS Total Portfolio had an aggregate value of \$315.6 billion as of June 30, 2023. During the latest six-month period, the Total Portfolio increased by \$13.5 billion (net of fees and contributions/benefits). Over the latest year, the Total Portfolio increased by \$14.1 billion (net of fees and contributions/benefits).

Portfolio Valuation as of June 30, 2023

	June 30, 2023	Dec 31, 2022	Semi-Annual Change ¹	Percentage Change ²	June 30, 2022	Annual Change ²	Percentage Change
CalSTRS	\$315.6B	\$302.1B	\$13.5B	4.5%	\$301.6B	\$14.1B	4.6%

¹ Differences due to rounding error.

² Includes investment performance and net contributions.



Actual vs. Target Allocations

The Total Portfolio ended the latest 12-month period overweight Private Markets and Innovative Strategies, and was underweight Global Equity, Fixed Income, and Risk Mitigating. The Inflation Sensitive, Cash, and Strategic Overlay asset classes ended the period in line with their respective policy targets.

As of June 30, 2023
(Differences due to rounding)¹

Segment	Actual (\$M)	Actual %	Target %	Variance
Total Portfolio	315,631	100	100	--
Global Equity	127,347	40	42	-2
Fixed Income	31,825	10	12	-2
Private Markets	99,713	32	28	+4
<i>Real Estate</i>	50,763	16	15	+1
<i>Private Equity</i>	48,951	16	13	+3
Inflation Sensitive	19,245	6	6	--
Risk Mitigating	27,780	9	10	-1
Innovative Strategies	4,524	1	0	+1
Cash	4,838	2	2	--
Strategic Overlay	358	0	0	--

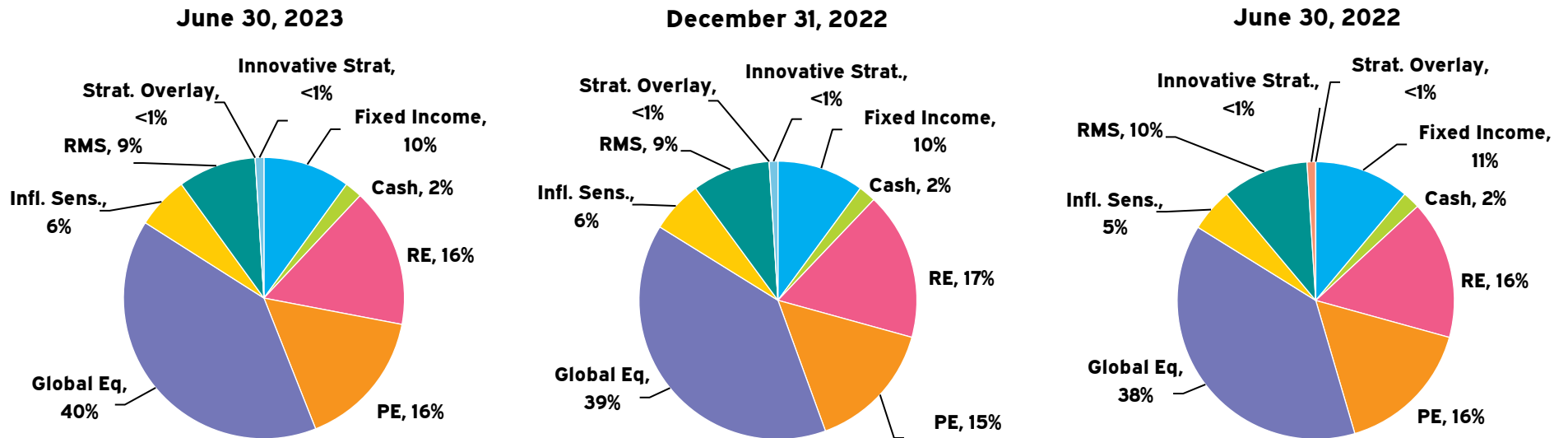
¹ Source: State Street.



Actual vs. Target Allocations (continued)

Over the trailing six-month period, the allocation to Real Estate fell by (1%), and the allocation to Global Equity and Private Equity rose by 1%. During the latest 12-month period, the allocation to Global Equity rose by 2%, Inflation Sensitive increased by 1%, the Fixed Income allocation fell by (1%), and the Risk Mitigating allocation declined by (1%).

Actual Strategic Allocation Comparison
 (Differences due to rounding)



Performance of Largest Accounts: US Equity

Manager	Mkt Value (\$000)	Asset Class	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
CalSTRS MSCI USA IMI	38,243,995	Passive US Equity	19.3	---	---	---
<i>MSCI CalSTRS Index on USA IMI</i>	---	---	18.7	---	---	---
CalSTRS Russell 3000	14,599,450	Passive Large Cap	19.1	13.9	11.5	12.5
<i>Custom Russell 3000 Index</i>	---	---	19.0	13.9	11.4	12.4
CalSTRS MSCI USA	12,692,740	Passive US Equity	19.7	---	---	---
<i>MSCI CalSTRS Index on USA</i>	---	---	19.1	---	---	---
Jacobs Levy 130-30 R3000	1,260,566	Active All Cap	18.2	26.1	---	---
<i>STRS US Equity Index</i>	---	---	19.0	13.9	---	---
CalSTRS Russell Top 200	985,392	Special Situations	21.0	14.6	---	---
<i>STRS Custom Russell Top 200</i>	---	---	21.0	14.6	---	---

Source: State Street.

- CalSTRS' five largest US Equity accounts (in terms of market value) ended the period with generally positive results versus their respective benchmarks over the longer-term time periods.
- CalSTRS' Russell 3000 passive portfolio met expectations over all applicable time periods.
- CalSTRS' MSCI USA IMI and MSCI USA portfolios continued to generate alpha, posting double digit returns over the latest fiscal year.
- Jacobs Levy 130-30 R3000 underperformed STRS US Equity Index by 0.9% over the one-year period, but outperformed by 12.2% over the three-year period.

Performance of Largest Accounts: Non-US Equity

Manager	Mkt Value (\$000)	Asset Class	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
CalSTRS EAFE + Canada Index	17,244,603	Passive EAFE + Canada	17.1	9.4	4.7	---
<i>Custom MSCI EAFE + Canada IMI Index</i>	---	---	16.5	8.9	4.2	---
Schroder GEM Core Equity	1,907,308	Active EM	4.8	3.5	2.5	---
<i>Custom MSCI EM Index</i>	---	---	1.7	1.7	0.9	---
Baillie Gifford & Co.	1,810,720	Active EM	7.3	2.5	3.9	6.2
<i>Custom MSCI EM Index</i>	---	---	1.7	1.7	0.9	3.0
Pzena Investment Mgmt EAFE	1,606,613	Active EAFE + Canada	23.4	15.4	5.7	---
<i>Custom MSCI EAFE + Canada Index</i>	---	---	17.6	9.3	4.6	---
Mondrian Investment	1,582,289	Active EM	7.1	5.7	2.6	2.0
<i>Custom MSCI EM Index</i>	---	---	1.7	1.7	0.9	3.0

Source: State Street.

- CalSTRS' five largest Non-US Equity accounts (in terms of market value) ended the period with positive results versus their respective benchmarks over the one-, three-, and five-year time periods.
- CalSTRS' largest passive Non-US developed + Canada strategy, an internally managed portfolio, deviated positively from its benchmark by 0.6%, 0.5%, and 0.5% over the one-, three-, and five-year periods, respectively.
- Schroder GEM Core, the portfolio's largest active Non-US developed manager, outperformed the relevant custom MSCI EAFE Index over the one-, three-, and five-year periods by 3.0%, 1.8% and 1.7%, respectively.
- Baillie Gifford and Co., the second-largest active Non-US developed manager, outperformed its benchmark by 5.6%, 0.8%, 3.0%, and 3.3% over the one-, three-, five-, and ten-year periods, respectively.
- Pzena Investment Management EAFE, the portfolio's third largest active Non-US developed manager, outperformed its benchmark by 5.8%, 6.1%, and 1.0% over the one-, three-, and five-year periods, respectively.
- Mondrian Investment, the portfolio's fourth largest active Non-US developed manager, outperformed its benchmark by 5.3%, 4.1% and 1.7% over the one-, three-, and five-year periods, respectively.

Performance of Largest Accounts:
Fixed Income

Manager	Mkt Value (\$000)	Asset Class	1 YR (%)	3 YR (%)	5 YR (%)	10 YR (%)
CalSTRS Interest Rate Products	11,037,443	Government	-1.9	-4.5	0.7	1.2
<i>CalSTRS Government Index</i>	---	---	-2.1	-4.7	0.5	1.0
CalSTRS Credit	7,479,170	Credit	1.6	-3.2	1.8	2.7
<i>CalSTRS Credit Index</i>	---	---	1.3	-3.4	1.6	2.5
CalSTRS Mortgage Backed	7,161,408	MBS	-1.5	-3.5	0.2	1.4
<i>CalSTRS MBS Index</i>	---	---	-1.5	-3.7	0.0	1.1
Western Asset Management	1,484,971	Core Plus	1.7	-3.2	1.6	2.6
<i>Custom US Universal Index</i>	---	---	-0.1	-3.4	1.0	1.8
CalSTRS Core Plus	1,446,233	Core Plus	0.8	---	---	---
<i>Custom US Universal Index</i>	---	---	-0.1	---	---	---

Source: State Street.

- CalSTRS' five largest Fixed Income portfolios (in terms of market value) ended the period with generally positive results versus their respective benchmarks over all applicable time periods.
- The CalSTRS Interest Rate Portfolio modestly outperformed its benchmark by roughly 20 basis points over all trailing periods.
- The CalSTRS Mortgage-Backed Portfolio matched or outperformed its benchmark over all trailing periods.
- The CalSTRS Credit Portfolio matched or outperformed its benchmark over all trailing periods.
- Western Asset Management, one of CalSTRS' external core plus managers, outperformed its benchmark over all trailing periods.

Appendix

Data Sources and Explanations¹

- US Equity Cyclically Adjusted P/E on S&P 500 Index – Source: Robert Shiller and Yale University.
- Small Cap P/E (Russell 2000 Index) vs. Large Cap P/E (Russell 1000 Index) - Source: Russell Investments. Earnings figures represent 12-month “as reported” earnings.
- Growth P/E (Russell 3000 Growth Index) vs. Value (Russell 3000 Value Index) P/E - Source: Bloomberg, MSCI, and Meketa Investment Group. Earnings figures represent 12-month “as reported” earnings.
- Developed International Equity (MSCI EAFE) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.
- Emerging Market Equity (MSCI Emerging Markets Index) Cyclically Adjusted P/E – Source: MSCI and Bloomberg. Earnings figures represent the average of monthly “as reported” earnings over the previous ten years.
- Private Equity Multiples – Source: S&P LCD Average EBITDA Multiples Paid in All LBOs.
- Core Real Estate Spread vs. Ten-Year Treasury – Source: Real Capital Analytics, US Treasury, Bloomberg, and Meketa Investment Group. Core Real Estate is proxied by weighted sector transaction-based indices from Real Capital Analytics and Meketa Investment Group.

¹ All Data as of March 31, 2023, unless otherwise noted.

Appendix (continued)

Data Sources and Explanations (continued)¹

- REITs Dividend Yield Spread vs. Ten-Year Treasury – Source: NAREIT, US Treasury. REITs are proxied by the yield for the NAREIT Equity Index.
- Credit Spreads – Source: Bloomberg High Yield is proxied by the Bloomberg High Yield Index and Investment Grade Corporates are proxied by the Bloomberg US Corporate Investment Grade Index.
 - Spread is calculated as the difference between the Yield to Worst of the respective index and the 10-Year Treasury Yield.
- EM Debt Spreads – Source: Bloomberg, and Meketa Investment Group. Option Adjusted Spread (“OAS”) for the Bloomberg EM USD Aggregate Index.
- Equity Volatility – Source: Bloomberg, and Meketa Investment Group. Equity Volatility proxied by VIX Index, a Measure of implied option volatility for US equity markets.
- Fixed Income Volatility – Source: Bloomberg, and Meketa Investment Group. Equity Volatility proxied by MOVE Index, a Measure of implied option volatility for US Treasury markets.
- Systemic Risk and Volatile Market Days – Source: Meketa Investment Group. Volatile days are defined as the top 10 percent of realized turbulence, which is a multivariate distance between asset returns.
- Systemic Risk, which measures risk across markets, is important because the more contagion of risk that exists between assets, the more likely it is that markets will experience volatile periods.

¹ All Data as of March 31, 2023, unless otherwise noted.

Appendix (continued)

Data Sources and Explanations (continued)¹

- Yield Curve Slope (Ten Minus Two) – Source: Bloomberg, and Meketa Investment Group. Yield curve slope is calculated as the difference between the 10-Year US Treasury Yield and 2-Year US Treasury Yield.
- Ten-Year Breakeven Inflation – Source: US Treasury and Federal Reserve. Inflation is measured by the Consumer Price Index (CPI-U NSA).

¹ All Data as of March 31, 2023, unless otherwise noted.

Meketa Market Sentiment Indicator Explanation, Construction and Q&A

Meketa has created the MIG Market Sentiment Indicator (MIG-MSI) to complement our valuation-focused Risk Metrics. This measure of sentiment is meant to capture significant and persistent shifts in long-lived market trends of economic growth risk, either towards a risk-seeking trend or a risk-aversion trend.

This appendix explores:

- What is the Meketa Market Sentiment Indicator?
- How do I read the indicator graph?
- How is the Meketa Market Sentiment Indicator constructed?
- What do changes in the indicator mean?

Meketa has created a market sentiment indicator for monthly publication (the MIG-MSI – see below) to complement Meketa's Risk Metrics.

→ Meketa's Risk Metrics, which rely significantly on standard market measures of relative valuation, often provide valid early signals of increasing long-term risk levels in the global investment markets. However, as is the case with numerous valuation measures, the Risk Metrics may convey such risk concerns long before a market corrections take place. The MIG-MSI helps to address this early-warning bias by measuring whether the markets are beginning to acknowledge key Risk Metrics trends, and / or indicating non-valuation based concerns. Once the MIG-MSI indicates that the market sentiment has shifted, it is our belief that investors should consider significant action, particularly if confirmed by the Risk Metrics. Importantly, Meketa believes the Risk Metrics and MIG-MSI should always be used in conjunction with one another and never in isolation. The questions and answers below highlight and discuss the basic underpinnings of the Meketa MIG-MSI:

What is the Meketa Market Sentiment Indicator (MIG-MSI)?

→ The MIG-MSI is a measure meant to gauge the market's sentiment regarding economic growth risk. Growth risk cuts across most financial assets, and is the largest risk exposure that most portfolios bear. The MIG-MSI takes into account the momentum (trend over time, positive or negative) of the economic growth risk exposure of publicly traded stocks and bonds, as a signal of the future direction of growth risk returns; either positive (risk seeking market sentiment), or negative (risk averse market sentiment).

How is the Meketa Market Sentiment Indicator (MIG-MSI) Constructed?

→ The MIG-MSI is constructed from two sub-elements representing investor sentiment in stocks and bonds:

- Stock return momentum: Return momentum for the S&P 500 Equity Index (trailing 12-months).
- Bond yield spread momentum: Momentum of bond yield spreads (excess of the measured bond yield over the identical duration US Treasury bond yield) for corporate bonds (trailing 12-months) for both investment grade bonds (75% weight) and high yield bonds (25% weight).
- Both measures are converted to Z-scores and then combined to get an “apples to apples” comparison without the need of re-scaling.

→ The black line reading on the graph is calculated as the average of the stock return momentum measure and the bonds spread momentum measure¹. The color reading on the graph is determined as follows:

- If both stock return momentum and bond spread momentum are positive = GREEN (positive).
- If one of the momentum indicators is positive, and the other negative = GRAY (inconclusive).
- If both stock return momentum and bond spread momentum are negative = RED (negative).

¹ Momentum as we are defining it is the use of the past behavior of a series as a predictor of its future behavior. “Time Series Momentum” Moskowitz, Ooi, Pedersen, August 2010. <http://pages.stern.nyu.edu/~lpederse/papers/TimeSeriesMomentum.pdf>

What does the Meketa Market Sentiment Indicator (MIG-MSI) mean? Why might it be useful?

→ There is strong evidence that time series momentum is significant and persistent. Across an extensive array of asset classes, the sign of the trailing 12-month return (positive or negative) is indicative of future returns (positive or negative) over the next 12-month period. The MIG-MSI is constructed to measure this momentum in stocks and corporate bond spreads. A reading of green or red is agreement of both the equity and bond measures, indicating that it is likely that this trend (positive or negative) will continue over the next 12 months. When the measures disagree, the indicator turns gray. A gray reading does not necessarily mean a new trend is occurring, as the indicator may move back to green, or into the red from there. The level of the reading (black line) and the number of months at the red or green reading, gives the user additional information on which to form an opinion, and potentially take action.



WE HAVE PREPARED THIS REPORT (THIS "REPORT") FOR THE SOLE BENEFIT OF THE INTENDED RECIPIENT (THE "RECIPIENT").

SIGNIFICANT EVENTS MAY OCCUR (OR HAVE OCCURRED) AFTER THE DATE OF THIS REPORT AND THAT IT IS NOT OUR FUNCTION OR RESPONSIBILITY TO UPDATE THIS REPORT. ANY OPINIONS OR RECOMMENDATIONS PRESENTED HEREIN REPRESENT OUR GOOD FAITH VIEWS AS OF THE DATE OF THIS REPORT AND ARE SUBJECT TO CHANGE AT ANY TIME. ALL INVESTMENTS INVOLVE RISK. THERE CAN BE NO GUARANTEE THAT THE STRATEGIES, TACTICS, AND METHODS DISCUSSED HERE WILL BE SUCCESSFUL.

INFORMATION USED TO PREPARE THIS REPORT WAS OBTAINED FROM INVESTMENT MANAGERS, CUSTODIANS, AND OTHER EXTERNAL SOURCES. WHILE WE HAVE EXERCISED REASONABLE CARE IN PREPARING THIS REPORT, WE CANNOT GUARANTEE THE ACCURACY OF ALL SOURCE INFORMATION CONTAINED HEREIN.

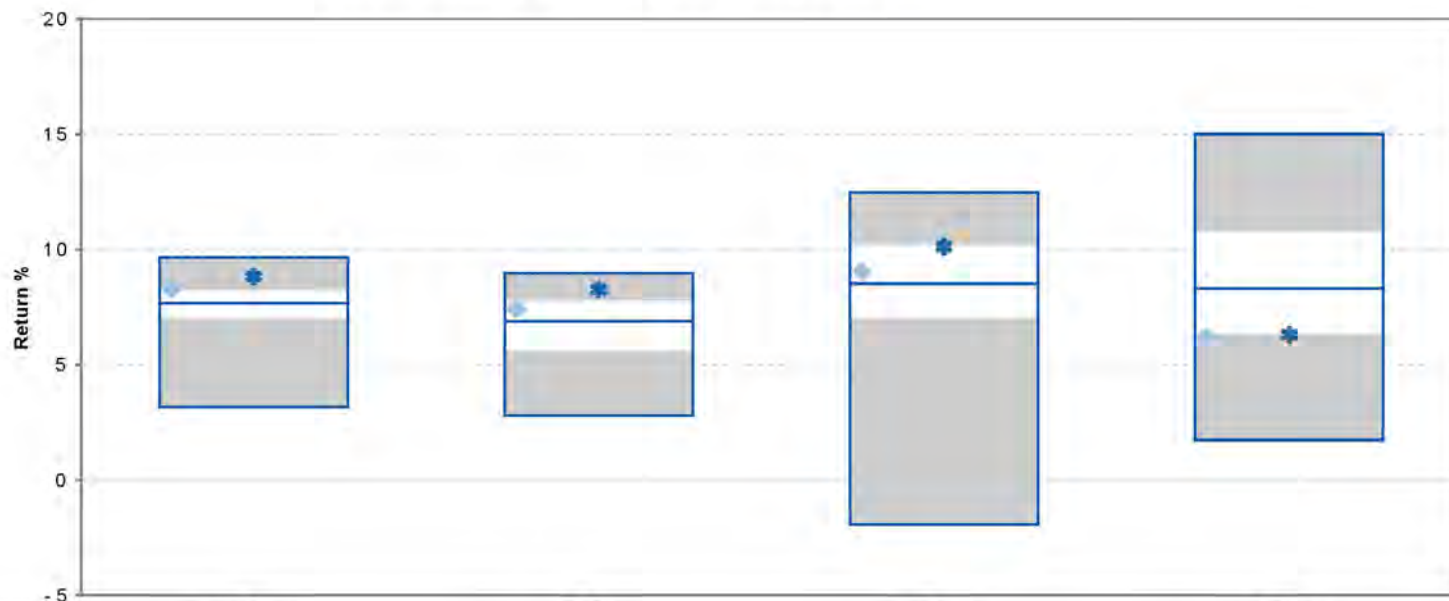
CERTAIN INFORMATION CONTAINED IN THIS REPORT MAY CONSTITUTE "FORWARD - LOOKING STATEMENTS," WHICH CAN BE IDENTIFIED BY THE USE OF TERMINOLOGY SUCH AS "MAY," "WILL," "SHOULD," "EXPECT," "AIM," "ANTICIPATE," "TARGET," "PROJECT," "ESTIMATE," "INTEND," "CONTINUE" OR "BELIEVE," OR THE NEGATIVES THEREOF OR OTHER VARIATIONS THEREON OR COMPARABLE TERMINOLOGY. ANY FORWARD-LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION ARE BASED UPON CURRENT ASSUMPTIONS. CHANGES TO ANY ASSUMPTIONS MAY HAVE A MATERIAL IMPACT ON FORWARD - LOOKING STATEMENTS, FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS. ACTUAL RESULTS MAY THEREFORE BE MATERIALLY DIFFERENT FROM ANY FORECASTS, PROJECTIONS, VALUATIONS, OR RESULTS IN THIS PRESENTATION.

PERFORMANCE DATA CONTAINED HEREIN REPRESENT PAST PERFORMANCE. PAST PERFORMANCE IS NO GUARANTEE OF FUTURE RESULTS.

California State Teachers Retirement
State Street Universe
Periods Ending June 30, 2023



State Street Universe - Public Funds Master Trusts



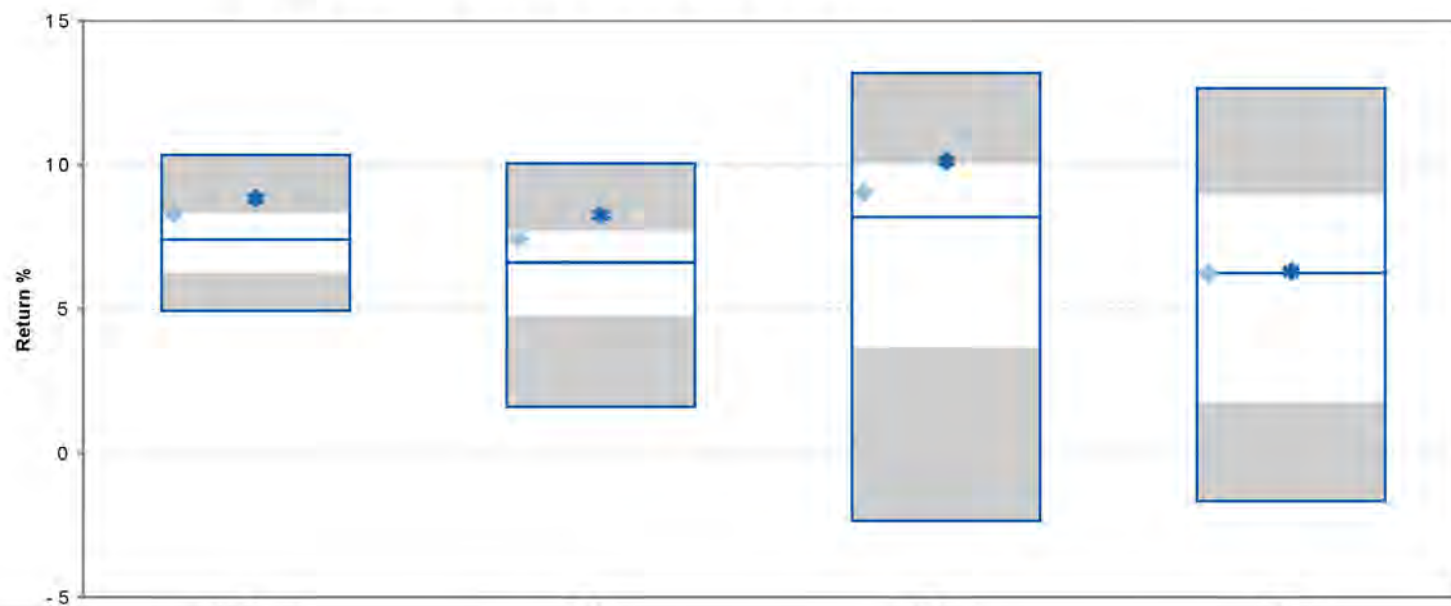
	10 Year	5 Year	3 Year	1 Year
Number of Observations	36	41	41	46
5th Percentile	9.65	8.96	12.46	15.00
25th Percentile	8.19	7.75	10.18	10.78
50th Percentile	7.66	6.88	8.51	8.29
75th Percentile	7.01	5.58	7.02	6.33
95th Percentile	3.16	2.79	-1.95	1.72
★ TOTAL FUND	8.86 14	8.29 13	10.16 28	6.33 76
★ STRS TOTAL FUND INDEX	8.37 24	7.49 35	9.12 41	6.30 76

Note: Returns for Universe are gross of fees. Returns greater than 1 year are annualized.
* Gross returns are based on best available expense information.

California State Teachers Retirement
State Street Universe
Periods Ending June 30, 2023



State Street Universe - Public Master Trusts > \$1 Billion



	10 Year	5 Year	3 Year	1 Year
Number of Observations	86	96	96	97
5th Percentile	10.35	10.05	13.19	12.66
25th Percentile	8.33	7.70	10.02	8.95
50th Percentile	7.41	6.61	8.19	6.24
75th Percentile	6.23	4.76	3.68	1.76
95th Percentile	4.94	1.61	-2.36	-1.67
★ TOTAL FUND	8.86 14	8.29 16	10.16 23	6.33 50
● STRS TOTAL FUND INDEX	8.37 25	7.49 30	9.12 38	6.30 50

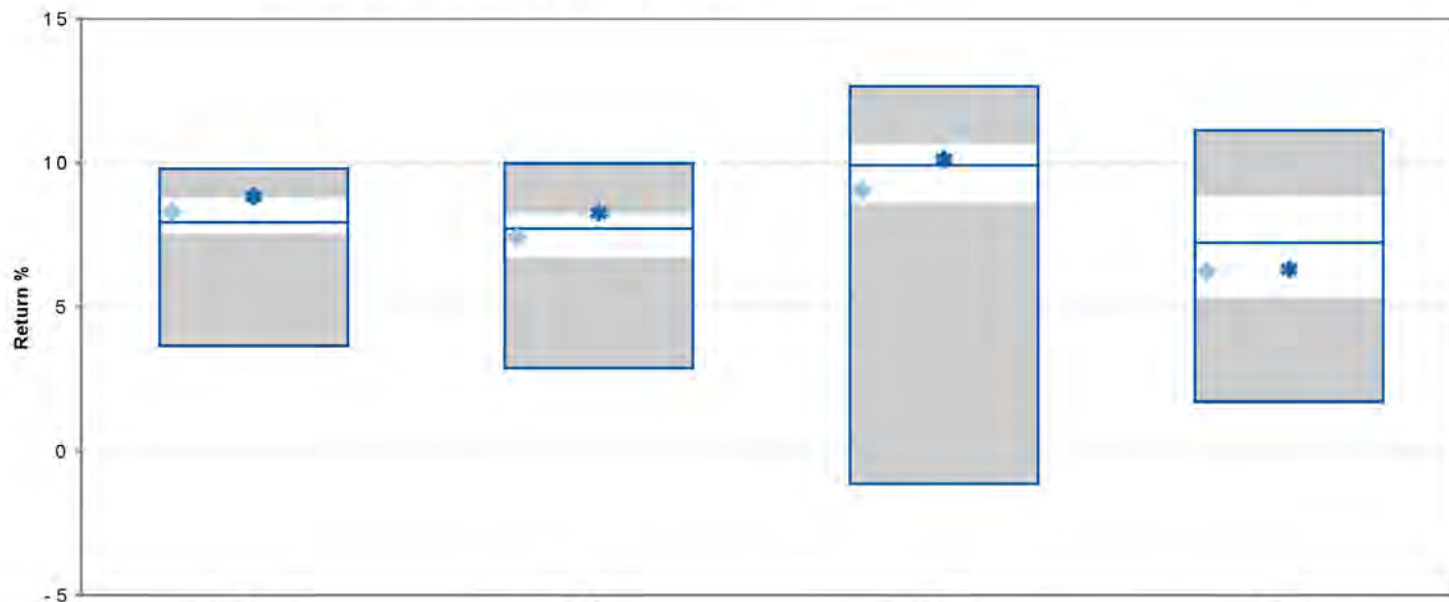
Note: Returns for Universe are gross of fees. Returns greater than 1 year are annualized.

* Gross returns are based on best available expense information.

California State Teachers Retirement
State Street Universe
Periods Ending June 30, 2023



State Street Universe - Public Master Trusts > \$10 Billion



	10 Year	5 Year	3 Year	1 Year
Number of Observations	19	19	18	19
5th Percentile	9.80	9.98	12.66	11.13
25th Percentile	8.78	8.22	10.66	8.85
50th Percentile	7.93	7.72	9.91	7.23
75th Percentile	7.52	6.69	8.58	5.32
95th Percentile	3.65	2.88	-1.14	1.71
★ TOTAL FUND	8.86 21	8.29 22	10.16 33	6.33 67
★ STRS TOTAL FUND INDEX	8.37 30	7.49 58	9.12 64	6.30 67

Note: Returns for Universe are gross of fees. Returns greater than 1 year are annualized.
* Gross returns are based on best available expense information.

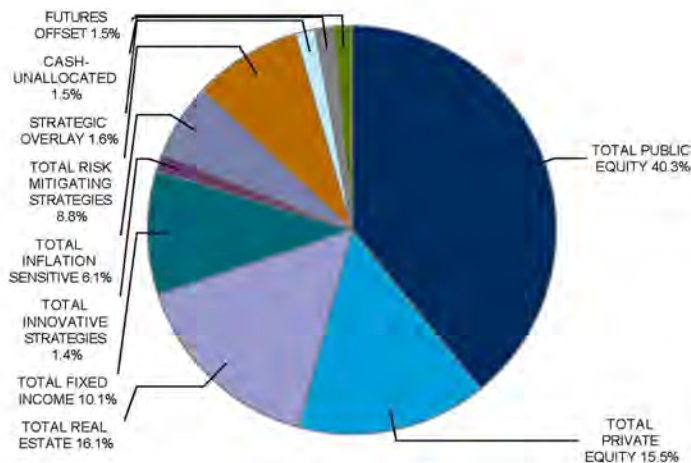
California State Teachers Retirement

Total Fund - Asset Allocation

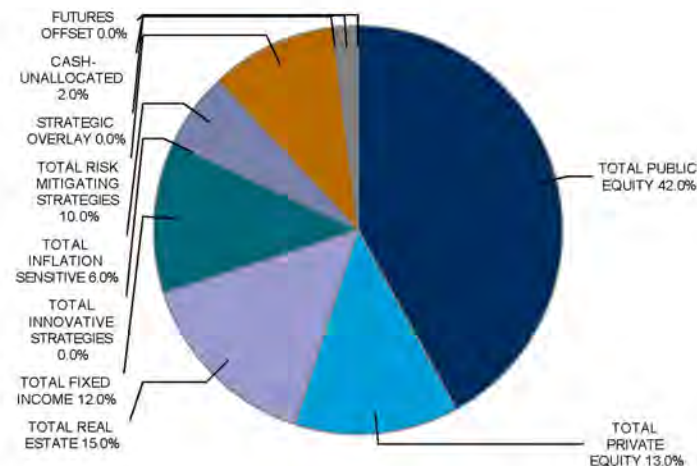
Periods Ending June 30, 2023



Allocation*



Target Policy



Allocation vs. Target Policy

	Actual*	Policy	Difference
TOTAL PUBLIC EQUITY	40.3	42.0	-1.7
TOTAL PRIVATE EQUITY	15.5	13.0	2.5
TOTAL REAL ESTATE	16.1	15.0	1.1
TOTAL FIXED INCOME	10.1	12.0	-1.9
TOTAL INNOVATIVE STRATEGIES	1.4	0.0	1.4
TOTAL INFLATION SENSITIVE	6.1	6.0	0.1
TOTAL RISK MITIGATING STRATEGIES	8.8	10.0	-1.2
STRATEGIC OVERLAY	1.6	0.0	1.6
CASH-UNALLOCATED	1.5	2.0	-0.5
FUTURES OFFSET	-1.5	0.0	-1.5

* End of period weights

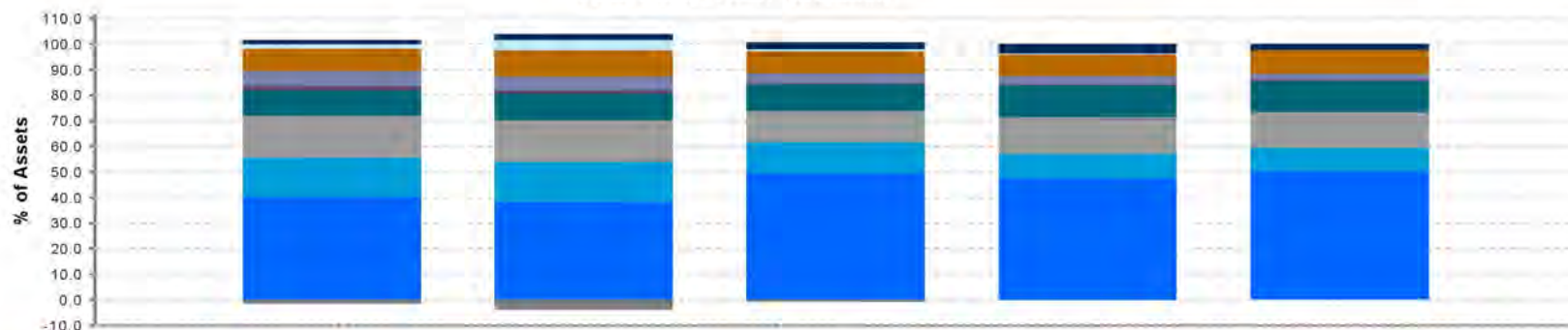
**Derivatives are not included which provide additional exposure to Public Equity bringing the Asset Allocation range within policy limits. Negative allocation to Futures Offset are represented as positive numbers on the Allocation pie chart.

Includes Sustainable Investment & Stewardship Strategies Public and Private investments total of \$9,956 Million.

California State Teachers Retirement
Total Fund - Historical Asset Allocation
 Periods Ending June 30, 2023



Total Fund - Asset Allocation



■ Public Equity
 ■ Private Equity
 ■ Real Estate
 ■ Fixed Income
 ■ Innovative Strategies
 ■ Inflation Sensitive
 ■ Risk Mitigating Strategies
 ■ Strategic Overlay
 ■ Cash-Unallocated
 ■ Futures Offset

	Jun-23	Jun-22	Jun-21	Jun-20	Jun-19
Public Equity	40.3	38.3	49.7	47.7	50.4
Private Equity	15.5	15.7	12.0	9.6	9.1
Real Estate	16.1	16.3	12.3	14.2	13.8
Fixed Income	10.1	10.5	10.4	12.5	12.3
Innovative Strategies	1.4	1.1	0.5	0.3	0.3
Inflation Sensitive	6.1	5.4	3.7	-3.3	2.5
Risk Mitigating Strategies	8.8	10.2	8.6	8.4	9.4
Strategic Overlay	1.6	4.1	0.8	0.3	-0.0
Cash-Unallocated	1.5	2.1	2.6	-3.7	2.1
Futures Offset	-1.5	-3.9	-0.7		

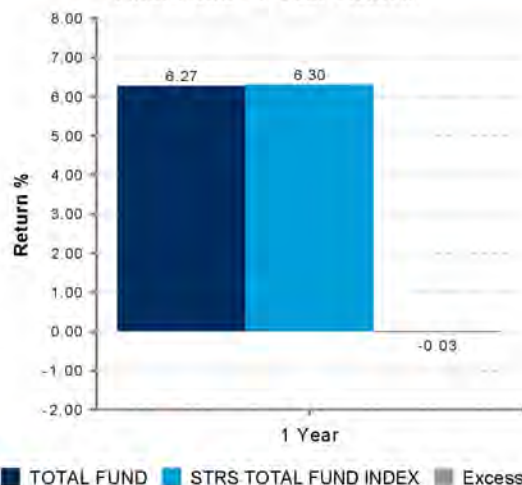
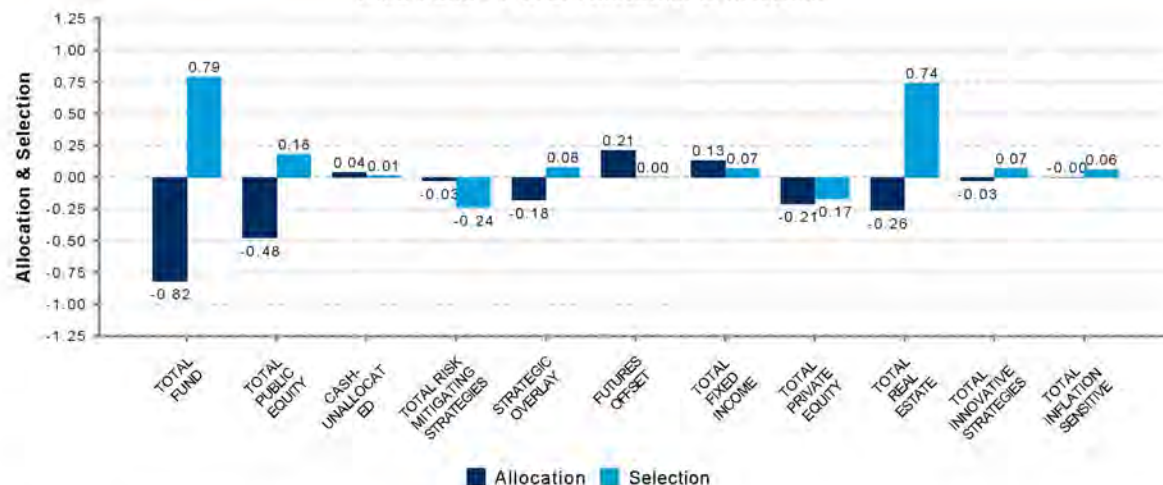
Ending Market Value (\$ in Millions)

	Public Equity	Private Equity	Real Estate	Fixed Income	Innovative Strategies	Inflation Sensitive	Risk Mitigating Strategies	Strategic Overlay	Cash Unallocated	Futures Offset
Jun 30, 2023	127,347	48,951	50,763	31,825	4,524	19,245	27,780	4,953	4,838	-4,595
Jun 30, 2022	115,650	47,249	49,221	31,701	3,219	16,413	30,904	12,506	6,417	-11,699
Jun 30, 2021	153,285	36,991	37,859	32,230	1,559	11,526	26,659	2,328	8,142	-2,020
Jun 30, 2020	117,353	23,538	34,992	30,772	716	8,118	20,637	757	9,146	
Jun 30, 2019	119,727	21,668	32,865	29,185	785	5,871	22,212	-7	5,017	

* End of period weights

Includes Sustainable Investment & Stewardship Strategies Public and Private investments total of \$9,956 Million.

California State Teachers Retirement
Total Fund Attribution
 Periods Ending June 30, 2023

**Total Fund - 1 Year Return****Total Fund - 1 Year Allocation & Selection****Total Fund Attribution - 1 Year**

	Portfolio Weight	Benchmark Weight	Beginning Difference	Portfolio Return	Benchmark Return	Return Difference	Weighting	Selection	Timing
TOTAL FUND	100.00	100.00	0.00	6.27	6.30	-0.03	-0.82	0.79	0.00
TOTAL PUBLIC EQUITY	38.35	42.00	-4.65	16.70	16.30	0.40	-0.48	0.18	
CASH-UNALLOCATED	2.13	2.00	0.13	4.28	3.74	0.54	0.04	0.01	
TOTAL RISK MITIGATING STRATEGIES	10.25	10.00	0.25	-4.31	-1.77	-2.53	-0.03	-0.24	
STRATEGIC OVERLAY	4.15	0.00	4.15	2.33	0.00	2.33	-0.18	0.08	
FUTURES OFFSET	-3.88	0.00	-3.88	0.00	0.00	0.00	0.21	0.00	
TOTAL FIXED INCOME	10.51	12.00	-1.49	0.09	-0.47	0.56	0.13	0.07	
TOTAL PRIVATE EQUITY	15.67	13.00	2.67	-0.86	-0.03	-0.83	-0.21	-0.17	
TOTAL REAL ESTATE	16.32	15.00	1.32	-0.51	-3.91	3.41	-0.26	0.74	
TOTAL INNOVATIVE STRATEGIES	1.07	0.00	1.07	9.32	3.36	5.95	-0.03	0.07	
TOTAL INFLATION SENSITIVE	5.44	6.00	0.44	1.50	0.81	0.69	-0.00	0.06	

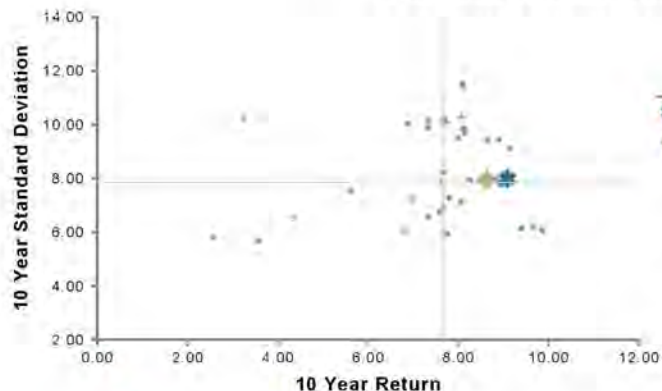
Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

* Attribution analysis uses beginning portfolio weights and end of period benchmark weights.

California State Teachers Retirement
 Total Fund - Risk vs Return
 Periods Ending June 30, 2023



10 Year Risk
 State Street Universe - Public Funds Master Trusts



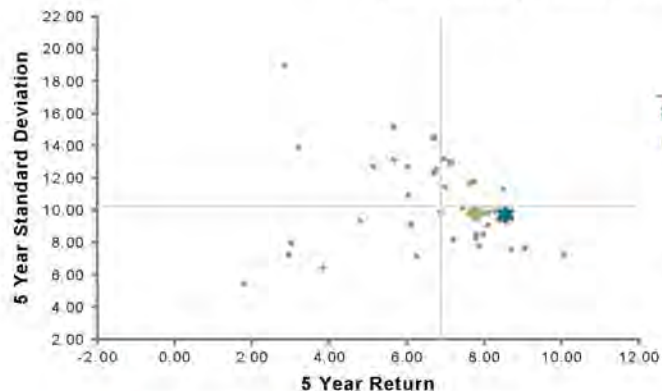
	10 Year Return	10 Year Standard Deviation
* TOTAL FUND	8.86 14	7.67 44
◆ STRS TOTAL FUND INDEX	8.37 24	7.63 44
Median	7.66	7.83
5th Percentile	9.65	5.67
25th Percentile	8.19	6.47
50th Percentile	7.66	7.83
75th Percentile	7.01	9.77
95th Percentile	3.16	11.32

10 Year Risk
 Risk Information & Statistics

	TOTAL FUND
Historic Beta	1.00
Information Ratio	0.52
Jensens Alpha	0.52
R-Squared	0.99
Sharpe Ratio	1.03
Tracking Error	0.94
Treynor Ratio	7.90

● TOTAL FUND ◆ STRS TOTAL FUND INDEX

5 Year Risk
 State Street Universe - Public Funds Master Trusts



	5 Year Return	5 Year Standard Deviation
* TOTAL FUND	8.29 13	9.19 41
◆ STRS TOTAL FUND INDEX	7.49 35	9.27 41
Median	6.88	10.23
5th Percentile	8.96	6.26
25th Percentile	7.75	8.03
50th Percentile	6.88	10.23
75th Percentile	5.58	12.72
95th Percentile	2.79	14.99

5 Year
 Risk Information & Statistics

	TOTAL FUND
Historic Beta	0.99
Information Ratio	0.91
Jensens Alpha	0.87
R-Squared	0.99
Sharpe Ratio	0.73
Tracking Error	0.87
Treynor Ratio	6.83

● TOTAL FUND ◆ STRS TOTAL FUND INDEX

Note: Returns for Universe are gross of fees. Returns greater than 1 year are annualized.
 * Gross returns are based on best available expense information.

California State Teachers Retirement
Performance Summary
 Periods Ending June 30, 2023



Performance Summary

	Ending Market Value (\$ in Thousands)	Percentage of Plan	30 Year	25 Year	20 Year	10 Year	5 Year	3 Year	1 Year
TOTAL FUND	315,631,246	100.00	7.79	6.83	7.99	8.66	8.17	10.09	6.27
<i>STRS TOTAL FUND INDEX</i>			7.72	6.70	7.92	8.37	7.49	9.12	6.30
TOTAL PUBLIC EQUITY	127,346,987	40.35			8.76	9.42	8.02	11.32	16.70
<i>TOTAL PUBLIC EQUITY BLENDED INDEX</i>					8.68	9.29	7.85	10.95	16.30
TOTAL PRIVATE EQUITY	48,950,519	15.51			14.34	13.93	15.52	23.07	-0.86
<i>TOTAL PRIVATE EQUITY INDEX</i>					11.26	13.38	13.84	22.04	-0.03
TOTAL REAL ESTATE	50,762,959	16.08			7.89	9.98	9.19	10.48	-0.51
<i>STRS REAL ESTATE INDEX</i>					8.51	8.47	6.56	7.46	-3.91
TOTAL FIXED INCOME	31,825,332	10.08			3.55	2.14	1.32	-3.16	0.09
<i>STRS US DEBT CUSTOM INDEX</i>					3.18	1.67	0.91	-3.62	-0.47
TOTAL INNOVATIVE STRATEGIES	4,524,491	1.43				5.94	7.94	11.31	9.32
<i>TOTAL INNOVATIVE STRATEGIES INDEX</i>						3.37	2.58	3.04	3.36
TOTAL INFLATION SENSITIVE	19,245,045	6.10				6.97	8.59	12.08	1.50
<i>TOTAL INFLATION SENSITIVE INDEX</i>						5.14	5.82	9.08	0.81
TOTAL RISK MITIGATING STRATEGIES	27,780,065	8.80				2.70	5.28	3.47	-4.31
<i>STRS TOTAL RMS</i>						2.26	5.56	3.52	-1.78
STRATEGIC OVERLAY	4,952,505	1.57				0.39	0.65	-0.21	2.33

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

Includes Sustainable Investment & Stewardship Strategies Public and Private investments total of \$9,956 Million.

* Please see footnote regarding the Innovation strategy under "Performance Summary - Innovative Strategies" section.

**Derivatives are not included which provide additional exposure to Public Equity bringing the Asset Allocation range within policy limits.



California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023

Performance Summary

	Ending Market Value (\$ in Thousands)	Percentage of Plan	30 Year	25 Year	20 Year	10 Year	5 Year	3 Year	1 Year
CASH-UNALLOCATED	4,838,252	1.53			2.57	1.38	1.84	1.60	4.28
<i>Bloomberg U.S. Treasury Bellwethers: 3M</i>					1.38	1.01	1.59	1.32	3.74
FUTURES OFFSET	-4,594,909	-1.46						0.00	0.00

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

Includes Sustainable Investment & Stewardship Strategies Public and Private investments total of \$9,956 Million.

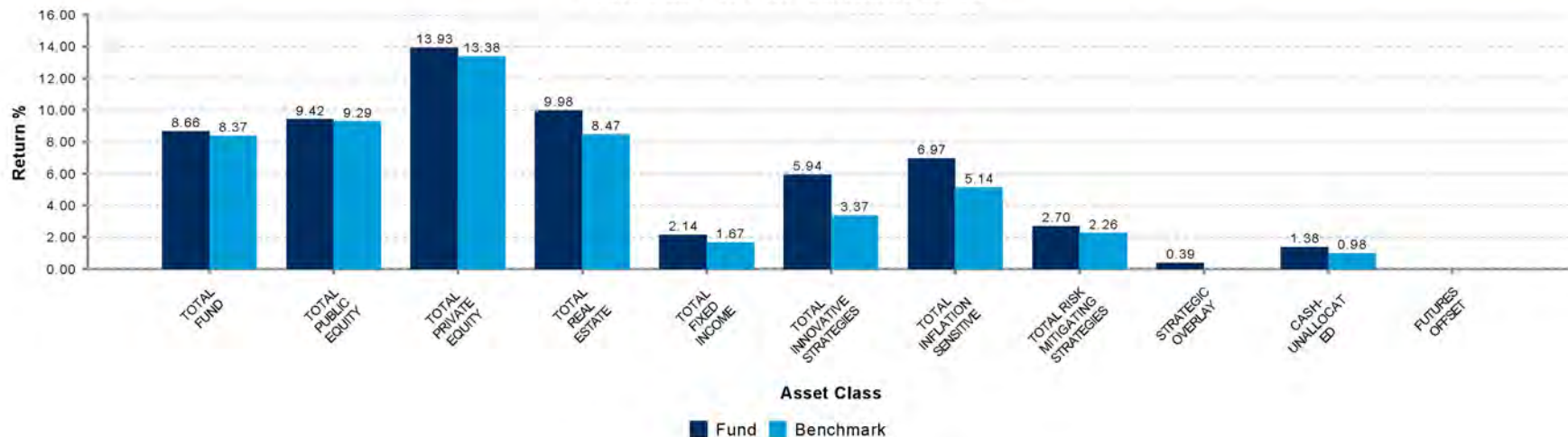
* Please see footnote regarding the Innovation strategy under "Performance Summary - Innovative Strategies" section.

**Derivatives are not included which provide additional exposure to Public Equity bringing the Asset Allocation range within policy limits.

California State Teachers Retirement Performance Summary Periods Ending June 30, 2023



Asset Class - 10 Year Annualized Return



Asset Class - 5 Year Annualized Return

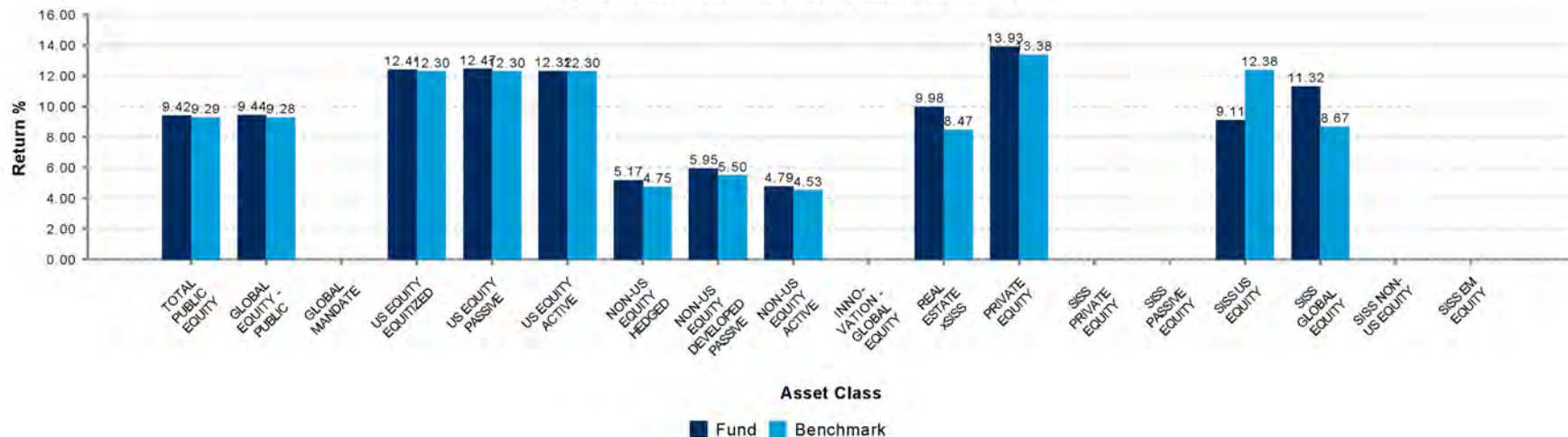


Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

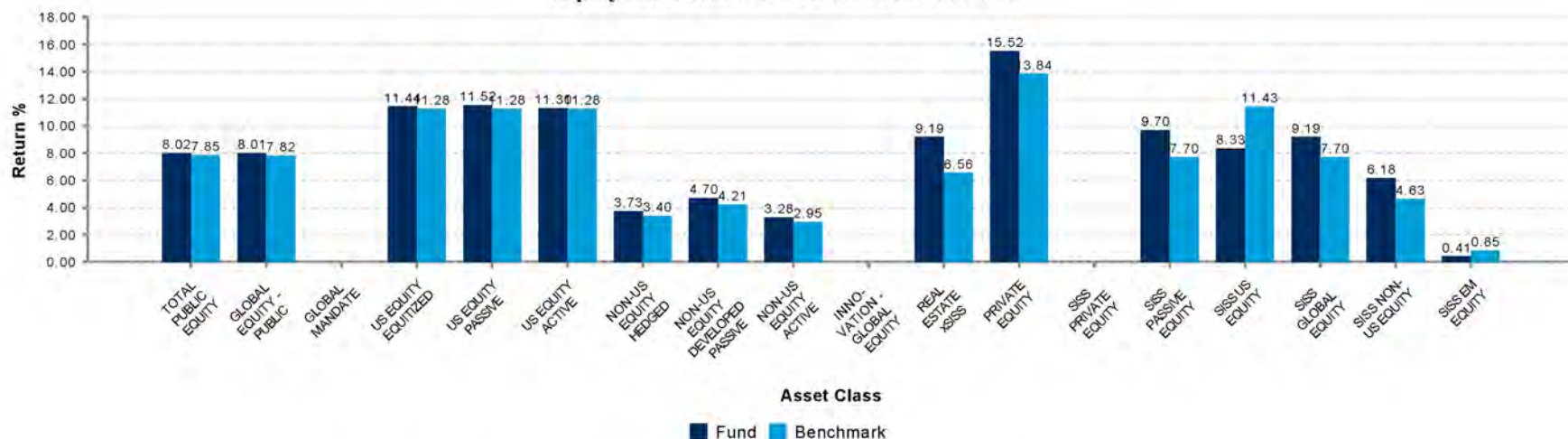


California State Teachers Retirement Performance Summary Periods Ending June 30, 2023

Equity Asset Class - 10 Year Annualized Return



Equity Asset Class - 5 Year Annualized Return

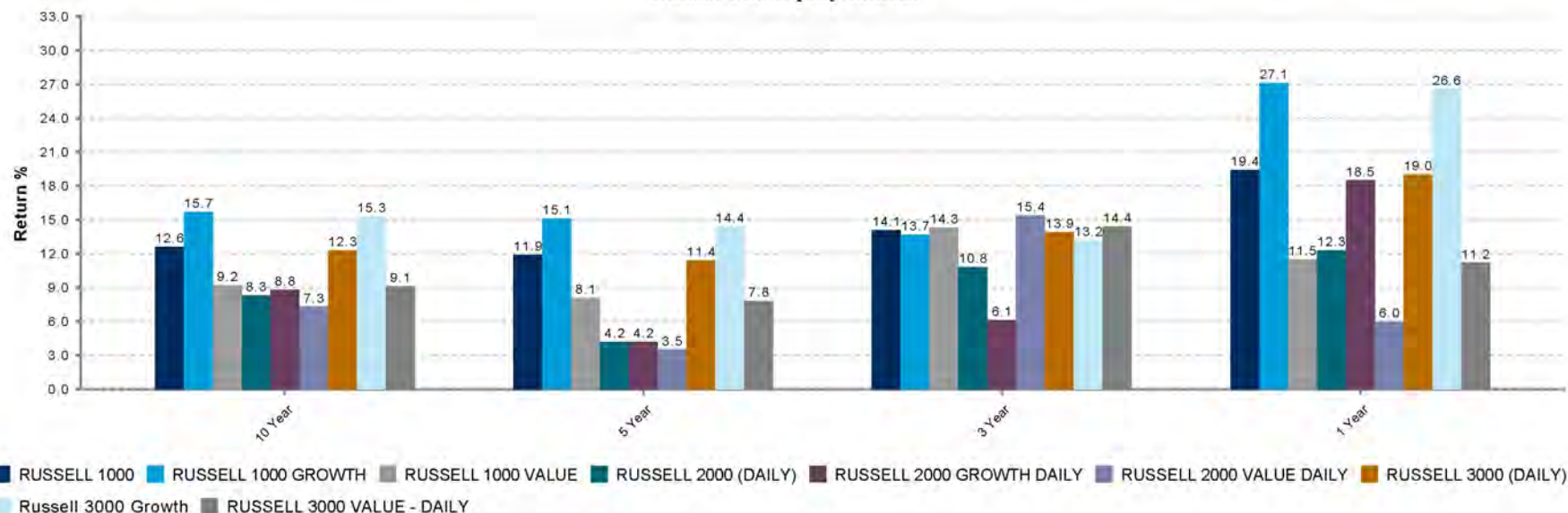


Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
US Equity - Market Review
 Periods Ending June 30, 2023



Russell U.S. Equity Indices



Russell U.S. Equity Indices - Market Review Summary

	20 Year	10 Year	5 Year	3 Year	1 Year
RUSSELL 1000	10.13	12.64	11.92	14.09	19.36
RUSSELL 1000 GROWTH	11.49	15.74	15.14	13.73	27.11
RUSSELL 1000 VALUE	8.50	9.22	8.11	14.30	11.54
RUSSELL 2000	8.89	8.26	4.21	10.82	12.31
RUSSELL 2000 GROWTH	9.23	8.83	4.22	6.10	18.53
RUSSELL 2000 VALUE	8.29	7.29	3.54	15.43	6.01
RUSSELL 3000	10.05	12.34	11.39	13.89	18.95
RUSSELL 3000 GROWTH	11.35	15.26	14.39	13.24	26.60
RUSSELL 3000 VALUE	8.49	9.09	7.79	14.38	11.22

Note: Indices are standard market versions. Returns greater than 1 year are annualized.

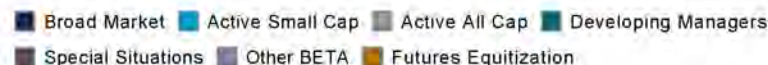
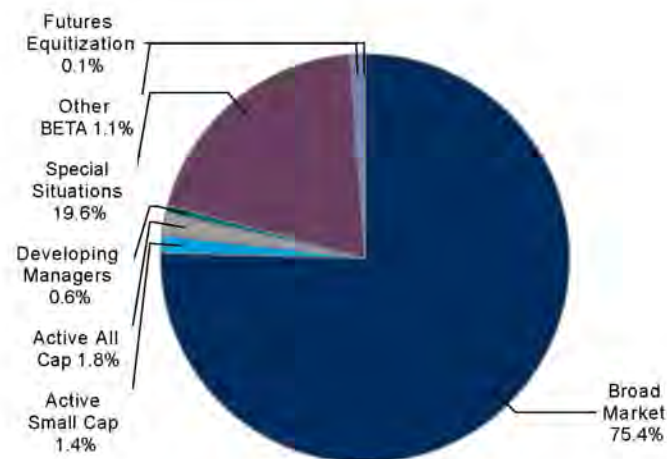
California State Teachers Retirement
US Equity - Asset Allocation
Periods Ending June 30, 2023



Total Equity Fund Allocations

	Market Value (\$ in Thousands)	Actual Weight (Percentage %)
Passive		
Broad Market	52,843,446	75.4
Total US Equity Passive	52,843,446	75.4
Active		
Active Small Cap	965,039	1.4
Active All Cap	1,260,566	1.8
Developing Managers	435,705	0.6
Special Situations	13,700,886	19.6
Other BETA	770,301	1.1
Futures Equitization	76,958	0.1
Total US Equity Active	17,209,455	24.6
Other		
US Equity Allocation	17,280	0.0
Total US Equity		
Total US Equity	70,070,181	100.0

Asset Allocation

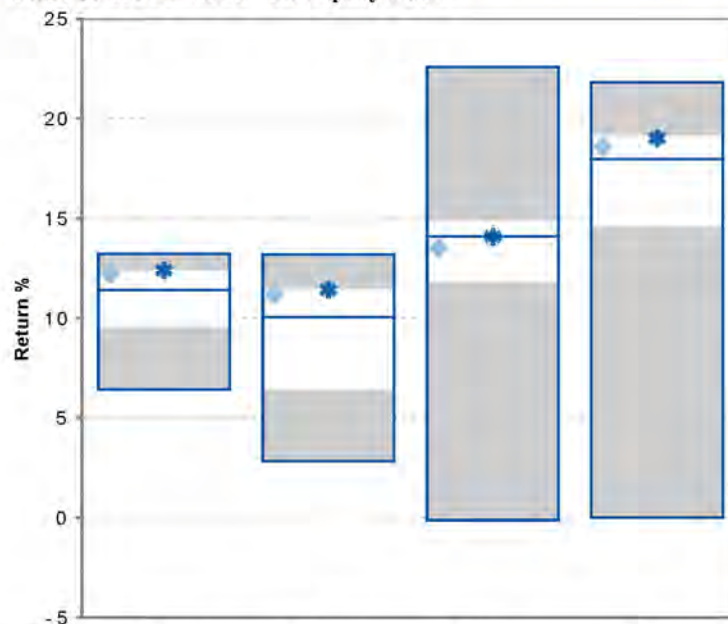


* End of period weights

California State Teachers Retirement
US Equity Equitized
 Periods Ending June 30, 2023

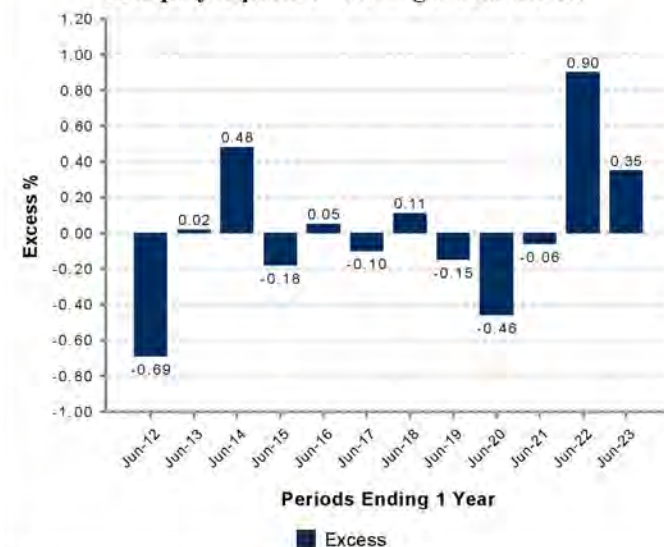


State Street Universe - US Equity Pools



	10 Years	5 Years	3 Years	1 Year
Number of Observations	115	124	126	127
5th Percentile	13.23	13.20	22.59	21.83
25th Percentile	12.41	11.44	14.85	19.14
50th Percentile	11.40	10.06	14.10	17.98
75th Percentile	9.56	6.41	11.80	14.55
95th Percentile	6.44	2.83	-0.12	0.00
★ US EQUITY EQUITIZED	12.45 22	11.47 25	14.13 49	19.07 26
◆ STRS MSCI USA IMI	12.30 27	11.28 31	13.62 63	18.68 40

US Equity Equitized - Rolling 1 Year Excess



Top 10 Holdings

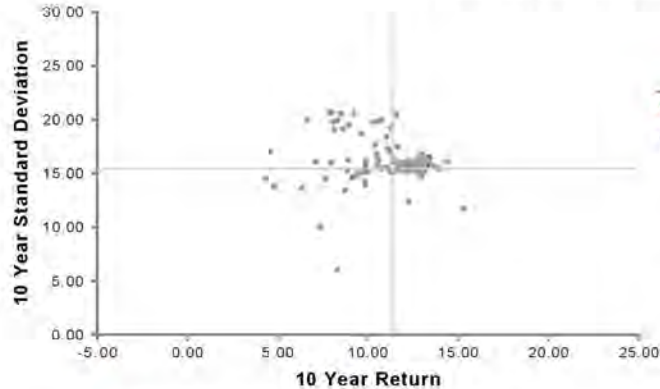
Security Name	Ending Market Value (\$ in Thousands)	Percentage %
APPLE INC	4,875,320	7.0
MICROSOFT CORP	3,884,716	5.5
AMAZON.COM INC	1,891,283	2.7
NVIDIA CORP	1,632,106	2.3
TESLA INC	1,164,128	1.7
ALPHABET INC CL A	1,126,773	1.6
META PLATFORMS INC CLASS A	1,040,424	1.5
ALPHABET INC CL C	1,026,894	1.5
BERKSHIRE HATHAWAY INC CL B	766,147	1.1
UNITEDHEALTH GROUP INC	713,303	1.0

Note: Returns for Universe are gross of fees. Returns for rolling 1 year excess are net of manager fees. Returns greater than 1 year are annualized.
 *Gross of fees returns are based on best available expense information.



California State Teachers Retirement
US Equity Equitized - Risk vs Return
Periods Ending June 30, 2023

10 Year Risk
State Street Universe - US Equity Pools



US EQUITY EQUITIZED	12.45	22	15.36	49
STRS MSCI USA IMI	12.30	27	15.41	53
Median	11.40		15.40	
5th Percentile	13.23		12.11	
25th Percentile	12.41		14.92	
50th Percentile	11.40		15.40	
75th Percentile	9.56		16.05	
95th Percentile	6.44		20.18	

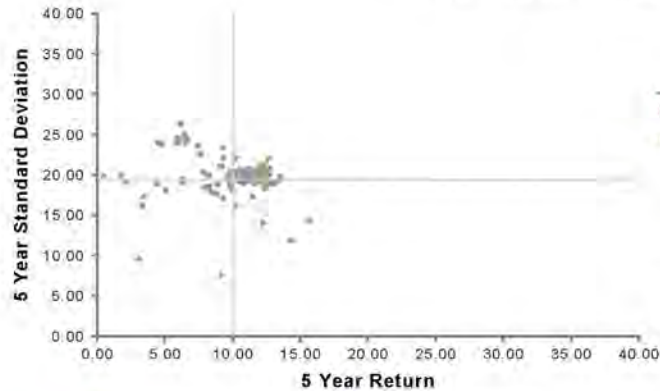
	10 Year Return	10 Year Standard Deviation
US EQUITY EQUITIZED	12.45	22
STRS MSCI USA IMI	12.30	27
Median	11.40	15.40
5th Percentile	13.23	12.11
25th Percentile	12.41	14.92
50th Percentile	11.40	15.40
75th Percentile	9.56	16.05
95th Percentile	6.44	20.18

10 Year Risk Information & Statistics

US EQUITY EQUITIZED	
Historic Beta	1.00
Information Ratio	0.69
Jensens Alpha	0.19
R-Squared	1.00
Sharpe Ratio	0.75
Tracking Error	0.22
Treynor Ratio	11.51

US EQUITY EQUITIZED STRS MSCI USA IMI

5 Year Risk
State Street Universe - US Equity Pools



US EQUITY EQUITIZED	11.47	25	19.37	48
STRS MSCI USA IMI	11.28	31	19.46	54
Median	10.06		19.40	
5th Percentile	13.20		14.00	
25th Percentile	11.44		18.70	
50th Percentile	10.06		19.40	
75th Percentile	6.41		20.36	
95th Percentile	2.83		25.97	

	5 Year Return	5 Year Standard Deviation
US EQUITY EQUITIZED	11.47	25
STRS MSCI USA IMI	11.28	31
Median	10.06	19.40
5th Percentile	13.20	14.00
25th Percentile	11.44	18.70
50th Percentile	10.06	19.40
75th Percentile	6.41	20.36
95th Percentile	2.83	25.97

5 Year Risk Information & Statistics

US EQUITY EQUITIZED	
Historic Beta	1.00
Information Ratio	0.77
Jensens Alpha	0.23
R-Squared	1.00
Sharpe Ratio	0.51
Tracking Error	0.25
Treynor Ratio	9.96

US EQUITY EQUITIZED STRS MSCI USA IMI

Note: Returns are gross of fees. Returns greater than 1 year are annualized.
*Gross returns are based on best available expense information.

California State Teachers Retirement US Equity Equitized - Attribution Periods Ending June 30, 2023



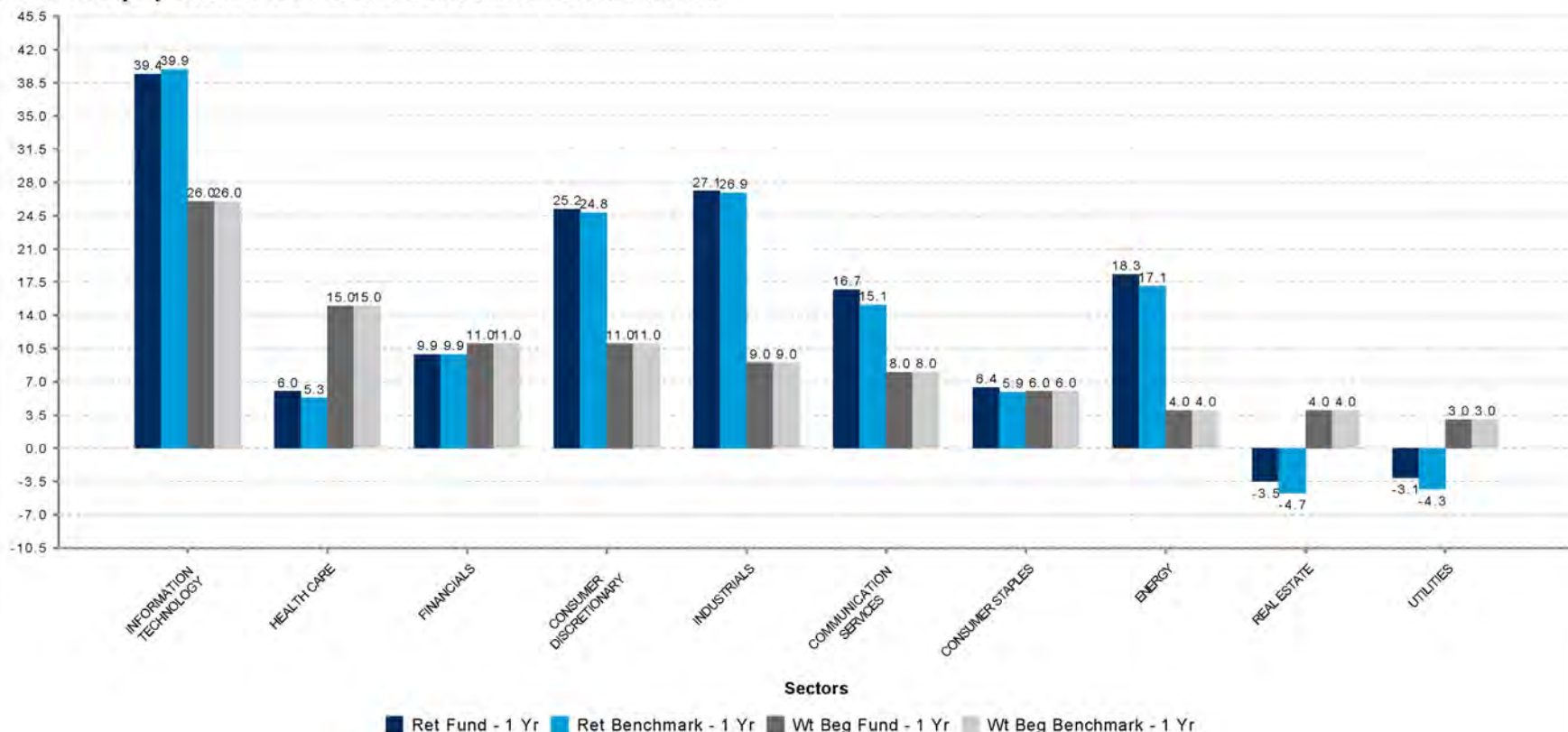
Attribution Highlights

- During the 2022/2023 fiscal year, U.S. Equity Equitized outperformed the benchmark, STRS U.S. Equity Index by 39 basis points (19.07% vs. 18.68%).
- Security selection in Health Care, Communication Services, Industrials, and Energy contributed to the overperformance.

1 Year Attribution

	Allocation - 1 Yr	Selection - 1 Yr
US EQUITY EQUITIZED	-0.1	0.5

1 Year US Equity Returns/Allocations vs. STRS Custom MSCI USA IMI



Note: Returns are gross of fees. Weights are beginning of period. Attribution is calculated using monthly average weights and Modified Dietz rate of returns. Effective 8/1/2021, U.S. Equity Equitized benchmark is STRS Custom MSCI USA IMI.

California State Teachers Retirement
US Equity - Performance Summary
 Periods Ending June 30, 2023



Performance Summary - US Equity

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
US EQUITY EQUITIZED	70,070,181	10.02	12.41	11.44	14.11	19.03
<i>STRS MSCI USA IMI</i>		9.96	12.30	11.28	13.62	18.68
US EQUITY UNEQUITIZED	70,070,181	10.02	12.41	11.44	14.11	19.03
<i>STRS MSCI USA IMI</i>		9.96	12.30	11.28	13.62	18.68
US EQUITY ACTIVE	17,209,455	10.11	12.32	11.30	14.70	18.42
<i>STRS MSCI USA IMI</i>		9.96	12.30	11.28	13.62	18.68
US EQUITY ACTIVE - DEV MGR	435,705		8.19	5.17	11.96	9.81
<i>US DEVELOPING MANAGER CUSTOM BENCHMARK</i>			9.29	4.26	10.78	12.36
US EQUITY ACTIVE BIVUM DEV MGR	435,705		7.61	5.17	11.96	9.81
<i>STRS CUSTOM RUSSELL 2000</i>			8.28	4.26	10.78	12.36
BIV - PHOCAS FINANCIAL CORP	87,719		9.31	5.69	19.23	9.89
<i>STRS CUSTOM RUSSELL 2000 VALUE</i>			7.33	3.61	15.35	6.04
BIV - COVE STREET CAPITAL	66,256		7.58	6.37	17.90	20.02
<i>STRS CUSTOM RUSSELL 2000 VALUE</i>			7.33	3.61	15.35	6.04
BIV - EASTERN SHORE	61,836			3.56	6.08	9.02
<i>STRS CUSTOM RUSSELL 2000</i>				4.26	10.78	12.36
BIV - AMI ASSET MANAGEMENT	67,002			1.90	6.09	3.03
<i>STRS CUSTOM RUSSELL 2000 GROWTH</i>				4.26	6.12	18.59
BIV - ESSEX INVESTMENT MGMT	34,515			7.16	14.17	13.57
<i>STRS CUSTOM RUSSELL 2000</i>				4.26	10.78	12.36
BIV - GRANAHAN	83,857				7.27	12.08
<i>STRS CUSTOM RUSSELL 2000 GROWTH</i>					6.12	18.59

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

* From inception to 7/31/2021 - STRS US Equity Index. From 8/1/2021 to current - STRS Custom MSCI USA IMI.

California State Teachers Retirement
US Equity - Performance Summary
 Periods Ending June 30, 2023



Performance Summary - US Equity

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
BIV-MONARCH	1					
<i>STRS CUSTOM RUSSELL 2000</i>						
BIV-DENALI	34,518					
<i>STRS CUSTOM RUSSELL 2000</i>						
US EQUITY SPECIAL SITUATIONS	13,700,886		13.64	13.08	14.18	19.85
<i>STRS CUSTOM RUSSELL 3000</i>			12.38	11.43	13.87	19.02
CalSTRS Russell Top 200	985,392				14.65	20.98
<i>STRS CUSTOM RUSSELL TOP 200</i>					14.64	20.98
US EQUITY SPECIAL SITUATION-A	1					
<i>STRS CUSTOM RUSSELL MIDCAP GRWTH BLENDED</i>						
US EQUITY SPECIAL SITUATION-A1	22,753					
<i>Bloomberg U.S. Treasury Bellwethers: 3M</i>						
CALSTRS MSCI USA	12,692,740					19.69
<i>MSCI CALSTRS Index on USA</i>						19.06
US EQUITY ACTIVE - CORE	2,225,605	9.99	12.08	11.26	17.92	13.80
<i>STRS US EQUITY INDEX</i>		9.99	12.38	11.43	13.87	19.02
US EQUITY ACTIVE SMALL SMID	965,039	8.09	8.24	4.36	12.27	8.80
<i>US EQ ACT SM Blended</i>		9.46	8.64	4.94	12.00	11.30
US EQUITY ACTIVE SMID VALUE	509,796	7.51	7.82	3.81	12.56	4.95
<i>STRS CUSTOM RUSSELL SMALL/MID (SMID) VALUE BLENDED INDEX</i>		9.03	7.92	4.65	17.29	10.40
SILVERCREST SMIDV	509,796		8.02	3.81	12.56	4.95
<i>STRS Custom Russell Small/Mid (SMID) Value Blended Index</i>			7.87	4.65	17.29	10.40

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

* From inception to 7/31/2021 - STRS US Equity Index. From 8/1/2021 to current - STRS Custom MSCI USA IMI.

California State Teachers Retirement
US Equity - Performance Summary
 Periods Ending June 30, 2023



Performance Summary - US Equity

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
PANAGORA SMALL CAP	455,242				12.72	13.45
<i>STRS CUSTOM RUSSELL 2000</i>					<i>10.78</i>	<i>12.36</i>
US EQUITY ACTIVE ALL CAP	1,260,566				26.05	18.16
<i>STRS US EQUITY INDEX</i>					<i>13.87</i>	<i>19.02</i>
JACOBS LEVY 130-30 R3000	1,260,566				26.05	18.16
<i>STRS US EQUITY INDEX</i>					<i>13.87</i>	<i>19.02</i>
US EQUITY OTHER BETA	770,301			11.06	14.05	11.62
<i>STRS US EQUITY INDEX</i>				<i>11.43</i>	<i>13.87</i>	<i>19.02</i>
CALSTRS RUSSELL RAFI LARGE CAP	156,043			11.85	18.73	15.86
<i>CALSTRS Russell RAFI US Large Company</i>				<i>11.81</i>	<i>18.72</i>	<i>15.88</i>
AQR DEFENSIVE	614,258			11.94	12.98	10.60
<i>STRS CUSTOM RUSSELL 1000 HEDI MOD</i>				<i>13.52</i>	<i>14.12</i>	<i>19.43</i>
STRS-FUTURES EQUITIZATION-US	76,958		32.96	13.68	26.72	31.62
<i>STRS MSCI USA IMI</i>			<i>12.30</i>	<i>11.28</i>	<i>13.62</i>	<i>18.68</i>
US EQUITY PASSIVE	52,843,446	10.08	12.47	11.52	13.97	19.23
<i>STRS MSCI USA IMI</i>		<i>9.96</i>	<i>12.30</i>	<i>11.28</i>	<i>13.62</i>	<i>18.68</i>
CALSTRS RUSSELL 3000	14,599,450		12.46	11.51	13.95	19.08
<i>STRS CUSTOM RUSSELL 3000</i>			<i>12.38</i>	<i>11.43</i>	<i>13.87</i>	<i>19.02</i>
CALSTRS MSCI USA IMI	38,243,995					19.30
<i>MSCI CALSTRS Index on USA IMI</i>						<i>18.68</i>

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

* From inception to 7/31/2021 - STRS US Equity Index. From 8/1/2021 to current - STRS Custom MSCI USA IMI.

California State Teachers Retirement
US Equity - Performance Summary
Periods Ending June 30, 2023



Performance Summary - US Equity

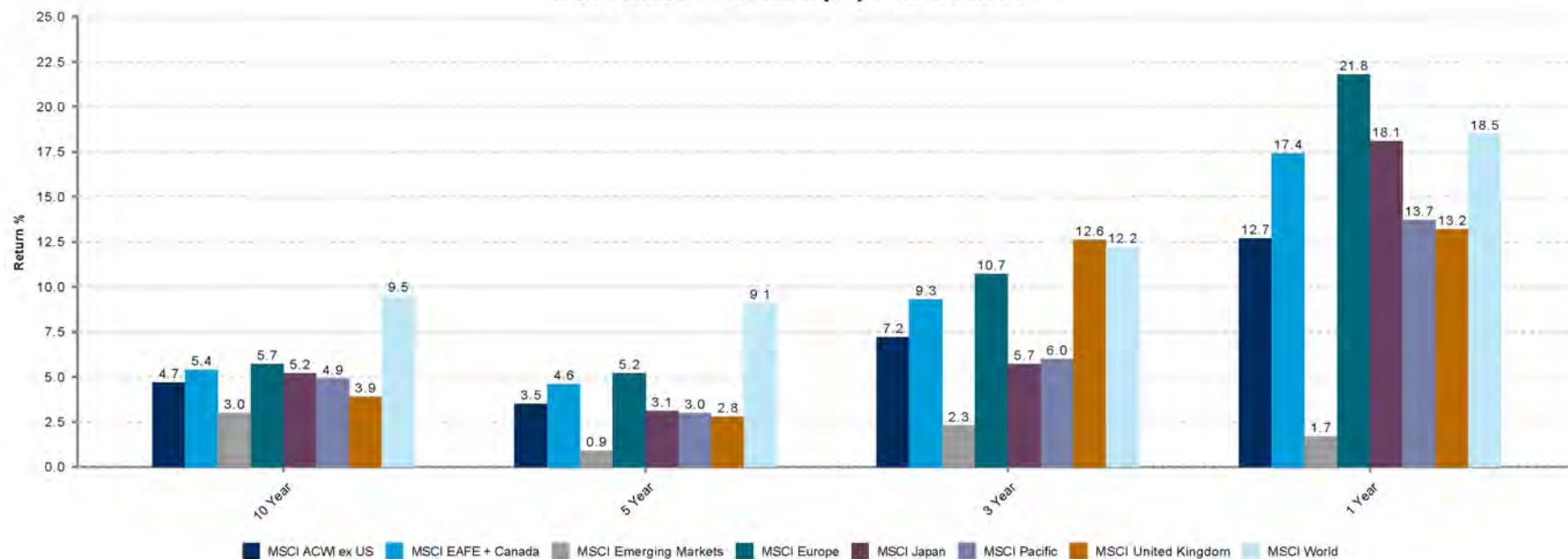
	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
CALSTRS US EQUITY ALLOCATION	17,280					
STRS MSCI USA IMI97						

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.
* From inception to 7/31/2021 - STRS US Equity Index. From 8/1/2021 to current - STRS Custom MSCI USA IMI.

California State Teachers Retirement
Non-US Equity - Market Review
Periods Ending June 30, 2023



MSCI Global & Non-U.S. Equity - Market Review



MSCI Global & Non-U.S. Equity - Market Review Summary

	20 Year	10 Year	5 Year	3 Year	1 Year
MSCI ACWI ex US	6.67	4.75	3.52	7.22	12.72
MSCI EAFE + Canada	6.62	5.40	4.58	9.30	17.41
MSCI Emerging Markets	8.94	2.95	0.93	2.32	1.75
MSCI Europe	6.59	5.70	5.19	10.68	21.81
MSCI Japan	5.73	5.23	3.13	5.70	18.14
MSCI Pacific	6.54	4.95	3.00	5.97	13.69
MSCI United Kingdom		3.88	2.83	12.57	13.19
MSCI World	8.37	9.50	9.07	12.18	18.51

Note: Indices are standard market versions at net. Returns greater than 1 year are annualized.
Returns greater than 1 year are annualized.

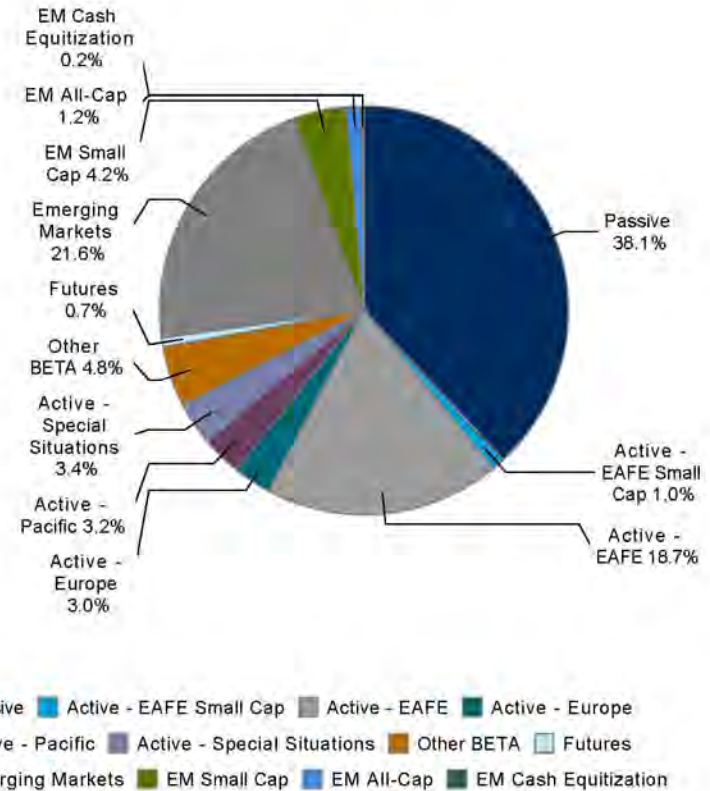
California State Teachers Retirement
Non-US Equity
Periods Ending June 30, 2023



Non-US Equity Fund Allocations

	Market Value (\$ in Thousands)	Actual Weight (Percentage %)
Developed		
Non-US Equity Developed Passive	17,244,603	38.1
Non-US Equity Developed Active	15,719,066	34.7
EAFE Small Cap	457,417	1.0
EAFE	8,476,657	18.7
Europe	1,357,663	3.0
Pacific	1,430,363	3.2
Special Situations	1,529,385	3.4
Other BETA	2,171,234	4.8
Futures	296,346	0.7
Non-US Equity Developed	32,963,669	72.8
Emerging Markets		
Emerging Markets	9,786,622	21.6
EM Small Cap	1,903,366	4.2
EM All-Cap	526,443	1.2
EM Cash Equitization	70,272	0.2
Non-US Equity Emerging Markets	12,286,704	27.2
Transition 1	206	0.0
Transition 2	38	0.0
Hybrid Transition	2,015	0.0
Total Non-US Equity		
Total Non-US Equity	45,252,631	100.0

Asset Allocation

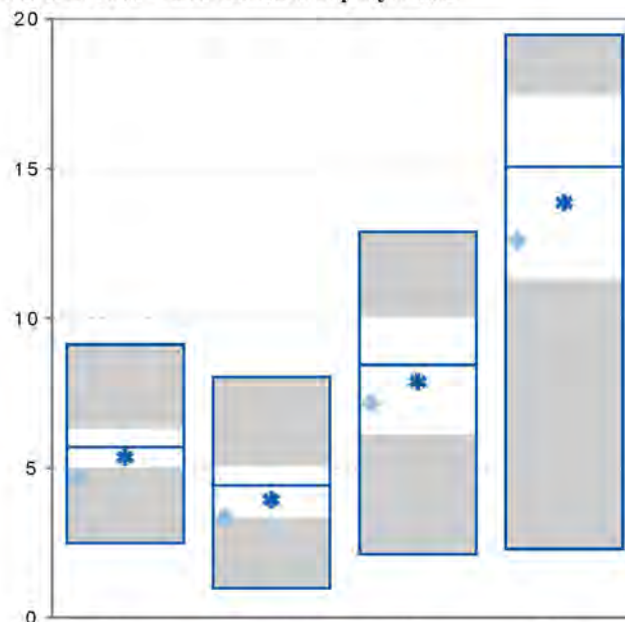


* End of period weights

California State Teachers Retirement
Non-US Equity Hedged
Periods Ending June 30, 2023

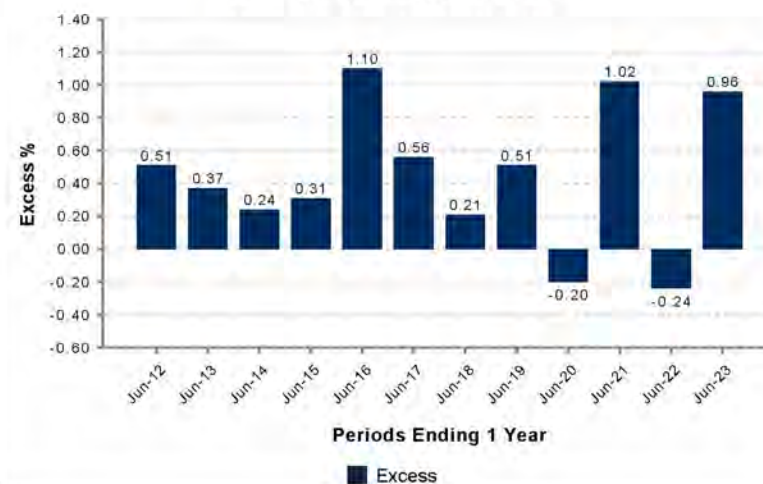


State Street Universe - International Equity Pools



	10 Years	5 Years	3 Years	1 Year
Number of Observations	88	93	93	94
5th Percentile	9.12	8.03	12.89	19.46
25th Percentile	6.32	5.06	10.06	17.47
50th Percentile	5.69	4.41	8.44	15.05
75th Percentile	4.99	3.31	6.11	11.27
95th Percentile	2.49	0.98	2.12	2.29
★ NON-US EQUITY HEDGED	5.39 66	3.97 61	7.91 61	13.89 57
◆ STRS NON-US EQUITY INDEX	4.75 78	3.40 72	7.21 71	12.68 71

Non-US Equity Hedged
Rolling 1 Year Excess Return



Top 10 Holdings

Security Name	Ending Market Value (\$ in Thousands)	Percentage %
TAIWAN SEMICONDUCTOR MANUFAC	717,366	1.6
MSCI EAFE SEP23	593,086	1.3
SAMSUNG ELECTRONICS CO LTD	573,059	1.3
ASML HOLDING NV	482,743	1.1
NESTLE SA REG	434,980	1.0
ROCHE HOLDING AG GENUSSCHEIN	377,689	0.8
TENCENT HOLDINGS LTD	376,337	0.8
MSCI EMGMKT SEP23	341,531	0.8
NOVO NORDISK A/S B	340,937	0.8
LVMH MOET HENNESSY LOUIS VUI	335,909	0.7

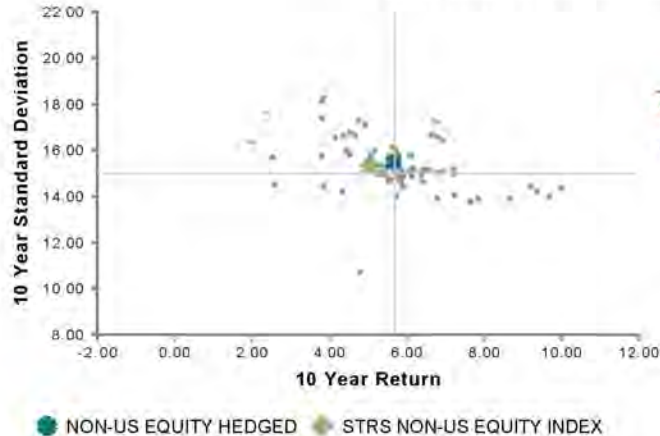
Note: Returns for Universe are gross of fees. Returns for rolling 1 year excess are net of manager fees. Returns greater than 1 year are annualized.

* Gross of fees returns are based on best available expense information.



California State Teachers Retirement
Non-US Equity Hedged - Risk vs Return
Periods Ending June 30, 2023

10 Year Risk
State Street Universe - International Equity Pools



	10 Year Return	10 Year Standard Deviation
NON-US EQUITY HEDGED	5.39 66	15.11 60
STRS NON-US EQUITY INDEX	4.75 78	15.01 49
Median	5.69	15.01
5th Percentile	9.12	13.76
25th Percentile	6.32	14.62
50th Percentile	5.69	15.01
75th Percentile	4.99	15.69
95th Percentile	2.49	17.27

10 Year Risk Information & Statistics

NON-US EQUITY HEDGED	
Historic Beta	1.01
Information Ratio	0.86
Jensens Alpha	0.62
R-Squared	1.00
Sharpe Ratio	0.29
Tracking Error	0.75
Treynor Ratio	4.38

5 Year Risk
State Street Universe - International Equity Pools



	5 Year Return	5 Year Standard Deviation
NON-US EQUITY HEDGED	3.97 61	18.08 55
STRS NON-US EQUITY INDEX	3.40 72	17.84 46
Median	4.41	17.99
5th Percentile	8.03	16.41
25th Percentile	5.06	17.51
50th Percentile	4.41	17.99
75th Percentile	3.31	19.04
95th Percentile	0.98	20.53

5 Year Risk Information & Statistics

NON-US EQUITY HEDGED	
Historic Beta	1.01
Information Ratio	0.71
Jensens Alpha	0.54
R-Squared	1.00
Sharpe Ratio	0.13
Tracking Error	0.80
Treynor Ratio	2.39

Note: Returns are gross of fees. Returns greater than 1 year are annualized.
* Gross returns are based on best available expense information

California State Teachers Retirement Non-US Equity Hedged Periods Ending June 30, 2023



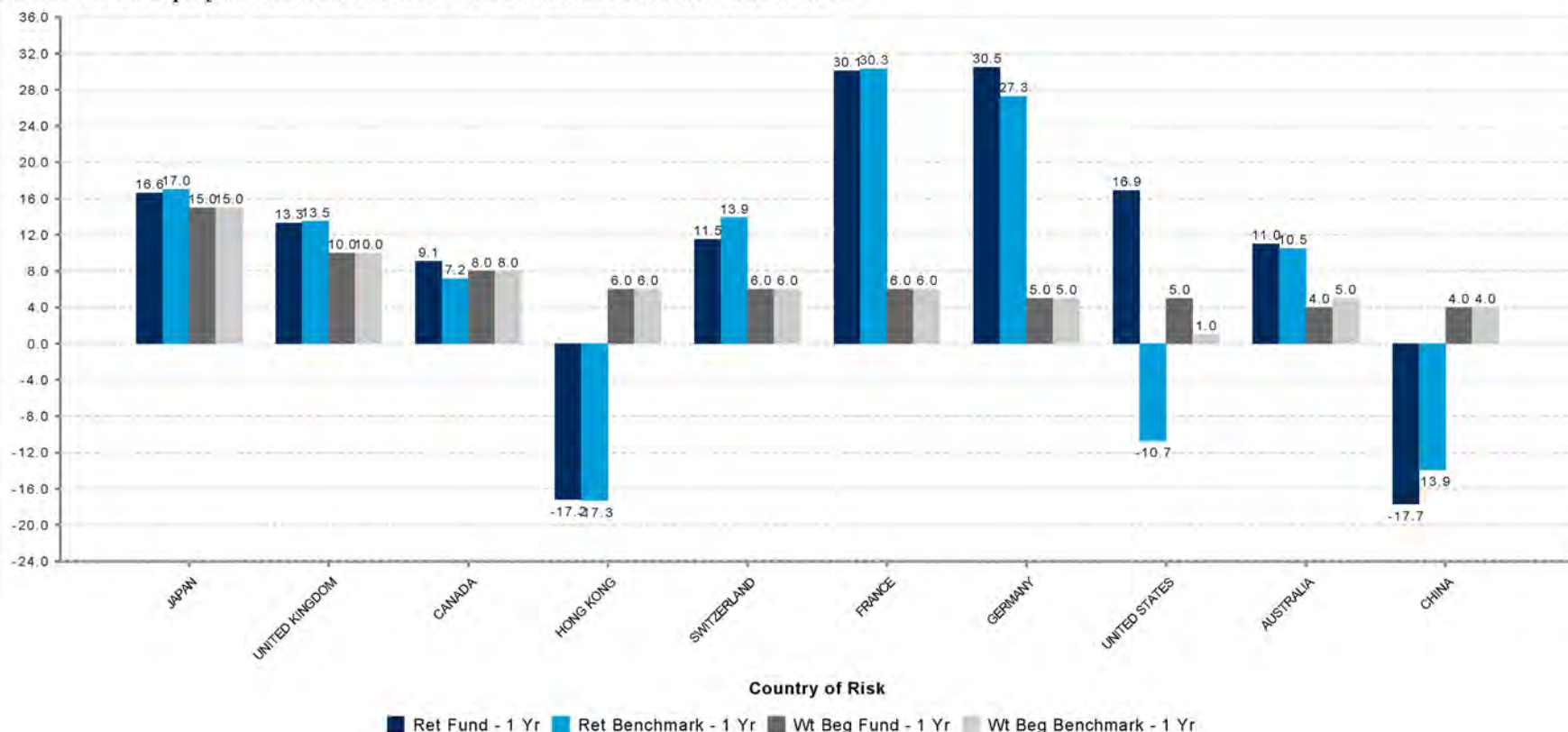
Attribution Highlights

- During the 2022/2023 fiscal year, Non-U.S. Equity Hedged outperformed the benchmark, STRS Non-U.S. Equity Index by 120 basis points (13.89% vs. 12.68%).
- Security selection in Canada, and Germany contributed to the outperformance.
- Overweighting in United States contributed to the outperformance.

1 Year Attribution

NON-US EQUITY HEDGED	Allocation - 1 Yr	Selection - 1 Yr
	0.5	0.6

1 Year Non-US Equity Returns/Allocations vs. STRS Custom MSCI ACWI Free ex US

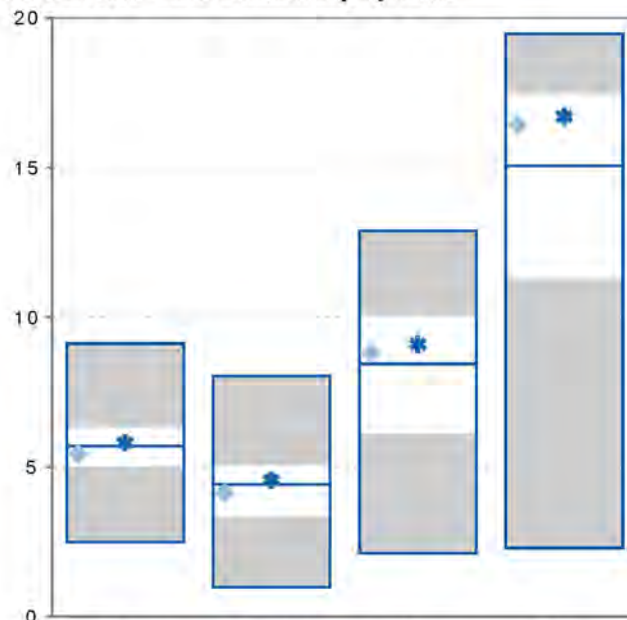


Note: Returns are gross of fees. Weights are beginning of period. Attribution is calculated using monthly average weights and Modified Dietz rate of returns.

California State Teachers Retirement Non-US Equity Developed Periods Ending June 30, 2023

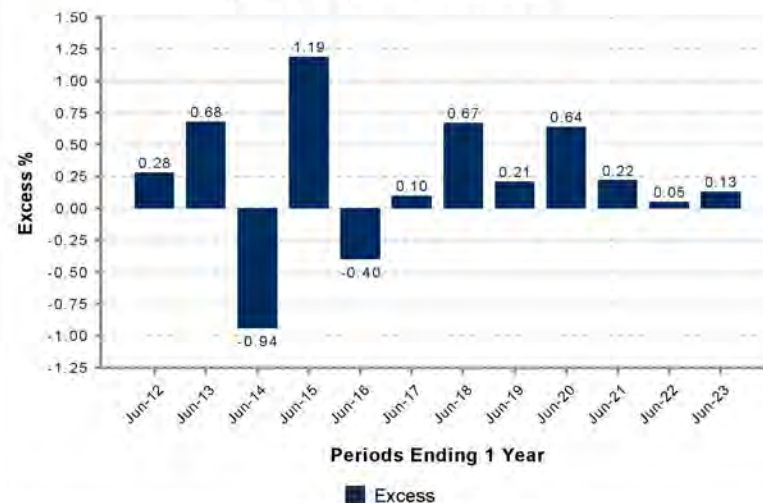


State Street Universe - International Equity Pools



	10 Years	5 Years	3 Years	1 Year
Number of Observations	88	93	93	94
5th Percentile	9.12	8.03	12.89	19.46
25th Percentile	6.32	5.06	10.06	17.47
50th Percentile	5.69	4.41	8.44	15.05
75th Percentile	4.99	3.31	6.11	11.27
95th Percentile	2.49	0.98	2.12	2.29
★ NON - US EQUITY DEV	5.84 39	4.59 42	9.13 36	16.74 32
★ STRS CUSTOM MSCI EAFE+CAN IMI	5.50 60	4.21 55	8.88 40	16.49 35

**Non-US Equity Developed
Rolling 1 Year Excess Return**



Top 10 Holdings

Security Name	Ending Market Value (\$ in Thousands)	Percentage %
MSCI EAFE SEP23	593,086	1.8
ASML HOLDING NV	482,743	1.5
NESTLE SA REG	434,980	1.3
ROCHE HOLDING AG GENUSSSCHEIN	377,689	1.1
NOVO NORDISK A/S B	340,937	1.0
LVMH MOET HENNESSY LOUIS VUI	335,909	1.0
NOVARTIS AG REG	281,490	0.9
ASTRAZENECA PLC	270,993	0.8
SANOFI	263,969	0.8
SHELL PLC	254,513	0.8

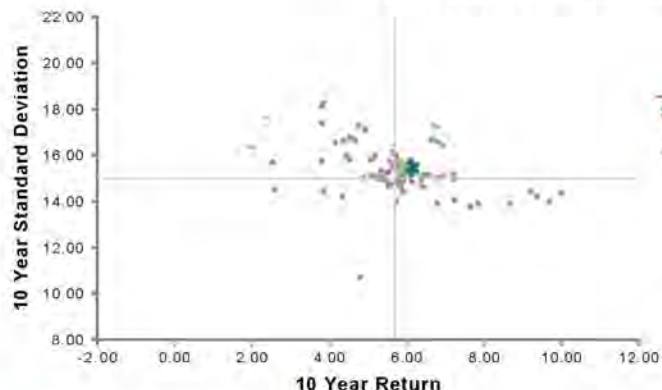
Note: Returns for Universe are gross of fees. Returns for rolling 1 year excess are net of manager fees. Returns greater than 1 year are annualized.

* Gross of fees returns are based on best available expense information.

California State Teachers Retirement
Non-US Equity Developed - Risk vs Return
Periods Ending June 30, 2023



10 Year Risk
State Street Universe - International Equity Pools



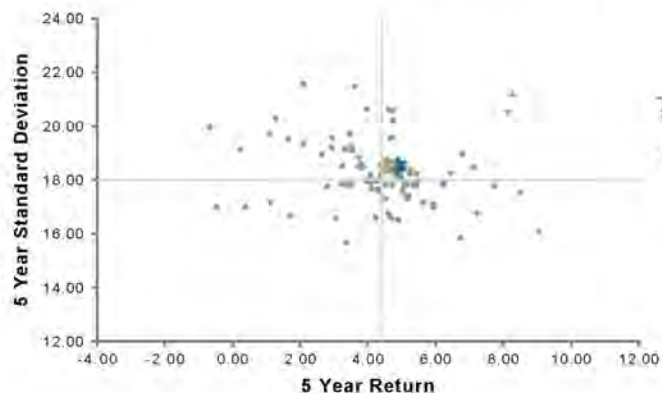
	10 Year Return	10 Year Standard Deviation
NON - US EQUITY DEV	5.84 39	15.08 58
STRS_CUSTOM_MSCI_EAFE+CAN_IMI	5.50 60	15.14 61
Median	5.69	15.01
5th Percentile	9.12	13.76
25th Percentile	6.32	14.62
50th Percentile	5.69	15.01
75th Percentile	4.99	15.69
95th Percentile	2.49	17.27

10 Year Risk Information & Statistics

NON - US EQUITY DEV	
Historic Beta	0.99
Information Ratio	0.60
Jensens Alpha	0.36
R-Squared	1.00
Sharpe Ratio	0.32
Tracking Error	0.56
Treynor Ratio	4.88

● NON - US EQUITY DEV ● STRS_CUSTOM_MSCI_EAFE+CAN_IMI

5 Year Risk
State Street Universe - International Equity Pools



	5 Year Return	5 Year Standard Deviation
NON - US EQUITY DEV	4.59 42	18.20 59
STRS_CUSTOM_MSCI_EAFE+CAN_IMI	4.21 55	18.24 60
Median	4.41	17.99
5th Percentile	8.03	16.41
25th Percentile	5.06	17.51
50th Percentile	4.41	17.99
75th Percentile	3.31	19.04
95th Percentile	0.98	20.53

5 Year Risk Information & Statistics

NON - US EQUITY DEV	
Historic Beta	1.00
Information Ratio	0.64
Jensens Alpha	0.39
R-Squared	1.00
Sharpe Ratio	0.17
Tracking Error	0.60
Treynor Ratio	3.05

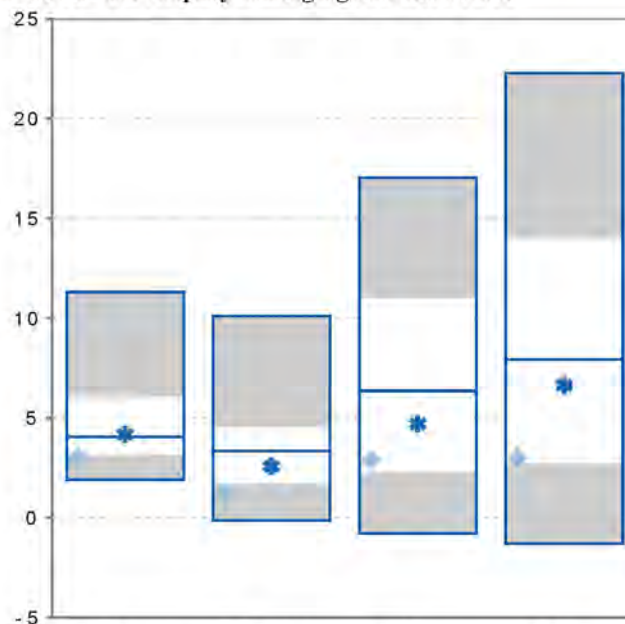
● NON - US EQUITY DEV ● STRS_CUSTOM_MSCI_EAFE+CAN_IMI

Note: Returns are gross of fees. Returns greater than 1 year are annualized.
 * Gross returns are based on best available expense information.

California State Teachers Retirement
Non-US Equity Emerging Markets
Periods Ending June 30, 2023

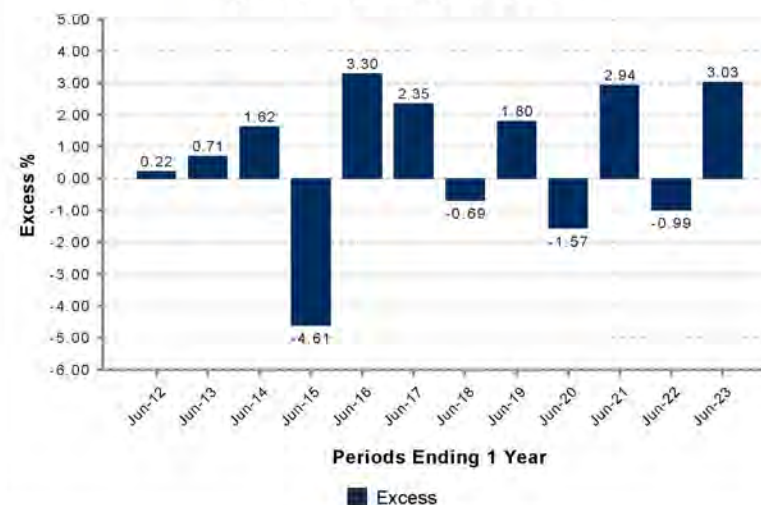


State Street Universe - Int'l Equity Emerging Market Funds



	10 Years	5 Years	3 Years	1 Year
Number of Observations	49	64	71	72
5th Percentile	11.31	10.10	17.05	22.27
25th Percentile	6.03	4.51	10.99	14.02
50th Percentile	4.05	3.35	6.36	7.92
75th Percentile	3.16	1.70	2.27	2.72
95th Percentile	1.90	-0.13	-0.79	-1.30
★ NON-US EQUITY EM	4.22 47	2.62 65	4.76 52	6.68 55
◆ STRS CUSTOM MSCI EM IMI	3.16 76	1.33 82	3.00 64	3.13 70

Non-US Equity Emerging Markets
Rolling 1 Year Excess Return



Top 10 Holdings

Security Name	Ending Market Value (\$ in Thousands)	Percentage %
TAIWAN SEMICONDUCTOR MANUFAC	710,014	5.8
SAMSUNG ELECTRONICS CO LTD	556,484	4.5
TENCENT HOLDINGS LTD	368,234	3.0
MSCI EMGMKT SEP23	341,531	2.8
ALIBABA GROUP HOLDING LTD	282,027	2.3
RELIANCE INDUSTRIES LTD	187,591	1.5
HOUSING DEVELOPMENT FINANCE	178,930	1.5
TAIWAN SEMICONDUCTOR SP ADR	176,104	1.4
PETROLEO BRASILEIRO SPON ADR	171,408	1.4
PING AN INSURANCE GROUP CO H	161,144	1.3

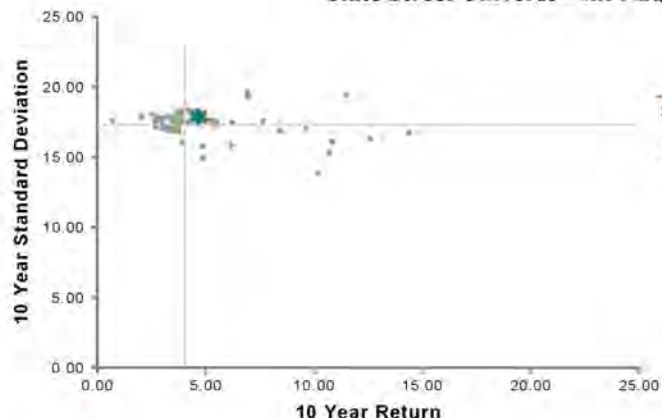
Note: Returns for Universe are gross of fees. Returns for rolling 1 year excess are net of manager fees. Returns greater than 1 year are annualized.

* Gross of fees returns are based on best available expense information.

California State Teachers Retirement
Non-US Equity Emerging Markets - Risk vs Return
 Periods Ending June 30, 2023



10 Year Risk
State Street Universe - Int'l Equity Emerging Market Funds



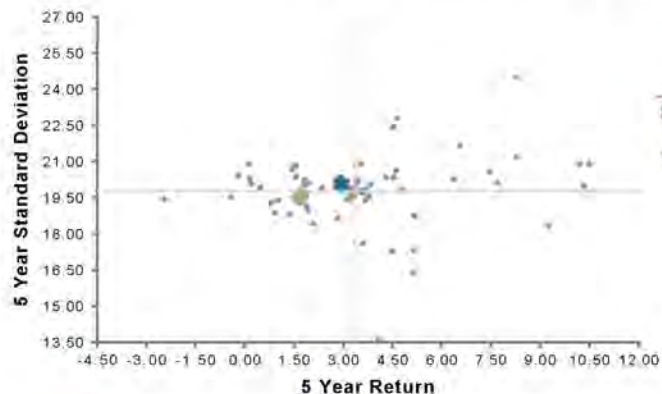
	10 Year Return	10 Year Standard Deviation
NON-US EQUITY EM	4.22 47	17.26 49
STRS_CUSTOM_MSCI_EM_IMI	3.16 76	16.97 38
Median	4.05	17.27
5th Percentile	11.31	14.92
25th Percentile	6.03	16.69
50th Percentile	4.05	17.27
75th Percentile	3.16	17.68
95th Percentile	1.90	19.14

NON-US EQUITY EM STRS_CUSTOM_MSCI_EM_IMI

10 Year Risk Information & Statistics

	NON-US EQUITY EM
Historic Beta	1.01
Information Ratio	0.47
Jensens Alpha	1.05
R-Squared	0.98
Sharpe Ratio	0.19
Tracking Error	2.27
Treynor Ratio	3.21

5 Year Risk
State Street Universe - Int'l Equity Emerging Market Funds



	5 Year Return	5 Year Standard Deviation
NON-US EQUITY EM	2.62 65	19.71 43
STRS_CUSTOM_MSCI_EM_IMI	1.33 82	19.19 21
Median	3.35	19.79
5th Percentile	10.10	17.20
25th Percentile	4.51	19.30
50th Percentile	3.35	19.79
75th Percentile	1.70	20.25
95th Percentile	-0.13	21.92

NON-US EQUITY EM STRS_CUSTOM_MSCI_EM_IMI

5 Year Risk Information & Statistics

	NON-US EQUITY EM
Historic Beta	1.02
Information Ratio	0.59
Jensens Alpha	1.30
R-Squared	0.99
Sharpe Ratio	0.05
Tracking Error	2.18
Treynor Ratio	1.05

Note: Returns are gross of fees. Returns greater than 1 year are annualized.
 * Gross returns are based on best available expense information.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Non-US Equity

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
NON-US EQUITY HEDGED	45,252,631	6.94	5.17	3.73	7.66	13.65
<i>STRS NON-US EQUITY INDEX</i>		6.70	4.75	3.40	7.21	12.68
NON-US EQUITY UN-HEDGED	45,252,631		5.17	3.73	7.66	13.65
<i>STRS NON-US EQUITY INDEX</i>			4.75	3.40	7.21	12.68
NON - US EQUITY DEV	32,963,669	7.04	5.71	4.46	9.00	16.62
<i>STRS CUSTOM MSCI EAFE+CAN IMI</i>		6.65	5.50	4.21	8.88	16.49
NON-US EQUITY DEVELOPED PASSIVE	17,244,603	7.39	5.95	4.70	9.38	17.07
<i>STRS Non-US Equity Passive (Daily)</i>		6.88	5.50	4.21	8.88	16.49
NON-USEQ PASS UNHDGD	17,244,603	7.33	5.95	4.70	9.38	17.07
<i>STRS Non-US Equity Passive (Daily)</i>		6.88	5.50	4.21	8.88	16.49
NON-US EQUITY PASSIVE EAFE	17,244,603	7.10	5.95	4.70	9.38	17.07
<i>STRS CUSTOM MSCI EAFE+CAN IMI</i>		6.65	5.50	4.21	8.88	16.49
CALSTRS EAFE + CANADA	17,244,603			4.71	9.40	17.10
<i>STRS MSCI EAFE+CAN IMI</i>				4.21	8.88	16.49
NON-US EQUITY DEVELOPED ACTIVE	15,719,066	6.68	5.40	4.22	8.62	16.13
<i>STRS CUSTOM MSCI EAFE+CAN IMI</i>		6.65	5.50	4.21	8.88	16.49
NON-US EQUITY EAFE SMALL CAP	457,417			0.48	5.34	12.97
<i>MSCI CalSTRS EAFE + CA SC Custom Net</i>				1.81	6.36	9.99
MONDRIAN EAFE SMALL	1,144					
<i>MSCI CalSTRS EAFE + CA SC Custom Net</i>						
PRINCIPAL EAFE SMALL	449,710			0.46	5.48	12.86
<i>MSCI CalSTRS EAFE + CA SC Custom Net</i>				1.81	6.36	9.99
SSGA AQE EAFE SMALL	6,563					
<i>MSCI CalSTRS EAFE + CA SC Custom Net</i>						

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Non-US Equity

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
NON-USEQ ACT EAFE	8,476,657	7.02	6.03	4.67	9.08	17.60
<i>STRS CUSTOM MSCI EAFE+CAN</i>		6.58	5.44	4.63	9.32	17.60
MONDRIAN EAFE	1,178,428	7.07	5.07	3.53	10.41	12.95
<i>STRS MSCI EAFE + CAN BLENDED INDEX</i>		6.76	5.67	4.63	9.32	17.60
TEMPLETON-FIDUCIARY EAFE	1,240,332	8.74	6.90	3.39	-0.40	17.41
<i>STRS CUSTOM MSCI EAFE+CAN</i>		6.58	5.44	4.63	9.32	17.60
LAZARD ASSET MGMT EAFE	2,523					
<i>STRS CUSTOM MSCI EAFE+CAN</i>						
PZENA INVESTMENT MGMT EAFE	1,606,613			5.66	15.45	23.42
<i>STRS CUSTOM MSCI EAFE+CAN</i>				4.63	9.32	17.60
AQR EAFE EQUITY	5,621					
<i>STRS CUSTOM MSCI EAFE+CAN</i>						
ARROWSTREET CAPITAL EAFE	1,509,039			8.08	13.94	17.57
<i>STRS CUSTOM MSCI EAFE+CAN</i>				4.63	9.32	17.60
PYRFORD EAFE	637,744				8.70	13.20
<i>STRS CUSTOM MSCI EAFE+CAN</i>					9.32	17.60
JP MORGAN EAFE	863,122					19.10
<i>STRS CUSTOM MSCI EAFE+CAN</i>						17.60
NON-US EQUITY DEVELOPING MGRS	1,433,234			4.36	8.13	17.58
<i>STRS CUSTOM MSCI EAFE+CAN</i>				4.63	9.32	17.60
XPONANCE	927,747			4.74	9.07	17.70
<i>STRS CUSTOM MSCI EAFE+CAN</i>				4.63	9.32	17.60
LEIA EAFE	505,487			3.93	6.84	17.58
<i>STRS CUSTOM MSCI EAFE+CAN</i>				4.63	9.32	17.60

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Non-US Equity

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
NON-US EQUITY SPECIAL SITUATION	1,529,385			5.41	11.19	9.05
<i>STRS CUSTOM MSCI ACWI EX US</i>				3.55	7.11	13.00
SSGM EAFE BETA	2,294					
<i>STRS CUSTOM MSCI EAFE+CAN</i>						
NON US SPECIAL SITUATION-P	16,327					
<i>STRS CUSTOM MSCI EAFE+CAN</i>						
CALSTRS MSCI CANADA	838,179		5.94	7.43	13.90	8.12
<i>STRS CUSTOM MSCI CANADA IMI</i>			5.08	6.50	13.00	7.20
SSGM EAFE SMALL BETA	1,151					
<i>MSCI CalSTRS EAFE + CA SC Custom Net</i>						
CALSTRS MSCI EAFE + CANADA SC	671,434					10.71
<i>MSCI CalSTRS EAFE + CA SC Custom Net</i>						9.99
NON-US EQUITY OTHER BETA	2,171,234				8.04	14.11
<i>STRS CUSTOM MSCI EAFE+CAN</i>					9.32	17.60
ACADIAN ASSET MANAGEMENT	1,110,052			2.99	6.15	9.79
<i>MSCI World ex USA (CALSTRS) Min Vol(USD)</i>				2.13	3.53	7.83
CALSTRS MSCI WORLD EX USA DMF	1,061,182				10.55	19.02
<i>MSCI World ex USA Custom DMF</i>					10.04	18.45
NON-USEQ ACT EUROPE	1,357,663	7.45	6.10	5.40	9.10	21.36
<i>STRS CUSTOM MSCI EUROPE</i>		6.54	5.75	5.26	10.73	22.24
FIDELITY	1,357,663	7.87	6.05	5.40	9.10	21.36
<i>STRS CUSTOM MSCI EUROPE</i>		6.54	5.75	5.26	10.73	22.24

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Non-US Equity

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
NON-USEQ ACT PACIFIC	1,430,363	6.10	4.80	3.65	6.23	13.93
<i>STRS CUSTOM MSCI PACIFIC</i>		6.53	4.99	3.02	5.94	13.58
CALSTRS PAC BASIN	1,430,363				6.23	13.93
<i>STRS CUSTOM MSCI PACIFIC</i>					5.94	13.58
CALSTRS-FUTURES EQUITIZATION NONUS	296,346		-1.77	-32.06	20.11	26.54
NON-US EQUITY EM	12,286,704		3.69	2.08	4.23	6.15
<i>STRS CUSTOM MSCI EM IMI</i>			3.16	1.33	3.00	3.13
NON-US EQUITY ACTIVE EMG MKT	9,786,622		3.48	1.73	3.26	5.27
<i>STRS CUSTOM MSCI EM</i>			2.97	0.85	1.69	1.74
BAILLIE GIFFORD & CO	1,810,720		6.23	3.86	2.48	7.34
<i>STRS CUSTOM MSCI EM</i>			2.97	0.85	1.69	1.74
LAZARD ASSET MGMT	907,543		3.11	2.91	9.09	13.43
<i>STRS CUSTOM MSCI EM</i>			2.97	0.85	1.69	1.74
MONDRIAN INVESTMENT	1,582,289		1.96	2.56	5.74	7.07
<i>STRS CUSTOM MSCI EM</i>			2.97	0.85	1.69	1.74
T ROWE PRICE	184					
<i>STRS CUSTOM MSCI EM</i>						
J.P.MORGAN GEM OPPORTUNITIES	1,089,528			0.93	0.73	2.73
<i>STRS CUSTOM MSCI EM</i>				0.85	1.69	1.74
SCHRODER GEM CORE EQUITY	1,907,308			2.53	3.46	4.75
<i>STRS CUSTOM MSCI EM</i>				0.85	1.69	1.74
AQR EM	1,364,301			1.28	3.81	2.37
<i>STRS CUSTOM MSCI EM</i>				0.85	1.69	1.74

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Non-US Equity

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
SSGA EM	123					
<i>STRS CUSTOM MSCI EM</i>						
CalSTRS EM	1,124,626					1.65
<i>MSCI CALSTRS INDEX ON EM ESG FOCUS</i>						1.53
NON-US EQUITY EM SMALL CAP	1,903,366			5.03	12.83	13.27
<i>MSCI CalSTRS EM Small Cap Custom</i>				4.68	13.21	12.70
AQR EM SMALL CAP	833,641			5.72	14.15	15.50
<i>MSCI CalSTRS EM Small Cap Custom</i>				4.68	13.21	12.70
JP MORGAN EM SMALL CAP	549,583			4.39	8.90	7.51
<i>MSCI CalSTRS EM Small Cap Custom</i>				4.68	13.21	12.70
SSGA EM SMALL CAP	520,142				15.37	16.59
<i>MSCI CalSTRS EM Small Cap Custom</i>					13.21	12.70
NON-US EQUITY EM ALL CAP	526,443					
<i>STRS CUSTOM MSCI EM IMI</i>						
WILLIAM BLAIR EM GROWTH	526,443					
<i>STRS CUSTOM MSCI EM IMI</i>						
EM CASH EQUITIZATION	70,272					36.81
BLACKROCK NON-US EQUITY TRANSITION 2	38					
<i>STRS MSCI EAFE + CANADA CUSTOM</i>						
CALSTRS - NON-US EQUITY TRANSITION	206					
<i>STRS CUSTOM MSCI EAFE+CAN</i>						
GE HYBRID TRANSITION	2,015					

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.



California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023

Performance Summary - Global Mandate

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
GLOBAL MANDATE	1,959,762				15.07
<i>MSCI CalSTRS on ACWI IMI Custom</i>					16.30
RBC GLOBAL FOCUS EQUITY	723,281				6.73
<i>MSCI CALSTRS Index on ACWIexSaudi Arabia</i>					16.72
ARROWSTREET GLOBAL EQUITY	1,236,481				
<i>STRS CUSTOM MSCI WORLD IMI</i>					

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Sustainable Investment & Stewardship Strategies

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
TOTAL SISS	9,960,742		8.48	10.90	15.53
<i>TOTAL SISS INDEX</i>			8.33	10.91	16.16
TOTAL SISS PUBLIC EQUITY	9,834,306		8.50	10.94	15.70
<i>TOTAL SISS INDEX</i>			8.35	10.93	16.30
SISS PUBLIC EQUITY	9,834,007		8.54	10.95	15.66
<i>SISS INDEX</i>			8.12	10.93	16.30
SISS ACTIVE EQUITY	4,228,242	8.92	7.45	9.80	14.21
<i>SISS ACTIVE EQUITY INDEX</i>		8.67	7.70	10.93	16.30
SISS US EQUITY	1,387,551	9.11	8.33	12.82	10.78
<i>SISS US EQUITY BLENDED INDEX</i>		12.38	11.43	13.87	19.02
TRIAN PARTNERS	317,233	9.96	8.05	12.10	11.73
<i>STRS CUSTOM RUSSELL 1000</i>		12.68	11.96	14.08	19.43
STARBOARD VALUE	374,230	11.54	11.74	9.55	5.28
<i>STRS CUSTOM RUSSELL 2000</i>		8.28	4.26	10.78	12.36
IMPACTIVE SIERRA FUND LP	343,907			20.13	9.28
<i>STRS CUSTOM RUSSELL 2000</i>				10.78	12.36
LEGION PARTNERS	352,181		6.38	10.36	16.25
<i>STRS CUSTOM RUSSELL 2000</i>			4.26	10.78	12.36
SISS GLOBAL EQUITY	1,713,068	11.32	9.19	9.68	18.00
<i>SISS GLOBAL EQUITY BLENDED INDEX</i>		8.67	7.70	10.93	16.30
AGF INVESTMENT AMERICA INC	581,862	9.15	9.73	9.75	15.59
<i>STRS CUSTOM MSCI WORLD(NET)</i>		9.56	9.13	12.18	18.63

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.



California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023

Performance Summary - Sustainable Investment & Stewardship Strategies

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
GENERATION INV MGMT	820,093	12.14	8.73	9.12	18.12
<i>STRS CUSTOM MSCI WORLD(NET)</i>		9.56	9.13	12.18	18.63
IMPAX LEADERS CALSTRS	311,114			12.35	22.48
<i>MSCI CalSTRS on ACWI IMI Custom</i>				10.93	16.30
SISS NON-US EQUITY	804,878		6.18	9.62	18.54
<i>SISS NON-US EQUITY BLENDED INDEX</i>			4.63	9.32	17.60
SCHRODER INTERNATIONAL EQUITY	804,878			9.62	18.54
<i>STRS CUSTOM MSCI EAFE+CAN</i>				9.32	17.60
SISS EM EQUITY	322,745		0.41	0.49	3.75
<i>SISS EM EQUITY BLENDED INDEX</i>			0.85	1.69	1.74
CARTICA CAPITAL	7,495				
<i>STRS CUSTOM MSCI EM</i>					
HERMES GLOBAL EM	315,250			0.94	3.07
<i>STRS CUSTOM MSCI EM</i>				1.69	1.74
SISS PASSIVE EQUITY	5,605,764		9.70	11.38	16.70
<i>MSCI CalSTRS on ACWI IMI Custom</i>			7.70	10.93	16.30
LOW CARBON	4,519,863		9.59	11.18	16.58
<i>STRS CUSTOM LOW CARBON INDEX</i>			9.09	10.70	16.41
CALSTRS LOW CARBON INDEX	1,447				
<i>MSCI ACWI CUST LOW CARBON TARGET BLENDED</i>					
CALSTRS LOW CARBON EM INDEX	504,714				1.40
<i>LOW CARBON EM BLENDED INDEX</i>					1.55

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Sustainable Investment & Stewardship Strategies

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
CALSTRS LOW CARBON US INDEX	3,179,827				19.40
<i>MSCI USA Custom Low Carbon Target Gross</i>					19.35
CALSTRS LOW CARBON NON-US INDEX	833,873				18.05
<i>MSCI WORLD x US CUSTOM LOW CARBON TARGET</i>					17.51
LC TRANSITION READINESS	1,085,902				17.20
<i>STRS LCTR Custom Index</i>					18.83
US LC TRANSITION READINESS	734,621				18.25
<i>STRS CUSTOM RUSSELL 1000</i>					19.43
NON-US LC TRANSITION READINESS	351,281				15.06
<i>STRS CUSTOM MSCI EAFE+CAN</i>					17.60
SISS TRANSITION DEVELOPED	112				
<i>STRS Custom Zero Return</i>					
SISS TRANSITION GLOBAL	188				
<i>STRS Custom Zero Return</i>					
TOTAL SISS PRIVATE ASSETS	126,436				3.60
<i>TOTAL SISS PRIVATE ASSETS INDEX</i>					-0.10
SISS PRIVATE EQUITY	59,463				16.40
<i>SISS PRIVATE EQUITY INDEX</i>					-0.03
VISTA CO INV	22,010				35.33
<i>SISS PRIVATE EQUITY INDEX</i>					-0.03
SOLAR CO INV	19,997				
<i>SISS PRIVATE EQUITY INDEX</i>					

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.



California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023

Performance Summary - Sustainable Investment & Stewardship Strategies

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
ORCHESTRA COINV (GRIDSPERTISE) <i>SISS PRIVATE EQUITY INDEX</i>	17,456				
SISS INNOVATIVE STRATEGIES	60,933				-10.78
<i>SISS INNOVATIVE STRATEGIES INDEX</i>					2.60
SER CAPITAL PARTNERS FUND I <i>STRS Custom 3 month tbill Gross QTR Lag</i>	21,585				9.05
<i>CONGRUENT CONTINUITY I</i>	5,674				2.60
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					
G2VP OPPORTUNITY FUND I <i>STRS Custom 3 month tbill Gross QTR Lag</i>	13,575				
<i>JUST CLIMATE</i>	20,099				
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					
SISS REAL ESTATE	6,040				
<i>STRS REAL ESTATE INDEX</i>					
SOLA CO INV <i>STRS REAL ESTATE INDEX</i>	6,040				

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Innovation Global Equity

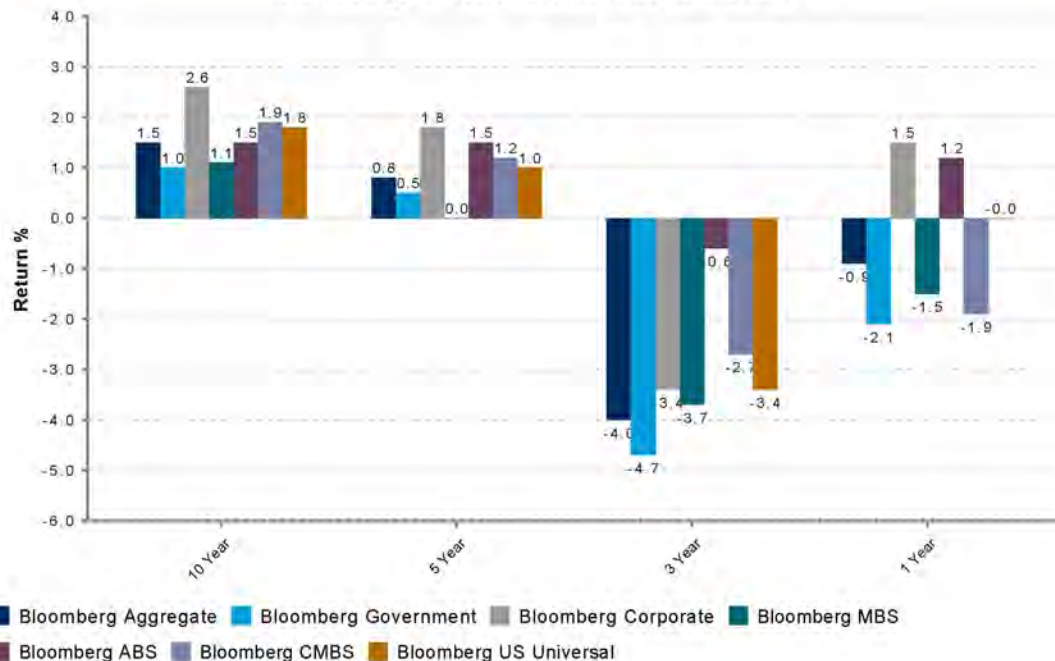
	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
INNOVATION-GLOBAL EQUITY	246				
<i>STABILIZED EQUITY BLENDED INDEX</i>					
STABILIZED EQUITY	246				
<i>STABILIZED EQUITY BLENDED INDEX</i>					
LOW VOLATILITY	246				
<i>LOW VOLATILITY BLENDED INDEX</i>					
LOW VOLATILITY - NON-US	246				
<i>LOW VOLATILITY - NON-US BLENDED INDEX</i>					
ROBECO	246				
<i>MSCI World ex USA (CALSTRS) Min Vol(USD)</i>					

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

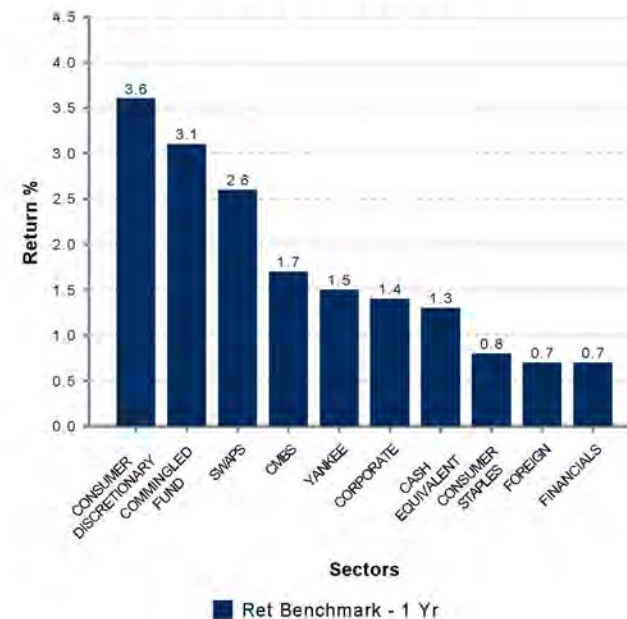


California State Teachers Retirement US Fixed Income Market Review Periods Ending June 30, 2023

Bloomberg US Fixed Income - Market Review



**Bloomberg Aggregate Index
1 Year Sector Return**



Bloomberg U.S. Fixed Income - Market Review Summary

	20 Year	10 Year	5 Year	3 Year	1 Year
Bloomberg Aggregate	3.01	1.52	0.77	-3.96	-0.94
Bloomberg Government	2.51	0.97	0.46	-4.71	-2.08
Bloomberg Corporate	3.90	2.63	1.76	-3.44	1.55
Bloomberg MBS	2.90	1.13	0.03	-3.73	-1.52
Bloomberg ABS	2.49	1.48	1.53	-0.62	1.18
Bloomberg CMBS	3.32	1.86	1.22	-2.73	-1.86
Bloomberg US Universal	3.31	1.80	0.98	-3.43	-0.04

Note: Indices are standard market versions. Returns greater than 1 year are annualized.
Note: Sector returns are calculated using constituent level data of the index.

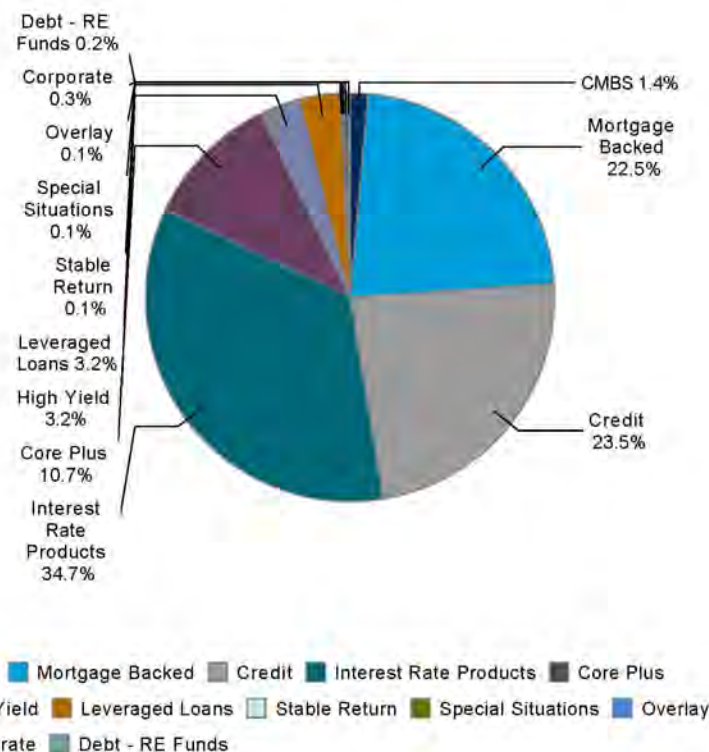
California State Teachers Retirement Total Fixed Income - Asset Allocation Periods Ending June 30, 2023



Total Fixed Income Allocations

	Market Value (\$ in Thousands)	Actual Weight (Percentage %)
Core Debt		
CMBS	444,945	1.4
Mortgage Backed	7,161,408	22.5
Credit	7,479,170	23.5
Interest Rate Products	11,037,443	34.7
Total Debt-Core	26,122,966	82.1
Opportunistic Debt		
Core Plus	3,390,425	10.7
High Yield	1,027,044	3.2
Leveraged Loans	1,033,093	3.2
Special Situations	36,404	0.1
Overlay	17,724	0.1
Total Opportunistic Debt	5,504,690	17.3
Stable Return		
STRS-Enhanced HLP	24,692	0.1
Stable Return	24,692	0.1
Debt-Private		
Corporate	97,786	0.3
Debt - RE Funds	75,198	0.2
Total Debt-Private	172,984	0.5
Total Fixed Income		
Total Fixed Income	31,825,332	100.0

Asset Allocations

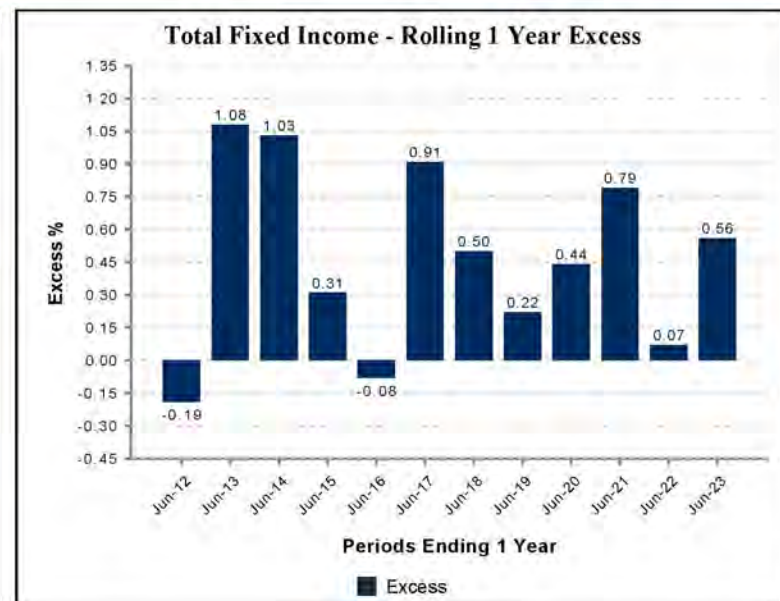
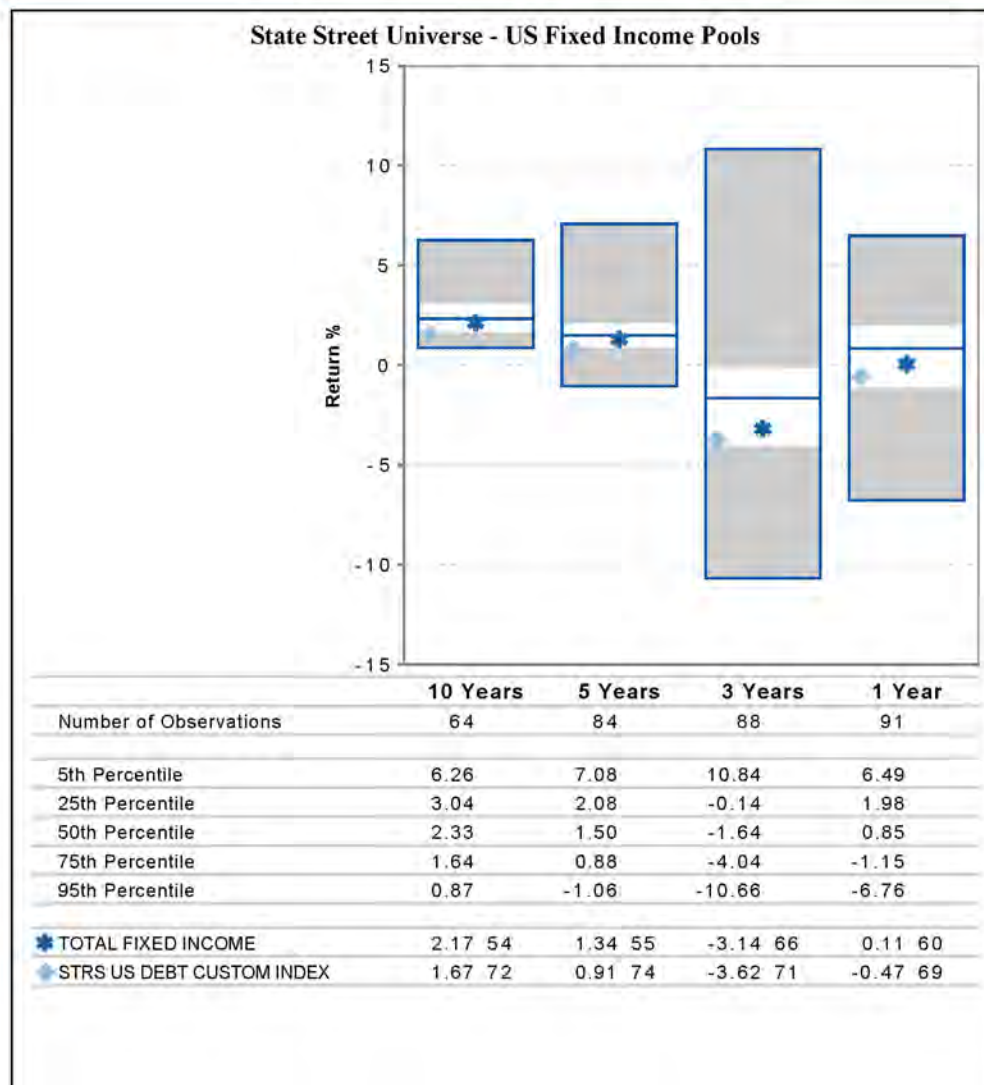


* End of period weights

California State Teachers Retirement

Total Fixed Income

Periods Ending June 30, 2023



Top 10 Holdings

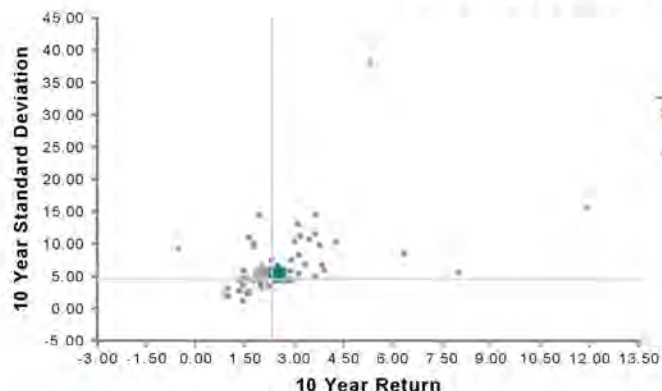
Security Name	Maturity Date	Ending Market Value (\$ in Thousands)	Percentage %
US TREASURY N/B	06/15/2026	446,226	1.4
US TREASURY N/B	03/15/2026	334,866	1.1
US TREASURY N/B	11/15/2032	313,326	1.0
US TREASURY N/B	04/30/2030	312,687	1.0
US TREASURY N/B	02/28/2026	296,412	0.9
US TREASURY N/B	05/15/2032	283,960	0.9
US TREASURY N/B	06/30/2028	259,631	0.8
US TREASURY N/B	11/30/2029	258,558	0.8
US TREASURY N/B	01/31/2028	256,810	0.8
US LONG BOND(CBT) SEP23	09/20/2023	251,274	0.8

Note: Returns for Universe are gross of fees. Returns for rolling 1 year excess are net of manager fees. Returns greater than 1 year are annualized.
 *Gross of fees returns are based on best available expense information.

California State Teachers Retirement Total Fixed Income - Risk vs Return Periods Ending June 30, 2023



10 Year Risk State Street Universe - US Fixed Income Pools



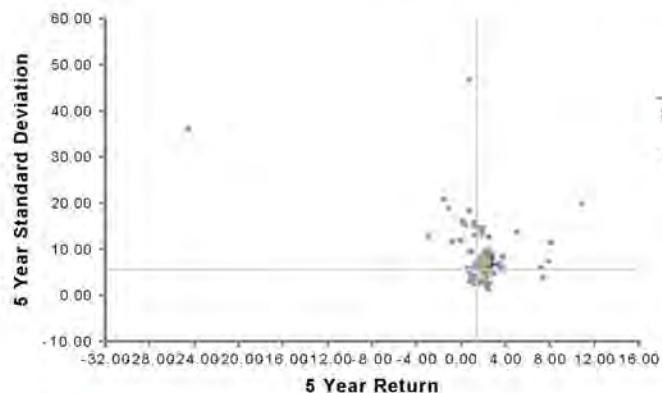
	10 Year Return	10 Year Standard Deviation
★ TOTAL FIXED INCOME	2.17 54	4.24 42
◆ STRS US DEBT CUSTOM INDEX	1.67 72	4.26 43
Median	2.33	4.52
5th Percentile	6.26	1.53
25th Percentile	3.04	3.85
50th Percentile	2.33	4.52
75th Percentile	1.64	7.99
95th Percentile	0.87	13.98

★ TOTAL FIXED INCOME ◆ STRS US DEBT CUSTOM INDEX

10 Year Risk Information & Statistics

TOTAL FIXED INCOME	
Historic Beta	0.99
Information Ratio	1.46
Jensens Alpha	0.51
R-Squared	0.99
Sharpe Ratio	0.28
Tracking Error	0.35
Treynor Ratio	1.20

5 Year Risk State Street Universe - US Fixed Income Pools



	5 Year Return	5 Year Standard Deviation
★ TOTAL FIXED INCOME	1.34 55	5.45 48
◆ STRS US DEBT CUSTOM INDEX	0.91 74	5.44 48
Median	1.50	5.56
5th Percentile	7.08	1.79
25th Percentile	2.08	3.56
50th Percentile	1.50	5.56
75th Percentile	0.88	8.93
95th Percentile	-1.06	18.21

★ TOTAL FIXED INCOME ◆ STRS US DEBT CUSTOM INDEX

5 Year Risk Information & Statistics

TOTAL FIXED INCOME	
Historic Beta	1.00
Information Ratio	1.13
Jensens Alpha	0.44
R-Squared	0.99
Sharpe Ratio	-0.04
Tracking Error	0.39
Treynor Ratio	-0.21

Note: Returns are gross of fees. Returns greater than 1 year are annualized.
* Gross returns are based on best available expense information.

California State Teachers Retirement
Total Fixed Income - Performance Summary
Periods Ending June 30, 2023



Performance Summary - Total Fixed Income

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
TOTAL FIXED INCOME	31,825,332	3.55	2.14	1.32	-3.16	0.09
<i>STRS US DEBT CUSTOM INDEX</i>		3.18	1.67	0.91	-3.62	-0.47
DEBT-PUBLIC	31,652,348	3.55	2.15	1.33	-3.13	0.18
<i>STRS US DEBT CUSTOM INDEX</i>		3.18	1.67	0.91	-3.62	-0.47
DEBT- CORE/OPP	31,627,656	3.56	2.15	1.33	-3.14	0.17
<i>STRS DEBT-CORE/OPPORTUNISTIC CUSTOM INDEX</i>		3.17	1.64	0.85	-3.70	-0.87
DEBT - CORE	26,122,966	3.24	1.85	1.05	-3.73	-0.74
<i>STRS DEBT-CORE CUSTOM INDEX</i>		3.00	1.51	0.76	-3.97	-0.96
CORE DEBT - PRE OVERLAY	26,122,966	3.24	1.81	1.04	-3.74	-0.74
<i>STRS DEBT-CORE CUSTOM INDEX</i>		3.00	1.51	0.76	-3.97	-0.96
CALSTRS INTEREST RATE PRODUCTS	11,037,443	2.71	1.19	0.69	-4.52	-1.88
<i>STRS GOVERNMENT INDEX</i>		2.51	0.97	0.46	-4.71	-2.08
CALSTRS CREDIT	7,479,170	4.06	2.71	1.80	-3.17	1.59
<i>STRS CREDIT CUSTOM INDEX</i>		3.79	2.50	1.65	-3.38	1.35
US DEBT SECURITIZED	7,606,353	3.02	1.46	0.34	-3.48	-1.41
<i>STRS SECURITIZED INDEX</i>		2.88	1.18	0.13	-3.64	-1.50
MBS	7,161,408	3.09	1.41	0.25	-3.55	-1.46
<i>STRS MBS INDEX</i>		2.90	1.13	0.03	-3.73	-1.52
CMBS	444,945	3.65	1.99	1.34	-2.89	-1.69
<i>Bloomberg CMBS: Erisa Eligible</i>		3.43	1.80	1.29	-2.89	-1.71

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Total Fixed Income - Performance Summary
Periods Ending June 30, 2023



Performance Summary - Total Fixed Income

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
DEBT OPPORTUNISTIC	5,504,690		3.43	2.57	-0.25	4.60
<i>STRS US DEBT CUSTOM INDEX</i>			1.67	0.91	-3.62	-0.47
OPPORTUNISTIC DEBT - PRE OVERLAY	5,486,966		3.44	2.62	-0.17	4.59
<i>STRS US DEBT CUSTOM INDEX</i>			1.67	0.91	-3.62	-0.47
HIGH YIELD	1,027,044	6.17	4.81	3.77	3.72	9.43
<i>STRS US HYCP 2% CAP CUSTOM INDEX</i>		6.67	4.44	3.38	3.13	9.14
CALSTRS HY	513,540		4.56	3.48	3.76	9.34
<i>STRS US HYCP 2% CAP CUSTOM INDEX</i>			4.44	3.38	3.13	9.14
BLACKROCK HIGH YIELD	513,504		5.14	4.02	3.67	9.53
<i>STRS US HYCP 2% CAP CUSTOM INDEX</i>			4.44	3.38	3.13	9.14
DEBT CORE PLUS	3,390,425		2.38	1.71	-2.72	1.27
<i>STRS US UNIVERSAL CUSTOM INDEX</i>			1.81	1.01	-3.38	-0.07
WAMCO	1,484,971		2.55	1.56	-3.18	1.69
<i>STRS US UNIVERSAL CUSTOM INDEX</i>			1.81	1.01	-3.38	-0.07
LM CAPITAL GROUP	459,221		2.31	1.82	-2.13	1.32
<i>STRS US UNIVERSAL CUSTOM INDEX</i>			1.81	1.01	-3.38	-0.07
CALSTRS CORE PLUS	1,446,233					0.80
<i>STRS US UNIVERSAL CUSTOM INDEX</i>						-0.07
LEVERAGED LOANS	1,033,093		4.37	4.18	6.49	11.21
<i>STRS MORNINGSTARLSTA LEVERAGE LOAN INDEX</i>			4.07	4.13	6.31	10.71
CREDIT SUISSE BL	621,764		4.53	4.13	6.40	11.09
<i>STRS MORNINGSTARLSTA LEVERAGE LOAN INDEX</i>			4.07	4.13	6.31	10.71

California State Teachers Retirement
Total Fixed Income - Performance Summary
 Periods Ending June 30, 2023



Performance Summary - Total Fixed Income

	Ending Market Value (\$ in Thousands)	20 Year	10 Year	5 Year	3 Year	1 Year
ARES BANK LOAN	411,329					11.88
<i>STRS MORNINGSTARLSTA LEVERAGE LOAN INDEX</i>						10.71
SPECIAL SITUATIONS - DEBT	36,404				112.53	10.43
<i>STRS US DEBT CUSTOM INDEX</i>					-3.62	-0.47
CALSTRS TAP	36,404				113.72	10.43
<i>STRS US DEBT CUSTOM INDEX</i>					-3.62	-0.47
CALSTRS OPPORTUNISTIC OVERLAY	17,724		-0.00	-0.05	-0.08	0.00
<i>STRS ABSOLUTE RETURN INDEX</i>			0.00	0.00	0.00	0.00
STABLE RETURN	24,692		6.50	5.64	6.23	6.91
CALSTRS-ENHANCED HLP	24,692	5.75	5.68	5.64	6.23	6.91
<i>Debt Opportunity Policy Benchmark</i>		3.34	1.67	0.91	-3.62	-0.47
DEBT-PRIVATE	172,984					-20.18
<i>STRS PRIVATE CREDIT CUSTOM INDEX</i>						-0.31
CORPORATE	97,786					5.71
<i>STRS US DEBT CUSTOM INDEX</i>						-0.47
DEBT - RE Funds	75,198					-83.52
<i>STRS US DEBT CUSTOM INDEX 1 QTR LAG</i>						-4.70

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Inflation Sensitive

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
TOTAL INFLATION SENSITIVE	19,245,045	6.97	8.59	12.08	1.50
<i>TOTAL INFLATION SENSITIVE INDEX</i>		5.14	5.82	9.08	0.81
INFLATION SENSITIVE xSISS	19,245,045	6.97	8.59	12.08	1.50
<i>STRS TOTAL IS INDEX</i>		5.14	5.82	9.08	0.81
INFLATION SENSITIVE	19,245,045	6.94	8.59	12.08	1.50
<i>STRS INFLATION SENSITIVE</i>		5.14	5.82	9.08	0.81
INFLATION SENSITIVE COMMODITIES	4,507,121		5.94	19.13	-6.93
<i>STRS INFLATION SENSITIVE COMMODITIES INDEX</i>			3.03	16.02	-13.30
PIMCO COMMODITIES	1,663,601		5.62	19.65	-7.78
<i>Bloomberg Commodity Price Index</i>			3.03	16.02	-13.30
INVESCO COMMODITIES	1,061,307		4.99	17.38	-6.92
<i>Bloomberg Commodity Price Index</i>			3.03	16.02	-13.30
BCOM SWAP	1,782,213		7.71	20.88	-6.20
<i>Bloomberg Commodity Price Index</i>			3.03	16.02	-13.30
INFLATION SENSITIVE EX. COMMODITIES	14,737,923	7.23	8.99	10.02	4.77
<i>STRS INFLATION SENSITIVE EX COM</i>		5.43	6.30	7.13	6.58
INFLATION BOND	3,181,242	2.42	2.58	-0.04	-1.25
<i>STRS INFLATION BOND INDEX</i>		2.34	2.49	-0.12	-1.40
U.S. TIPS	3,181,242		2.58	-0.04	-1.25
<i>Bloomberg U.S. Treasury: U.S. TIPS</i>			2.49	-0.12	-1.40
TOTAL INFRASTRUCTURE	10,656,297	9.24	11.69	13.93	7.09
<i>INFRASTRUCTURE CUSTOM INDEX</i>		6.71	7.74	9.59	9.17

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Inflation Sensitive

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
INFRASTRUCTURE PRIVATE	10,656,734	9.61	11.69	13.66	7.45
<i>INFRASTRUCTURE PRIVATE BLENDED</i>		6.83	8.02	9.55	9.17
CALSTRS INFRA PRIVATE	3,571,223	9.98	11.18	13.27	9.82
<i>INFRASTRUCTURE PRIVATE BLENDED</i>		6.83	8.02	9.55	9.17
INFRASTRUCTURE CO-INVEST	1,777,414		13.42	17.28	13.36
<i>INFRASTRUCTURE PRIVATE BLENDED</i>			8.02	9.55	9.17
BASALT CO-INVEST	172,858		9.69	11.79	10.27
<i>INFRASTRUCTURE PRIVATE BLENDED</i>			8.02	9.55	9.17
STONEPEAK CO-INVEST	989,723		14.30	19.12	7.92
<i>INFRASTRUCTURE PRIVATE BLENDED</i>			8.02	9.55	9.17
BLACKROCK CO-INVEST	105,313			-1.93	24.22
<i>INFRASTRUCTURE PRIVATE BLENDED</i>				9.55	9.17
ARDIAN CO-INVEST	144,144			11.66	14.60
<i>INFRASTRUCTURE PRIVATE BLENDED</i>				9.55	9.17
CAPITAL DYNAMICS CO-INVEST	69,256				9.49
<i>INFRASTRUCTURE PRIVATE BLENDED</i>					9.17
ISQ CO-INVEST	165,517				8.94
<i>INFRASTRUCTURE PRIVATE BLENDED</i>					9.17
ARCLIGHT CO-INVEST	130,604				56.01
<i>INFRASTRUCTURE PRIVATE BLENDED</i>					9.17
INFRASTRUCTURE MANAGED ACCOUNT	5,308,097		11.31	12.42	3.53
<i>INFRASTRUCTURE PRIVATE BLENDED</i>			8.02	9.55	9.17
ARGO	1,562,598		8.50	7.97	7.94
<i>INFRASTRUCTURE PRIVATE BLENDED</i>			8.02	9.55	9.17

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.



California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023

Performance Summary - Inflation Sensitive

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
AREVON	704,712		4.89	2.36	-14.54
<i>INFRASTRUCTURE PRIVATE BLENDED</i>			8.02	9.55	9.17
STONEPEAK PE	265,436		28.28	24.46	4.97
<i>INFRASTRUCTURE PRIVATE BLENDED</i>			8.02	9.55	9.17
STEPSTONE	711,818			10.36	8.28
<i>INFRASTRUCTURE PRIVATE BLENDED</i>				9.55	9.17
UBS	926,444			16.92	4.10
<i>INFRASTRUCTURE PRIVATE BLENDED</i>				9.55	9.17
HARBERT	510,419			5.64	4.36
<i>INFRASTRUCTURE PRIVATE BLENDED</i>				9.55	9.17
JLC	16,484				
<i>INFRASTRUCTURE PRIVATE BLENDED</i>					
OAKTREE	336,991				
<i>INFRASTRUCTURE PRIVATE BLENDED</i>					
ARJUN	273,195				
<i>INFRASTRUCTURE PRIVATE BLENDED</i>					
INFRASTRUCTURE OVERLAY	-437		2.09	0.39	-2.79
TIMBERLAND	269,609		3.64	5.27	9.65
<i>NCREIF TIMBERLAND FUND QTR LAG</i>			4.83	7.84	13.50
TIMBERLAND	269,609		3.64	5.27	9.65
<i>NCREIF TIMBERLAND FUND QTR LAG</i>			4.83	7.84	13.50
AGRICULTURE	513,205		0.07	0.67	-1.30
<i>STRS CUSTOM CPI+300 BPS QTR LAG</i>			6.98	8.50	8.12

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Inflation Sensitive

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
AG FUNDS	513,205		0.07	0.67	-1.30
<i>STRS CUSTOM CPI+300 BPS QTR LAG</i>			6.98	8.50	8.12
INFRASTRUCTURE CREDIT	117,570				
<i>STRS INFRASTRUCTURE CREDIT INDEX</i>					
INFRA CREDIT FUND	117,570				
<i>INFRA CREDIT FUND INDEX</i>					

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Innovative Strategies

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
TOTAL INNOVATIVE STRATEGIES	4,524,491	5.94	7.94	11.31	9.32
<i>TOTAL INNOVATIVE STRATEGIES INDEX</i>		3.37	2.58	3.04	3.36
INNOVATIVE STRATEGIES xSISS	4,463,558	5.97	8.00	11.41	9.57
<i>Innovative Strategies Blended Index</i>		3.37	2.58	3.05	3.38
INNOVATIVE STRATEGIES	4,463,486	7.18	8.00	11.41	9.57
<i>INNOVATION INDEX</i>		3.93	2.58	3.05	3.38
INNOVATION PRIVATE ASSETS	4,463,486		15.56	11.41	9.57
<i>INNOVATION PA BLENDED INDEX</i>			2.62	3.05	3.38
INNOVATION PRIVATE EQUITY	498,117			36.23	31.10
<i>PRIVATE EQUITY CUSTOM</i>				0.77	2.14
BLACKROCK LTPC	498,117			36.23	31.10
<i>LONGER TERM STRATEGIES BLENDED</i>				0.77	2.14
INNOVATION PRIVATE CREDIT	3,965,369		14.08	8.45	7.29
<i>PRIVATE CREDIT CUSTOM BLENDED CM</i>			2.85	3.43	3.54
INNOVATION DIRECT LENDING	3,426,011		13.43	9.93	8.23
<i>PRIVATE DEBT CUSTOM BENCHMARK</i>			2.02	2.03	3.55
STONE POINT CAPITAL	240,112				7.15
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					2.60
ARCMONT STRATEGIC PARTNERSHIP	495,668			11.81	10.45
<i>ARCMONT STRATEGIC PARTNERSHIP INDEX</i>				1.47	4.28

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.
Due to the plan structure change on 7/2016, the Innovation aggregate returns include Risk Mitigating Strategies and Absolute Return performance.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Innovative Strategies

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
ARCMONT EUROPEAN DL FUND	479,593			11.87	10.67
<i>MORNINGSTAR LVGRD LOAN QTR LAG+175 BLEND</i>				1.48	4.32
ARCMONT CS	16,075				5.91
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					2.60
HPS STRATEGIC PARTNERSHIP	543,390			10.97	9.57
<i>HPS STRATEGIC PARTNERSHIP INDEX</i>				1.36	3.95
HPS GLOBAL DIRECT LENDING	452,532			10.00	8.35
<i>MORNINGSTAR LVGRD LOAN QTR LAG+175 BLEND</i>				1.48	4.32
HPS SSOF	90,857				16.23
<i>STRS Custom 3 month tbill Gross Blend</i>					2.60
OR STRATEGIC PARTNERSHIP	1,129,226				7.37
<i>OR STRATEGIC PARTNERSHIP INDEX</i>					2.60
ORCC III	486,178				9.09
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					2.60
ORO I	476,152				8.16
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					2.60
ORTF II	166,896				
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					
ARES STRATEGIC PARTNERSHIP	1,017,615		14.69	8.10	7.96
<i>ARES STRATEGIC PARTNERSHIP INDEX</i>			2.53	2.89	3.81
ARES SSG SLO II	33,762		2.16	-4.42	-19.51
<i>STRS Leveraged Loan QTR Lag+300bps Blend</i>			7.72	11.71	5.60
ARES EUROPEAN DL SMA	675,534			9.43	9.50
<i>MORNINGSTAR LVGRD LOAN QTR LAG+175 BLEND</i>				1.48	4.32

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.
Due to the plan structure change on 7/2016, the Innovation aggregate returns include Risk Mitigating Strategies and Absolute Return performance.

California State Teachers Retirement
Performance Summary
Periods Ending June 30, 2023



Performance Summary - Innovative Strategies

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
ARES SSG SLO III	142,317				12.09
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					2.60
ARES SME FUND	166,002				9.15
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					2.60
INNOVATION REAL ASSETS CREDIT	539,359		11.95	2.46	0.54
<i>REAL ASSETS CUSTOM</i>			5.60	8.07	3.43
CASTLELAKE STABLE YIELD	112,073		11.42	1.40	-2.31
<i>STRS Leveraged Loan QTR Lag+300bps Blend</i>			7.72	11.71	5.60
SPROTT STRATEGIC RELATIONSHIP	427,286			8.27	1.87
<i>SPROTT STRATEGIC RELATIONSHIP INDEX</i>				1.09	3.12
SPROTT PRIVATE LENDING FUND II	118,911			9.29	-2.42
<i>MORNINGSTAR LVRGD LOAN QTR LG+225 BLEND</i>				1.65	4.83
SPROTT STREAMING AND ROYALTIES	300,428				4.34
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					2.60
SPROTT LENDING FUND III	7,947				
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					
INNOVATIVE STRATEGIES TRANSITION	72				
<i>Zero Return Index DAILY ONLY</i>					
SISS INNOVATIVE STRATEGIES	60,933				-10.78
<i>SISS INNOVATIVE STRATEGIES INDEX</i>					2.60
SER CAPITAL PARTNERS FUND I	21,585				9.05
<i>STRS Custom 3 month tbill Gross QTR Lag</i>					2.60

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.
Due to the plan structure change on 7/2016, the Innovation aggregate returns include Risk Mitigating Strategies and Absolute Return performance.

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Performance Summary - Innovative Strategies

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
G2VP OPPORTUNITY FUND I <i>STRS Custom 3 month tbill Gross QTR Lag</i>	13,575				
CONGRUENT CONTINUITY I <i>STRS Custom 3 month tbill Gross QTR Lag</i>	5,674				
JUST CLIMATE <i>STRS Custom 3 month tbill Gross QTR Lag</i>	20,099				

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Performance Summary - Risk Mitigating Strategies

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
TOTAL RISK MITIGATING STRATEGIES	27,780,065	2.70	5.28	3.47	-4.31
<i>STRS TOTAL RMS</i>		2.26	5.56	3.52	-1.78
RISK MITIGATING STRATEGIES	27,729,555	2.75	5.39	3.51	-4.19
<i>RMS CUSTOM INDEX</i>		2.26	5.57	3.51	-1.85
RMS GLOBAL MACRO	3,038,995	2.65	1.24	1.15	-7.54
<i>STRS CUSTOM DISCRETIONARY THEMATIC</i>		2.28	4.38	5.02	3.39
MACRO BW	902,592	1.68	-2.00	8.46	-13.41
<i>STRS CUSTOM DISCRETIONARY THEMATIC</i>		2.28	4.38	5.02	3.39
MACRO QM	631,569		2.57	5.12	10.68
<i>STRS CUSTOM DISCRETIONARY THEMATIC</i>			4.38	5.02	3.39
MACRO EM	872,717		-0.32	-2.12	-0.61
<i>STRS CUSTOM DISCRETIONARY THEMATIC</i>			4.38	5.02	3.39
MACRO AS	632,117				23.44
<i>STRS CUSTOM DISCRETIONARY THEMATIC</i>					3.39
RMS TREND FOLLOWING	14,768,821		10.10	15.63	-3.07
<i>STRS CUSTOM TREND INDEX</i>			9.37	14.24	-1.12
TREND GM	2,450,361		9.74	16.03	-1.31
<i>STRS CUSTOM TREND INDEX</i>			9.37	14.24	-1.12
TREND TT	3,390,393			21.12	0.83
<i>STRS CUSTOM TREND INDEX</i>				14.24	-1.12
TREND AX	2,802,779		11.15	16.94	-6.42
<i>STRS CUSTOM TREND INDEX</i>			9.37	14.24	-1.12
TREND IM	1,740,489		16.26	25.81	-7.41
<i>STRS CUSTOM TREND INDEX</i>			9.37	14.24	-1.12

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.



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Performance Summary - Risk Mitigating Strategies

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
TREND LX	3,187,781		11.30	15.06	-2.53
<i>STRS CUSTOM TREND INDEX</i>			9.37	14.24	-1.12
TREND SM	1,197,018				
<i>STRS CUSTOM TREND INDEX</i>					
RMS SYSTEMATIC RISK PREMIA	1,675,724			3.29	7.95
<i>STRS CUSTOM RISK PREMIA</i>				6.37	6.14
SRP AB	263,093			-2.22	-2.86
<i>STRS CUSTOM RISK PREMIA</i>				6.37	6.14
SRP BR	853,362			8.90	17.44
<i>STRS CUSTOM RISK PREMIA</i>				6.37	6.14
SRP MN	559,269				
<i>STRS CUSTOM RISK PREMIA</i>					
RMS LONG US TREASURY	8,246,015		-0.99	-12.51	-7.55
<i>Bloomberg U.S. Treasury: 20+ Year</i>			-1.19	-12.67	-7.72
LONG DURATION U.S. TREASURIES	8,246,015		-0.99	-12.51	-7.55
<i>Bloomberg U.S. Treasury: 20+ Year</i>			-1.19	-12.67	-7.72
RMS TRANSITION	50,510				
<i>STRS RMS TRANSITION INDEX</i>					

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

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Performance Summary - Strategic Overlay

	Ending Market Value (\$ in Thousands)	10 Year	5 Year	3 Year	1 Year
STRATEGIC OVERLAY	4,952,505	0.39	0.65	-0.21	2.33
CURRENCY - ABSOLUTE RETURN	18,602	0.01	0.02	0.06	0.17
<i>STRS CURRENCY ABSOLUTE RETURN</i>		0.00	0.00	0.00	0.00
CURRENCY - OPPORTUNISTIC	19,875	0.16	0.26	0.68	1.63
<i>STRS CURRENCY ABSOLUTE RETURN</i>		0.00	0.00	0.00	0.00
LEE OVERLAY PARTNERS LTD	18,183	0.65	0.63	0.78	2.48
<i>STRS CURRENCY ABSOLUTE RETURN</i>		0.00	0.00	0.00	0.00
MILLENNIUM GLOBAL INVESTMENTS LTD	-328	-0.18	-0.54	-0.06	-0.19
<i>STRS CURRENCY ABSOLUTE RETURN</i>		0.00	0.00	0.00	0.00
CIBC	2,020			0.93	1.36
<i>STRS CURRENCY ABSOLUTE RETURN</i>				0.00	0.00
CURRENCY - CORE	-1,273	-0.01	-0.02	-0.02	-0.02
<i>STRS CURRENCY ABSOLUTE RETURN</i>		0.00	0.00	0.00	0.00
CALSTRS CURRENCY-NON US EQUITY	-1,273	-0.01	-0.02	-0.02	-0.02
<i>STRS CURRENCY ABSOLUTE RETURN</i>		0.00	0.00	0.00	0.00
DERIVATIVE OVERLAY	4,933,903			-18.40	7.22
<i>STRS CURRENCY ABSOLUTE RETURN</i>				0.00	0.00
CALSTRS EQUITIES	15,694			1.80	-2.83
<i>Zero Return Index DAILY ONLY</i>				0.00	0.00
GLOBAL EQUITY OVERLAY	3,658,018			11.23	9.97
<i>Bloomberg U.S. Treasury Bellwethers: 3M</i>				1.32	3.74
RMS OVERLAY	509,371				-14.44
<i>Bloomberg U.S. Treasury Bellwethers: 3M</i>					3.74
FIXED INCOME OVERLAY	750,821				
<i>Bloomberg U.S. Treasury Bellwethers: 3M</i>					

Note: Returns are net of manager fees. Returns greater than 1 year are annualized.

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ATTRIBUTION

Weighting – Measures the portion of the portfolio return that can be attributed to over/underweighting sectors/countries relative to the benchmark. Positive weighting occurs if the fund was over weighted in sectors/countries that performed well or underweighted in sectors/countries that did not perform well.

Sector weighting = $[\text{benchmark return (sector)} - \text{benchmark return (total)}] \times [\text{portfolio beginning weight (sector)} - \text{benchmark beginning weight (sector)}] / 100$

Selection – Measures the portion of the portfolio return that can be attributed to the selection of securities within a sector/country relative to the benchmark. Positive selection occurs if the portfolio's sector/country return is greater than the benchmark sector/country return.

Sector selection = $[\text{portfolio return (sector)} - \text{benchmark return (sector)}] \times [\text{portfolio beginning weight (sector)}] / 100$

RISK

Alpha - A measure of value added after adjusting for risk. Beta is the measure of risk used in the calculation of alpha, so the accuracy of alpha is dependent on the accuracy of beta. Alpha is the difference between the manager's return and what one would expect the manager to return after adjusting for the amount of risk taken. Mathematically, $\text{Alpha} = \text{Portfolio Return} - \text{Risk Free Rate} - \text{Beta} \times (\text{Market Return} - \text{Risk Free Rate})$, $\text{Alpha} = r_p - r_f - \text{Beta} (r_m - r_f)$. A positive alpha is an indication of value added.

Beta - A measure of risk for domestic equities. The market has a beta of 1. A manager with a beta above 1 exhibits more risk than the market, while a manager with a beta below 1 is less risky than the market.

Information Ratio – In investing terminology, the ratio of expected return to risk, as measured by standard deviation. Usually, this statistical technique is used to measure a manager's performance against a benchmark.

Jensen's Index – An index that uses the capital asset pricing model to determine whether a money manager outperformed a market index.

R2 (R Squared) – A measure of how well a manager moves with the market. If a manager's performance closely tracks that of the market, the R2 will be closed to 1. Broadly diversified managers have an R2 of 0.90 or greater, while the R2 of undiversified managers will be lower.

Sharpe Ratio – A risk-adjusted measure developed by William F. Sharpe, calculated using standard deviation and excess return to determine reward per unit of risk. The higher the Sharpe ratio, the better the fund's historical risk-adjusted performance.

Standard Deviation – The degree of variability of a time series, such as quarterly returns, relative to the average. Standard deviation measures the volatility of the time series.

Tracking Error - When using an indexing strategy, the amount by which the performance of the portfolio differed from that of the benchmark.

Treynor Index – A measure of a portfolio's excess return per unit of risk, equal to the portfolio's rate of return minus the risk-free rate of return, divided by the portfolio's beta.

FIXED INCOME CHARACTERISTICS

Asset Backed Security (ABS) - A fixed income security which has a specifically pledged collateral such as car loans, credit card receivables, lease loans, etc.

Average Life - The weighted average time to receipt of principal payments (including scheduled pay-downs and prepayments). For non-amortizing securities, the average life equals the time to the stated maturity.

Average Maturity - The market value-weighted average maturity of the bonds in a portfolio, where maturity is defined as Stated Final for bullet maturity bonds and Average Life for amortizing instruments, including mortgage pass-throughs, CMOs, amortizing asset-backed securities and ARMs.

Collateralized Mortgage Obligation (CMO) - A security backed by a pool of pass through securities and/or mortgages. Since CMOs derive their cash flow from the underlying mortgage collateral, they are referred to as derivatives. CMOs are structured so there are several classes of bondholders with varying stated maturities and varying certainty of the timing of cash flows.

Coupon - The coupon rate is the annual coupon (i.e., interest) payment value divided by the par value of the bond.

Duration - A weighted average maturity, expressed in years. All coupon and principal payments are weighted by the present value term for the expected time of payment. Duration is a measure of sensitivity to changes in interest rates with a longer duration indicating a greater sensitivity to changes in interest rates.

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Effective Duration – An option-adjusted measure of a bond's (or portfolio's) sensitivity to changes in interest rates. Calculated as the average percentage change in a bond's value (price plus accrued interest) under shifts of the Treasury curve +/- 100 bps. Incorporates the effect of embedded options for corporate bonds and changes in prepayments for mortgage-backed securities (including pass-throughs, CMOs and ARMs).

Maturity - The maturity for an individual bond is calculated as the number of years until principal is paid. For a portfolio of bonds, the maturity is a weighted average maturity, where the weighting factors are the individual security's percentage of the total portfolio.

Mortgage Pass Through - A security which "passes through" to the holder the interest and principal payments on a group of mortgages.

Quality – Relates to the credit risk of a bond (i.e., the issuer's ability to pay). Quality is most relevant for corporate bonds. Several rating organizations publish ratings of bonds including Moody's and Standard & Poor's. AAA is the highest quality rating, followed by AA+, AA, AA-, A+, A, A-, and then BBB+, BBB, BBB-, BB+, BB, BB-, etc. Bonds rated above BBB- are said to be of investment grade.

Yield (YTM) - Yield to Maturity unless otherwise indicated. The single Internal Rate of Return which equates a bond's remaining cash flows to its market price. For mortgage pass-throughs, CMOs, asset-backed securities, and ARMs, YTM is calculated using the cash flows generated from the security's lifetime prepayment speed (PSA, CPR, ABS etc.).

Yield to Maturity – The discount rate that equates the present value of cash flows (coupons and principal) to the market price taking into account the time value of money.

EQUITY CHARACTERISTICS GLOSSARY

Debt/Equity Ratio – Total long term debt divided by total common equity.

Dividend Growth 5 Yrs – the annualized growth rate of cash dividends per share for ex-dividend dates occurring during the reporting period, calculated via a least squares fit using the most recent year's DPS data and data from the previous four years. (Expressed in a percent.)

Dividend Yield – The current indicated annual income (dividend or coupon) divided by yesterday's composite closing price, stated as a percentage.

EPS Growth 1 Yr – the percent change, between the year with the most current Compustat data and the previous year, of the primary earnings per share including extraordinary items for the last 12 months ending the fiscal year of the company. (Expressed as a percent.)

EPS Growth 5 Yr – The annualized growth rate of primary earnings per share including extraordinary items calculated via a least squares fit using the most recent year's EPS data and data from the previous five years (Expressed as a percent.)

EPS Stability 5 Yr – The mean of the differences between actual EPS and trend line EPS for the past five years (20 quarters), expressed as a percentage of trend line EPS. Trend line EPS is based on a linear regression of the past twenty quarters actual EPS.

Fundamental Beta – An estimate of the security's systematic risk, based on the Vestek Fundamental Risk Model, which includes information on 48 fundamental variables of the company over the past sixty months.

Historical Beta – The beta from a regression of the monthly excess returns of the stock against the excess returns of the S&P 500 for the past sixty months.

Payout Ratio – Indicated annual dividend, based on most recent announced quarterly dividend, times four, plus any additional dividends to be paid during the current year, divided by the most recently reported annual earnings per common share outstanding.

Price/Book Ratio – The current market price of the stock divided by the most recently reported book value for the prior fiscal year.

Price/Earnings Ratio (P/E) – The P/E ratio of a common stock's price divided by earnings per share. The ratio is used as a valuation technique employed by investment managers.

Profit Margin-1Yr – Net income divided by net sales. Value in characteristics file is actual value multiplied by 100.00. (Expressed in hundredths.)

Quick Ratio – The sum of cash and short term investments plus total receivables divided by total liabilities.

ROA 1 Yr – Net income divided by current assets plus net property plus other noncurrent assets including intangible assets, deferred items, and investments and advances. Value in characteristics file is actual value times 100 (Expressed in hundredths.)

ROE 1 Yr – Net income divided by total common equity. Value in characteristics file is actual value multiplied by 100.00. (Expressed in hundredths.)

UNIVERSE

Cumulative Report – All periods on the report are affixed to the same end period.

Consecutive Report – Shows periods in successive order.

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Median – The middle value in a distribution, for which one half of the observations are greater and one half are less; a ranking of 50.

Observations – The number of different plans or portfolios contained within a particular universe.

Percent Allocation – Percent of Total Fund for a particular asset class, based on period ending, security level values.

Percentile – The number between 1 and 100 indicating an observation's position in the universe; derived by dividing the observations into parts in order of magnitude. For example, a score equal to or greater than 95 percent of all observations is in the 95th percentile.

Percentile Rank – A manager's rank signifies the percentage of managers in the universe performing better than the manager. For example, a manager with a rank of 10 means that only 10% of managers had returns greater than the manager's over the period of measurement. Likewise, a rank of 50 (i.e., the median manager) indicates that 50% of managers in the universe did better and 50% did worse.

Public Fund Master Trusts – The Universe that contains all Public Fund plans for which State Street provides performance data.

Public Fund Master Trusts > \$1 Billion – The Universe that contains all Public Fund plans with assets totaling more than \$1 Billion for which State Street provides performance data.

Public Fund Master Trusts > \$10 Billion – The Universe that contains all Public Fund plans with assets totaling more than \$10 Billion for which State Street provides performance data.

Rank – A particular observation's performance relative to others in the universe. The highest ranking is shown as 1, while the lowest is 100.

State Street Universe – The State Street Universe is a proprietary comparative universe service developed by State Street. It is one of the most comprehensive universes available, representing more than \$1 trillion in assets and contains over 5,000 portfolios.

BENCHMARK DEFINITIONS

US Equity = STRS Custom MSCI USA IMI Index

Non-US Equity = STRS Custom MSCI ACWI IMI ex-US

Real Estate = STRS Real Estate Index

US Debt = STRS US Debt Custom Index

Domestic Large Cap = STRS Custom Russell 1000

Domestic Small Cap = STRS Custom Russell 2000

Growth = STRS Custom Russell 3000 Growth Index

Value = STRS Custom Russell 3000 Value Index

Pacific = STRS Custom MSCI Pacific

Europe = STRS Custom MSCI Europe

Emerging = STRS Custom Emerging

Private Real Estate = STRS Real Estate Index

Public Real Estate = STRS Real Estate Index

Credit = STRS Custom Credit

Government = STRS Custom Government

Mortgage = STRS Custom MBS

High Yield = STRS Custom HYCP

*Custom is ex Tobacco, Firearms, and conflict countries

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Barclays Capital U.S. Aggregate Bond Index – The Barclays Capital Index covers the U.S. investment grade fixed rate bond market, including government and corporate securities, agency mortgage pass-through securities, and asset-backed securities. These major sectors are subdivided into more specific indices that are calculated and reported on a regular basis. To qualify for inclusion in the Aggregate Index, a bond or security must meet certain criteria: 1) It must have at least one year to final maturity regardless of call features. Asset-backed securities must have a remaining average life of at least one year while mortgages must have a weighted average maturity (WAM) of at least one year. There is no limit on final maturity; bonds with 50- and 100-year maturities may be included in the Aggregate Index. 2) It must have at least \$150 million par amount outstanding. The amount outstanding may differ from the original issue size due to various factors, including reopenings, sinking schedules, partial calls, and prepayments. 3) It must be rated investment grade (Baa3 or better) by Moody's Investor Services (unless it is a U.S. government or agency security, which are generally not formally rated). If a Moody's rating is unavailable, then Standard & Poor's Corporation rating is used. This implies that the index may include bonds that are split-rated. A bond rated Baa3 by Moody's and BB+ by S&P would be included; however, if Moody's assigns a rating below investment grade the bond will be excluded even if the S&P or Fitch rating is BBB- or better. 4) It must be fixed rate, although it can carry a coupon that steps up or changes according to a predetermined schedule. Adjustable or floating rate securities with periodic coupon changes based on changes in market rates that are excluded. Stripped securities created from coupon securities are excluded, while the underlying coupon security is included. Zero coupon bonds may be included. Medium-term notes are included only if they were underwritten issues and meet other eligibility criteria. 5) It must be dollar-denominated and nonconvertible. All corporate and asset-backed securities must be registered with the securities and Exchange Commission (SEC). 6) It must be publicly issued. Private placement securities including 144A securities are excluded.

Russell 1000 Growth Index – Measures the performance of those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 1000 Index – Measures the performance of the 1,000 largest companies in the Russell 3000 Index, which represents approximately 92% of the total market capitalization of the Russell 3000 Index.

Russell 1000 Value Index – Measures the performance of those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell 2000 Growth Index – Measures the performance of those Russell 2000 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 2000 Index – Measures the performance of the 2,000 smallest companies in the Russell 3000 Index, which represents approximately 8% of the total market capitalization of the Russell 3000 Index.

Russell 2000 Value Index – Measures the performance of those Russell 2000 companies with lower price-to-book ratios and lower forecasted growth values.

Russell 2500 Growth Index – Measures the performance of those Russell 2500 companies with higher price-to-book ratios and higher forecasted growth values.

Russell 2500 Index – Measures the performance of the 2,500 smallest companies in the Russell 3000 Index, which represents approximately 17% of the total market capitalization of the Russell 3000 Index.

Russell 2500 Value Index – Measures the performance of those Russell 2500 companies with lower price-to-book ratios and lower forecasted growth values.

Russell 3000 Index – Measures the performance of the 3,000 largest U.S. companies based on total market capitalization, which represents approximately 98% of the investable U.S. equity market.

Russell Midcap Growth Index – Measures the performance of those Russell Midcap companies with higher price-to-book ratios and higher forecasted growth values. The stocks are also members of the Russell 1000 Growth index.

Russell Midcap Index – Measures the performance of the 800 smallest companies in the Russell 1000 Index, which represent approximately 25% of the total market capitalization of the Russell 1000 Index.

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Russell Midcap Value Index – Measures the performance of those Russell Midcap companies with lower price-to-book ratios and lower forecasted growth values. The stocks are also members of the Russell 1000 Value index.

Morgan Stanley Capital International (MSCI) Europe, Australia, Far East (EAFE) Index – The Morgan Stanley Capital EAFE Index replicates the industry composition of the stock exchanges in the developed international markets from Europe, Australia, and the Far East: Australia, Austria, Belgium, Denmark, Finland, France, Germany, Greece, Hong Kong, Ireland, Italy, Japan, Netherlands, New Zealand, Norway, Portugal, Singapore, Spain, Sweden, Switzerland, and the United Kingdom; in addition, the index represents a sampling of large, medium, and small capitalization companies from each market, taking into account the stocks' liquidity.

Morgan Stanley Capital International (MSCI) Emerging Markets Free (EMF) Gross Index – Designation as an "emerging market" is determined by a number of factors. MSCI evaluates factors such as gross domestic product per capita; local government regulations; perceived investment risk; foreign ownership limits and capital controls; or the general perception by the investment community when determining an emerging classification of a market. "Free" reflects investable opportunities for global investors by taking into account local market restrictions on share ownership by foreigners. So the MSCI EMF Index is an arithmetic, market value-weighted average of the performance of securities listed on the stock exchanges of the following 26 countries: Argentina, Brazil Free, Chile, China Free, Colombia, Czech Republic, Egypt, Hungary, India, Indonesia, Israel, Jordan, Korea, Malaysia Free, Mexico, Morocco, Pakistan, Peru, Philippines Free, Poland, Russia, South Africa, Taiwan 80%, Thailand Free, Turkey, Venezuela.

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