

Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 19

MEETING DATE: February 19, 2025

SUBJECT: Total Fund Investment Performance Review Report—

Fourth Quarter 2024

SUBMITTED FOR: ___ Action __X_ Information

RECOMMENDATION

Receive and file the performance report for the quarter ended December 31, 2024, as presented by Verus.

PURPOSE

This agenda item complies with SCERS' investment policy statement reporting requirements and contributes to the effective management and oversight of investment activities.

SCERS TOTAL FUND RETURNS

This item summarizes SCERS' Total Fund investment returns as presented in Verus' Investment Performance Review for the period ending December 31, 2024. Please note that returns for SCERS' private equity, private credit, non-core real estate, and real assets portfolios are lagged one quarter.

SCERS' returns presented below are net of fees, across all asset categories and asset classes. Additionally, the public equity benchmarks, such as the MSCI ACWI IMI, are also presented on a net of fee basis.

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SCERS TOTAL FUND PERFORMANCE SUMMARY Quarter Reporting Periods Ending December 31, 2024

SCERS ASSET CLASS	Quarter	Fiscal YTD	1-Year	3-Year	5-Year	Since Inception	Since Inception Date
SCERS TOTAL FUND Return w/Overlay	-0.7%	3.7%	9.2%	3.1%	7.5%	8.1%	Jul-86
Policy Index InvestorForce Public DB > \$1B	-0.7% -0.9%	3.4% 3.9%	8.6% 8.8%	3.3% 2.8%	6.9% 7.0%	8.3% -	
SCERS TOTAL FUND Return w/o Overlay	-0.6%	3.7%	9.4%	3.2%	7.5%	8.1%	Jul-86
Policy Index	-0.7%	3.4%	8.6%	3.3%	6.9%	8.3%	
GROWTH ASSET CATEGORY	-0.7%	4.5%	13.6%	4.0%	10.1%	10.9%	Apr-17
Custom Benchmark	-1.0%	4.3%	12.9%	4.8%	9.8%	10.0%	
DIVERSIFYING ASSET CATEGORY	-1.4%	2.5%	3.5%	0.0%	1.7%	2.4%	Apr-17
Custom Benchmark	-1.5%	2.3%	3.0%	-0.4%	1.2%	2.1%	
REAL RETURN ASSET CATEGORY	0.5%	2.6%	3.5%	3.0%	5.7%	7.2%	Apr-17
Custom Benchmark	0.2%	1.0%	0.5%	3.0%	5.2%	5.4%	

SCERS' Total Fund was down 0.7% for the quarter, net of fees, in line with the Policy Index return of -0.7% and outperforming the median public fund return of -0.9%. Fiscal Year-to-date, SCERS' portfolio was up 3.7% compared to the Policy Index return of 3.4%, but slightly trailing the median public fund return of 3.9%. Over a 3-year period, SCERS' portfolio returned 3.1%, which trailed the Policy Index return of 3.3% but outperformed the median public fund return of 2.8%. Over the 1- and 5-Year periods, SCERS' Total Fund returned 9.2% and 7.5%, respectively, outperforming the Policy Index and median public fund benchmarks.

The portfolio's largest detractors for the quarter were International Equity and Fixed Income, with -8.2% and -3.2% returns, respectively. International equity returns were negatively impacted by a strong U.S. dollar during the quarter. Domestic Equity and Absolute Return provided the greatest cushion, with 2.8% and 1.9% respective returns.

Economic issues and central bank monetary policy had a significant impact on markets during the fourth quarter. With the labor market stabilizing and GDP growth slightly slowing, the Federal Reserve (Fed) cut interest rates twice during the quarter, by one quarter-point in November and again in December, bringing the Fed's target rate to 4.25-4.50% at the end of 2024. U.S. inflation measures were mixed during Q4, with the Consumer Price Index (CPI) measuring 2.9% year-over-year in December versus 2.4% in September, and the Core CPI, which excludes food and energy, measuring at 3.2% versus 3.3% in Q3. Annualized quarter-over-quarter Real GDP growth was 2.3%, down from 3.1% in Q3, likely due in part to lower investment activity. With inflation seemingly stabilizing at 3%, many investors expect the Fed to cut rates maybe once or twice in 2025.

International markets were impacted during the quarter with slow growth in the Eurozone, improvement in Japan, and continued GDP growth in China. Europe's growth for 2025 is

expected to be +1.2%, and the ECB will likely cut rates 4 to 5 times during the year. Japan moved from a contractionary Q3 to 0.5% GDP growth for Q4, and The Bank of Japan (BOJ) is expected to increase interest rates to 0.50% in early 2025. Meanwhile, China has continued its expansion, reportedly reaching 5.4% GDP growth year-over-year.

Overall, Q4 2024 showed slightly negative returns, with domestic equities delivering strong results, but underperformance from international markets and fixed income.

Growth Asset Category

SCERS GROWTH Performance Summary for the periods ending 12/31/24	Quarter	Fiscal YTD	1-Year	Since Inception	Since Inception Date
SCERS GROWTH ASSET CATEGORY	-0.7%	4.5%	13.6%	10.9%	Apr-17
Custom Benchmark	-1.0%	4.3%	12.9%	10.0%	
Global Public Equity	-1.9%	4.5%	15.5%	9.2%	Jul-11
MSCI ACWI IMI	-1.2%	5.5%	16.4%	8.8%	
Private Equity (lagged 1 quarter)	2.3%	4.1%	9.2%	7.3%	Mar-08
Cambridge All PE	2.5%	3.6%	7.3%	11.3%	
Public Credit	1.4%	6.6%	10.2%	4.9%	Dec-13
Custom Benchmark	1.2%	4.9%	8.6%	4.9%	
Private Credit (lagged 1 quarter)	1.2%	3.9%	9.3%	7.8%	Nov-11
Credit Suisse Leveraged Loan + 2%	2.6%	5.0%	11.8%	7.0%	

SCERS' Growth asset category was down -0.7% for the quarter, but outperformed the category benchmark return of -1.0%. Global Public Equity was the weakest performer within the growth asset category, with -1.9% returns. International markets generated negative returns during the quarter, with developed down -7.7% and emerging down -9.4%, largely due to unfavorable currency movements. Domestic equities fared better, thanks in part to a notable market rally in November, with Large Cap Passive returning 2.8% and Large Cap Active returning 3.3%. Small cap stocks underperformed large cap in both domestic and international equity markets—a reversal from last quarter.

SCERS' equity portfolio outperformed domestically, with all domestic segments beating their benchmarks. International segments mostly underperformed; however, international small cap outperformed, returning -4.4% versus its benchmark of -7.9%.

Private Equity, which is lagged by one quarter, delivered positive results despite slightly trailing the benchmark, with SCERS' portfolio up 2.3% versus 2.5% for the benchmark. The fourth quarter saw mixed performance across the portfolio, with positive returns led by a few high-performing growth funds. SCERS' private equity portfolio is up 9.2% and outperforming the benchmark return of 7.3%, over the past year.

Public Credit and Private Credit delivered muted but positive results for the quarter, up 1.4% and 1.2%, respectively. Shorter duration credit outperformed longer duration and distressed credit outperformed non-distressed. SCERS' Public Credit portfolio is up 10.2% and the Private Credit portfolio is up 9.3% over the past year.

<u>Diversifying Asset Category</u>

SCERS DIVERSIFYING Performance Summary for the periods ending 12/31/24	Quarter	Fiscal YTD	1-Year	Since Inception	Since Inception Date
SCERS DIVERSIFYING ASSET CATEGORY	-1.4%	2.5%	3.5%	2.4%	Apr-17
Custom Benchmark	-1.5%	2.3%	3.0%	2.1%	
Fixed Income	-3.2%	2.2%	1.6%	2.2%	Jul-11
Custom Benchmark	-2.6%	2.2%	1.9%	-	
Core/Core Plus Fixed Income	-3.3%	2.5%	1.8%	2.4%	Jul-11
Bloomberg Barclays U.S. Aggregate TR	-3.1%	2.0%	1.3%	2.0%	
U.S. Treasury	-3.1%	1.5%	0.8%	1.0%	Mar-18
Bloomberg Barclays US Treasury TR	-3.1%	1.5%	0.6%	0.9%	
Diversifying Absolute Return	1.9%	2.7%	6.8%	3.1%	Dec-11
HFRI FoF Conservative Index	1.5%	3.1%	6.6%	4.8%	
Dedicated Cash	1.2%	2.5%	5.2%	2.4%	Jul-19
Secured Overnight Financing Rate (SOFR)	1.2%	2.6%	5.4%	2.5%	

SCERS' Diversifying Asset Category delivered mixed results during the quarter. The Core/Core Plus and U.S. Treasury segments declined, while Absolute Return had muted but positive returns. The 10-year Treasury yield ended the quarter at 4.55% compared to 3.79% at the end of Q2. The short term 3-month T-Bill rate decreased during the quarter to 4.34% from 4.64%, amid heightening expectations of pro-growth policies and the possibility of increased inflation. SCERS' Core/Core Plus underperformed during the quarter, returning -3.3% and slightly trailing the benchmark of -3.1%. The Cash and Absolute Return segments had muted but positive returns, helping to offset the asset category's overall results.

The Absolute Return portfolio, which focuses on diversifying strategies with low correlation to equity and bond markets, provided some protection during a time of equity volatility and poor fixed income performance. SCERS' Absolute Return portfolio was up 1.9% for the quarter, outperforming the benchmark return of 1.5%. The Absolute Return portfolio was up an impressive 6.8% for calendar year 2024.

SCERS' Dedicated Cash allocation has continued to benefit from higher short-term interest rates and was up 1.2% and 5.2% for the quarter and 1-year returns, respectively. As the Federal Reserve bank continues to cut interest rates, expectations for cash returns should also come down.

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Real Return Asset Category

SCERS REAL RETURN Performance Summary	Quarter	Fiscal YTD	1-Year	Since Inception	Since Inception Date
SCERS REAL RETURN ASSET CATEGORY					
Real Return w/ SSgA Proxy Custom Benchmark	0.5% 0.2%	2.6% 1.0%	3.5% 0.5%	7.2% 5.4%	Apr-17 Apr-17
Real Estate	0.7%	0.2%	-2.5%	7.8%	Jul-11
Custom Benchmark	0.8%	0.8%	-3.7%	7.2%	
Core Real Estate (as of 12/31/24)					
Commingled Funds NFI-ODCE	0.6% 1.2%	1.3% 1.4%	-0.3% -1.4%	4.6% 4.7%	Oct-08 Oct-08
Non-Core Real Estate (as of 9/30/24)					
Opportunistic Value Add NFI-ODCE net +1%	-1.1% 1.6% 0.3%	-6.8% 2.4% -0.1%	-14.5% 2.5% -7.1%	9.5% 0.1% 6.8% 6.2%	Mar-14 Oct-08 Mar-14 Oct-08
Real Assets (as of 9/30/24)	1.6%	4.5%	8.3%	7.0%	Feb-13
Custom Benchmark	2.3%	4.0%	8.5%	7.3%	
Liquid Real Return (as of 12/31/24)	-3.6%	3.5%	5.1%	3.9%	Jul-19
SSgA Real Assets	-3.6%	-0.9%	0.9%	3.5%	

SCERS' Real Return asset category delivered positive returns for the fourth quarter as positive contributions from Real Estate and Real Assets helped to offset negative returns from Liquid Real Return. The Real Return asset category continued its relative outperformance, with quarterly returns at 0.5% versus the benchmark return of 0.2% and year-to-date returns at 2.6% versus the benchmark return of 1.0%.

SCERS' Real Estate portfolio, which was down -0.5% in Q3, was up 0.7% for the fourth quarter, slightly trailing the benchmark return of 0.8%. SCERS' Real Assets portfolio, where returns are lagged one quarter, delivered muted but positive returns. The Real Assets portfolio was up 1.6%, trailing the benchmark return of 2.3%.

SCERS' Liquid Real Return portfolio was down during the quarter, likely due in part to interest rate movement as well as a decline in commodity prices. However, this performance was in line with the benchmark return of -3.6%.

SCERS' policy index benchmark includes a blended weighted average of the individual asset class benchmarks, as defined within SCERS' Master IPS, and as shown below. No changes to the policy index benchmark were made during the quarter.

SCERS BENCHMARK SUMMARY As of December 31, 2024					
Asset Class	Policy Index Benchmark				
Growth Asset Category	Blended Weighted Average of Asset Class Benchmarks				
Global Equity Private Equity	MSCI ACWI IMI Net Cambridge Associates PE/VC Index 50% (BofA High Yield) + 50% (CS High				
Public Credit Private Credit	Yield) CS Leveraged Loan + 2%				
Diversifying Asset Category	Blended Weighted Average of Asset Class Benchmarks				
Fixed Income	75% Bloomberg Barclays Aggregate Index/25% Bloomberg U.S. Treasury Index				
Diversifying Absolute Return Cash	HFRI FoF Conservative Index Overnight LIBOR/SOFR				
Real Return Asset Category	Blended Weighted Average of Asset Class Benchmarks				
Real Estate	60% (NFI-ODCE) + 40% (NFI-ODCE) +1% 60% (Cambridge Associates Private				
Real Assets	Infrastructure Index) + 30% (Cambridge Associates Private Energy Index) + 10% (NCREIF Farmland Index)				
Liquid Real Return	SSGA Real Return Overlay Proxy *				

^{*}SSGA Real Return Overlay Policy: 15% FTSE EPRA/NAREIT Developed Liquid Index, 25% S&P Global Infrastructure Index, 10% S&P Global Large Mid Cap Commodity and Resources Index, 10% Bloomberg Roll select Commodity Index, 30% Bloomberg Barclays 1-10 year U.S. TIPS Index, and 10% Bloomberg Barclays U.S. Dollar Floating Rate <5 Year Index.

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ATTACHMENTS

- Board Order
- Verus' Investment Performance Review for SCERS for the period ending December 31, 2024

Prepared by:	Reviewed by:
/S/	/S/
Kenter Ludlow Investment Analyst	Eric Stern Chief Executive Officer
	/S/
	Steve Davis Chief Investment Officer



Retirement Board Order Sacramento County Employees' Retirement System

Before the Board of Retirement February 19, 2025

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Total Fund Investment Performance Review Report— Fourth Quarter 2024

THE BOARD OF RETIREMENT hereby accepts the recommendation of staff to receive and file the performance report for the quarter ended December 31, 2024, as presented by Verus.

I HEREBY CERTIFY that the above order was passed and adopted on February 19, 2025 by the following vote of the Board of Retirement, to wit:

AYES:	
NOES:	
ABSENT:	
ABSTAIN:	
ALTERNATES: (Present but not voting)	
James Diepenbrock	Eric Stern
Board President	Chief Executive Officer and Board Secretary







PERIOD ENDING: DECEMBER 31, 2024

Investment Performance Review for

Sacramento County Employees' Retirement System



Verus business update

Since our last Investment Landscape webinar:

- Verus hired Aimee Hauff as a Senior Performance Analyst, Mallory Wallace as Senior Operations Analyst, Chloe Vo as a Performance Analyst, and Mouhamed Diop as an Accounting Specialist in our Seattle office.
- Palmer Pederson was promoted to Consulting Associate on the Not-For-Profit team.
- Ian Toner, CFA, had an in-depth interview with The Journal of Portfolio Management: "CIO Perspectives".
- 2025 Verus Capital Market Assumptions were released.
- Recent research, found at <u>verusinvestments.com/research</u>:
 - Top 10 ideas for 2025: Back to the 90s?
 - Examining the Case for Private Credit
 - Selecting Exceptional Private Markets Managers: Strategies for Success in a Complex Arena
 - Using Fixed Income to Avoid Downside Risk

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Other assets	35
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Recent Verus research

Visit: verusinvestments.com/research

Thought leadership

TOP 10 IDEAS FOR 2025: BACK TO THE 90S?

Every year Verus identifies a series of topics that we believe will be important for investors to consider during the coming year. Some of those tend to be economics or markets focused, while others tend to focus on geopolitics or other broader issues.

SELECTING EXCEPTIONAL PRIVATE
MARKETS MANAGERS: STRATEGIES FOR
SUCCESS IN A COMPLEX ARENA

We examine the curated due diligence that Verus uses to select exceptional private markets managers, how our private market team identifies top-tier private markets managers, and the expertise required to do so.

EXAMINING THE CASE FOR PRIVATE CREDIT

We discuss the benefits of including private credit within an investment program. We also highlight the drawbacks and risks facing the asset class as we look to assist investors in answering the question of where to look for credit exposure.

USING FIXED INCOME TO AVOID DOWNSIDE RISK

Downside risk is the undesirable risk of market volatility. We explore how negative correlation of traditional fixed income to equities may mitigate equity drawdown risk and how these characteristics relate to the more active role that fixed income may play in broader portfolio risk management.



4th quarter summary

THE ECONOMY

- The election of Donald Trump and news of a unified government appears to have positively impacted household and business sentiment. The news has generally been perceived as implying easier business conditions, firmer economic growth, fewer interest rate cuts, and mildly higher inflation. p. 8 & 9
- U.S. inflation drifted upward during Q4, from 2.4% YoY in September to 2.9% in December. Core inflation (ex-food & energy) was fairly stable at 3.2%. Investors now expect the Fed to cut rates once or twice over the next year. Further increases in the rate of inflation could possibly push the Federal Reserve towards a rate hike—an outcome that would likely spook markets. p. 10

EQUITY

- The U.S. (S&P 500 +2.4%) provided a strong quarter while non-U.S. markets lagged. Emerging markets (MSCI EM -8.0%) and international developed (MSCI EAFE -8.1%) both delivered sharp losses, though these losses were caused by currency movements rather than equity weakness. For investors with hedged currency exposure, the MSCI EAFE index produced a +0.1% return. p. 26 & 36
- Small cap and value both continued to underperform. Small cap trailed large cap by -2.4% in Q4, while value trailed growth by -9.1%. This capped off a year of poor returns for both style factors, underperforming by -13% and -19%, respectively. p. 28

FIXED INCOME

- The 10-year U.S. Treasury yield jumped from 3.79% to 4.55% during the quarter, amid growing evidence that the economy may remain hotter than previously believed, and expectations around pro-growth policies of the Trump Administration, as well as the possibility that a tariff spat with trade partners could push inflation upwards. *p. 21*
- Default activity remained low, as the economy was strong and chances of recession have fallen. However, 'distressed exchanges', a renegotiation of debt that does not count as a technical default, have been rising substantially. During the quarter, total distressed credit volume was roughly \$19.4 billion, which marked the second largest quarterly total on record since Q4 2008. p. 24

ASSET ALLOCATION ISSUES

- U.S. election results triggered large market movements in early November. Equities rallied along with most risk assets, while treasury yields jumped materially. Although investors have interpreted this news as generally positive for the future, volatility along the way is also likely. p. 9
- Implied bond market volatility continued to moderate, following record highs that were achieved during the recent U.S. inflation scare. However, volatility levels remain materially above the longer-term average. We suspect that volatility will be elevated on an ongoing basis as investors are fixated on Federal Reserve actions and communications. p. 33

Evidence of a strong U.S. economy, and news of an incoming Trump Administration, have led to shifting expectations around growth, interest rates, and inflation



What drove the market in Q4?

"Donald Trump wins 2024 U.S. election in historic comeback"

Swing State Margin of Victory								
Arizona	Georgia	Michigan	Nevada	NC	Pennsylvania	Wisconsin		
+5.5%	+2.2%	+1.4%	+3.1%	+3.2%	+1.7%	+0.9%		

Article Source: BBC, November 7th, 2024

"Fed cuts by a quarter point, indicates fewer reductions ahead"

Futures Im	Futures Implied Fed Funds Rate									
Jan 25	March 25	May 25	June 25	July 25	Sep 25					
4.32%	4.26%	4.19%	4.09%	4.05%	3.98%					

Article Source: CNBC, December 18th, 2024

"U.S. inflation gauge ticks higher with consumer prices on the rise"

Personal Consumption Expenditures Price Index, Year-over-Year						
June 24	July 24	Aug 24	Sep 24	Oct 24	Nov 24	
2.4%	2.5%	2.3%	2.1%	2.3%	2.4%	

Article Source: PBS, November 27th, 2024

"Dollar hits one-year high as Trump clinches election victory"

ICE U.S. Dollar Index							
July 24	Aug 24	Sep 24	Oct 24	Nov 24	Dec 24		
104.1	101.7	100.8	104.0	105.7	108.5		

Article Source: Bloomberg, November 6th, 2024

U.S. MARKET IMPLIED FUTURE INTEREST RATES



Source: CME Group, as of 1/16/25

PCE INFLATION, YEAR-OVER-YEAR



Source: BEA, as of 11/30/24

ICE U.S. DOLLAR INDEX



Source: ICE, as of 12/31/24



Economic environment



U.S. economics summary

- In early November, U.S. election results were announced, confirming the election of Donald Trump and a unified government as Republicans took the House and Senate. Household surveys and market movements suggest that the coming years may be characterized by easier business conditions, firmer economic growth, fewer interest rate cuts, and perhaps mildly higher inflation.
- Real GDP growth slowed during Q4, from 3.1% to 2.3% quarter-over-quarter annualized (2.5% year-over-year), but remained fairly robust. Economic growth continues to be supported largely by consumer purchases, with increases in government spending also providing notable support. Investment fell and was the largest drag on the economy.
- The Federal Reserve cut interest rates once in November and again in December—each time by a quarter point. This brought the Fed's target rate from 4.75-5.00% down to 4.25-4.50%.
- U.S. inflation drifted upward during Q4, from 2.4% YoY in September to 2.9% in December. Core inflation (ex-food &

- energy) was fairly stable at 3.2%. Investors now expect the Fed to cut rates once or twice over the next full year. Further increases in the rate of inflation could potentially push the Federal Reserve towards a rate hike—an outcome that would likely spook markets.
- The labor market was broadly stable during the quarter. Unemployment remained at 4.1%, while the labor participation rate moved slightly lower. December nonfarm payrolls exceeded expectations, coming in at 256,000, which was 91,000 higher than forecast. Moderate, but stable, labor conditions further eased fears that the rise in unemployment of late-2023 might have indicated a trend towards recession.
- Consumer sentiment has improved materially since the results of the U.S. election became known. In November, small business optimism showed the largest monthly jump since 1980.
 Significant improvements in sentiment should bode well for household and business spending in the near-term.

	Most Recent	12 Months Prior
Real GDP (YoY)	2.5% 12/31/24	3.2% 12/31/23
Inflation	3.2%	3.3%
(CPI YoY, Core)	12/31/24	12/31/23
Expected Inflation (5yr-5yr forward)	2.3% 12/31/24	2.5% 12/31/23
Fed Funds Target	4.25–4.50%	5.25–5.50%
Range	12/31/24	12/31/23
10-Year Rate	4.55 % 12/31/24	3.88% 12/31/23
U-3	4.1%	3.7%
Unemployment	12/31/24	12/31/23
U-6	7.5%	7.1%
Unemployment	12/31/24	12/31/23



Examining notable movements of Q4

Conditions shifted in Q4, fueled by economic surprises & U.S. election results



Source: S&P, FTSE Russell, Bloomberg, ICE, as of 12/31/24



Inflation

U.S. inflation (CPI) drifted upward during the quarter, from 2.4% year-over-year in September to 2.9% in December. Meanwhile, core inflation (excluding food & energy) was fairly stable year-over-year, at 3.2% in December. Investors now expect the Fed to cut rates perhaps once or twice over the next year, but the outcome, as always, will depend on the strength of the labor market and the trend of inflation. Further inflation pressures could potentially push the Federal Reserve towards a rate hike—an outcome that would likely spook markets. This is certainly not our expectation, but it is a risk worth watching.

In prior guarters we discussed topics such as deflationary trends in certain goods and services prices, as well as the

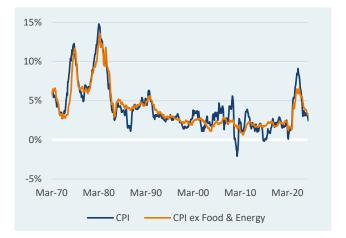
gradual decline of inflation (albeit slow) towards the Fed's 2% target. Based on recent gains in consumer sentiment and very large gains in business sentiment, as well as positivity around the business and economic effects of a second Trump presidency, we are not as optimistic that inflation will move materially lower from this point. Instead, inflation appears to have stabilized around 3%, with more risks to the upside than to the downside.

Investors will likely remain focused intently on monthly economic data and how the Federal Reserve reacts to data surprises. Also, the good news is bad news market dynamics may continue, as strong economic data reduces the chance of rate cuts and therefore may be interpreted negatively.

Certain goods & services prices have been softening, but other areas have been rising at a concerning pace

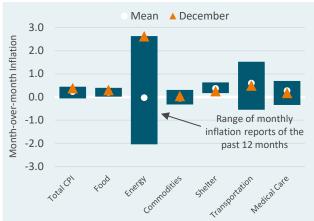
Energy prices fueled a hot December figure

U.S. CPI (YOY)



Source: BLS, as of 12/31/24

DECEMBER INFLATION REPORT



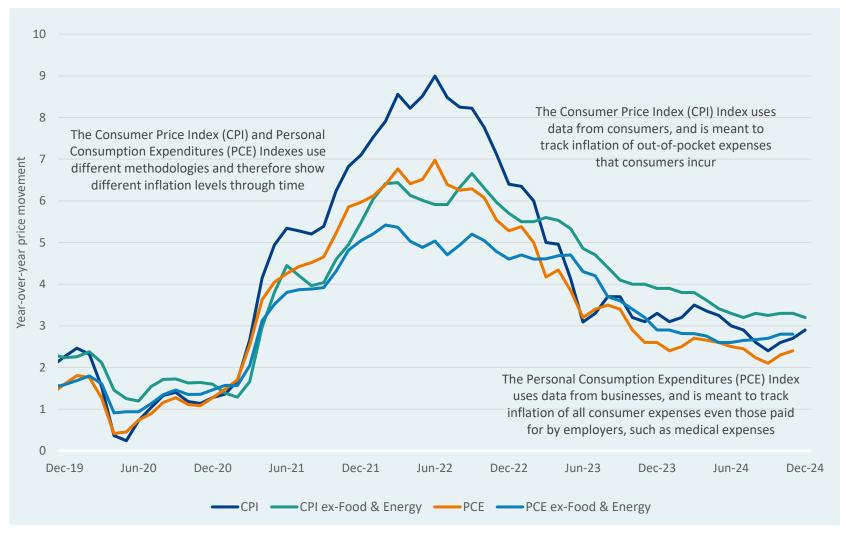
Source: BLS, Verus, of 12/31/24. Commodities exclude food and energy Source: BLS, as of 12/31/24

MONTHLY PRICE MOVEMENT (CPI)





Inflation stabilizing above Fed's target



The rate of inflation appears to be stabilizing *above* the Fed's target of 2%

A surprisingly strong economy and ongoing price pressures have led investors to expect fewer interest rate cuts in 2025

Source: FRED, Verus, as of 12/31/24 – or most recent release



GDP growth

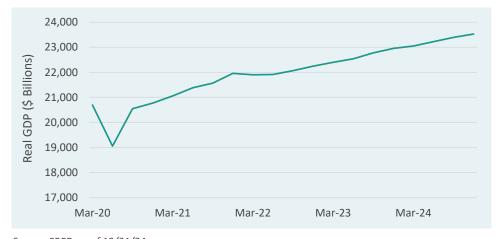
Real GDP growth slowed during Q4, from 3.1% to 2.3% quarter-over-quarter annualized (2.5% year-over-year), but remained fairly robust. Economic growth continues to be supported largely by consumer spending, with increases in government expenditures also providing notable support. Investment fell, and was the largest drag on the economy, followed by fewer imports. Spending gains were broad across goods and services—increases in healthcare spending acted as the largest change. Goods spending was boosted most notably by recreational goods and vehicles. The acceleration of government expenditures was fueled by employee compensation increases.

Economists and investors expect U.S. economic growth to slow

during 2025, reflecting more modest consumer spending as households face higher costs and lower savings rates. The U.S. economy is likely headed towards a more moderate growth phase after many quarters of surprisingly hot growth and spending. Unlike past periods of economic weakening, many trends today could reasonably be summarized as a return to normalcy. For example, following the pandemic, the domestic labor market was experiencing a historic mismatch between the number of jobs available and the number of workers available. Resolving that mismatch required a material weakening of the labor market from extreme tightness to relatively strong, but not a move towards something that suggests recession.

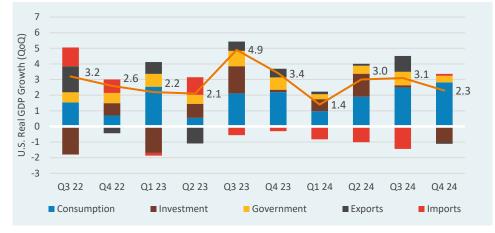
U.S. real GDP growth slowed during Q4, reflecting strong consumer spending but lower levels of private investment

U.S. REAL GROSS DOMESTIC PRODUCT



Source: FRED, as of 12/31/24

U.S. REAL GDP COMPONENTS (QOQ)



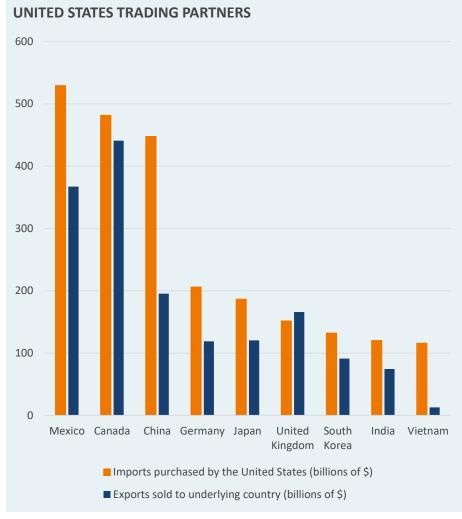
Source: FRED, as of 12/31/24



Trade negotiations: possible areas of focus

Since the re-election of Donald Trump, the topic of U.S. trade has been thrusted back into the spotlight. While the President has publicly threatened large, across-the-board tariffs, lessons learned from the first Trump Administration suggest this may be a negotiation tactic. It is more likely that tariffs will be used tactically, without broad and large increases as some investors fear.

Here we provide an overview of the United States' largest trading partners, through two lenses: the total amount of goods and services that the U.S. purchases from each of our largest trading partners, and the total amount of goods and services that these trading partners purchase from the United States. The countries that sell a significant amount of goods and services to the U.S., but do not purchase nearly as much, may become targets for trade negotiation in the near future.



Countries
which sell a
significant
amount of
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purchase
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negotiation

Source: Bureau of Economic Analysis, as of 2023



Labor market

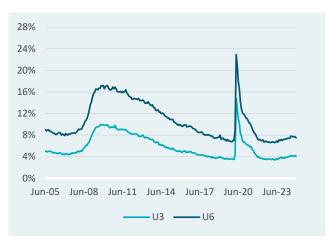
The labor market was broadly stable during the quarter. Unemployment remained at 4.1%, while the labor participation rate moved slightly from 62.7% to 62.5%. Labor data surprised to the upside in December with nonfarm payrolls exceeding expectations, coming in at 256,000, which was 91,000 higher than expectations for 165,000. Layoffs have been moving higher and are now back to pre-pandemic levels. Moderate, but stable, labor conditions have further eased fears that the rise in unemployment of late-2023 might have indicated a trend towards recession.

In recent editions of this document, we have explained that immigration, and specifically the difficulties of quantifying

unlawful immigration, have made certain labor statistics very difficult to interpret. Determining between a weak or strong job market, or whether the market is trending towards slack or tightness, requires data that is accurate and granular in nature. Relatively small changes in the size, or changes in trend, of the labor market can have real impacts on wage levels, the strength of the economy, and spending, for example. With the new administration coming into office, and many changes to border enforcement and overall immigration policy likely forthcoming, it will be important to closely monitor how these changes incrementally impact the size, trend, and nature of the U.S. job market.

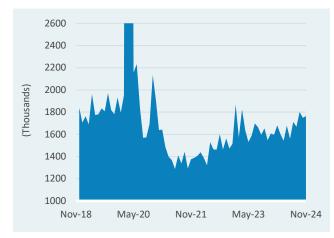
The job market appears to have shifted from extremely tight to fairly balanced, and is now showing greater stability

U.S. UNEMPLOYMENT



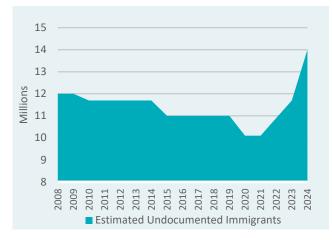
Source: FRED, as of 12/31/24

LAYOFFS



Source: FRED, as of 11/30/24

U.S. UNDOCUMENTED IMMIGRANTS



Source: Center for Immigration Studies



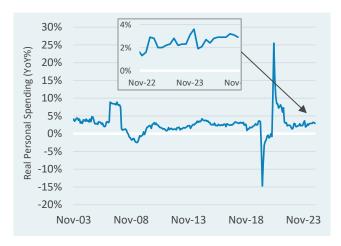
The consumer

Inflation adjusted personal spending growth was 2.9% year-over-year in November, remaining in a robust range. It is expected that consumer spending will slow in 2025, leading to a more moderate pace of overall economic growth.

The average cost of household debt payments has been rising in recent years, moving towards pre-pandemic levels. A helpful way to gauge the average household *debt burden* is to examine average monthly debt payments as a percentage of average monthly disposable income. This metric shows an important aspect of rising interest rate environments—higher interest rates gradually feed through to household costs over

time, rather than all at once. This is due to fixed rate borrowing—most Americans who own a home or a car, for example, are not as impacted by higher interest rates for those items until they purchase a new home or purchase a new car and are then exposed to higher rates. As time goes by, more households must eventually make large purchases and therefore must borrow at higher rates. As this occurs, the higher costs of debt continues to eat into budgets. This hurts economic growth, as households must either reduce overall spending, or save less money—as observed recently. We expect that, although the economy is strong, this effect will act as an incremental drag on spending for years to come.

REAL PERSONAL SPENDING



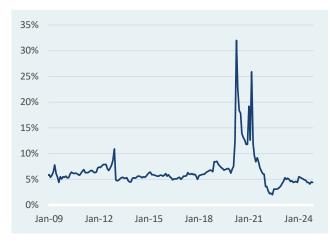
Source: FRED, as of 11/30/24

HOUSEHOLD DEBT PAYMENTS AS % OF DISPOSABLE INCOME



Source: FRED, as of 12/31/24

PERSONAL SAVINGS RATE



Source: FRED, as of 11/30/24

Sentiment

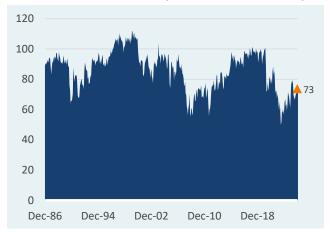
Consumer sentiment has improved materially since the results of the U.S. election became known. In November with small business optimism showing the largest monthly jump since 1980. Significant improvements in sentiment should bode well for household and business spending in the near-term.

According to the University of Michigan Consumer Sentiment survey, households expressed more optimism around the economy in December. Year-ahead inflation expectations changed, rising substantially to 3.3%, while long-run inflation expectations were more stable. We suspect ongoing news coverage and fear around tariffs has impacted expectations.

Throughout 2022, small business optimism had declined as companies grappled with high materials prices and labor shortages. Optimism remained very poor in the following years, until November showed the largest single-month increase in sentiment since 1980. As explained by NFIB Chief Economist Bill Dunkelberg, "Main Street also became more certain about future business conditions following the election, breaking a nearly three-year streak of record high uncertainty. Owners are particularly hopeful for tax and regulation policies that favor strong economic growth as well as relief from inflationary pressures."

Consumer sentiment improved in Q4, while small business sentiment showed the largest monthly gain since 1980

CONSUMER SENTIMENT (UNIV. OF MICHIGAN)



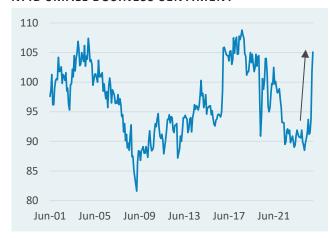
Source: University of Michigan, as of 12/31/24

CONSUMER CONFIDENCE (CONFERENCE BOARD)



Source: Conference Board, as of 12/31/24

NFIB SMALL BUSINESS SENTIMENT



Source: NFIB, as of 12/31/24

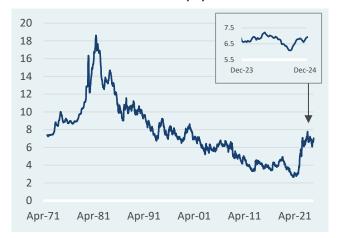
Housing

The average 30-year mortgage rate jumped materially during the quarter, from 6.1% to 6.9%, alongside broader rises across the yield curve. Meanwhile, home prices have increased 3.4% year-over-year as of October, according to CoreLogic. These conditions have led to sustained extreme difficulties in affordability for many Americans. However, some aspects of the market have moved in a more favorable direction, such as total housing inventory, at 953,000 in November, closer to the level of 1,143,000 in November 2019 (pre-pandemic). Inventory reached a low of 346,000 in February 2022. The average days on the market of homes for sale has also risen to 62 days in November, which compares to 67 days in November 2019—suggesting that more power resides with homebuyers. This metric reached a low of 30 in April 2022. Overall, it appears that the market will

likely remain incredibly expensive, but perhaps with a more normal supply/demand balance. If inventory continues increasing and homes sit longer on the market, this may pressure sellers to reduce prices in the future in order to incentivize buyers who have more inventory to choose from.

While home purchase affordability remains dire, the average cost of rent continues to fall nationwide. According to Redfin, in November rent costs were down -0.7% year-over-year and rents are now back to March 2022 levels. Substantial increases in multifamily supply have reportedly contributed to downward rent pressure, with the median asking rent price falling to \$1.79 per square foot for the first time since November 2021.

30-YEAR MORTGAGE RATE (%)



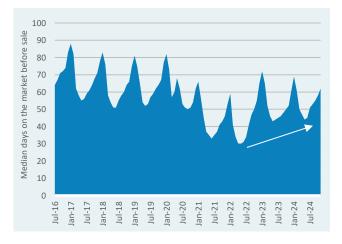
Source: Freddie Mac, as of 12/31/24

EXISTING HOME SALES



Source: National Association of Realtors, as of 11/30/24

AVERAGE DAYS ON THE MARKET



Source: FRED, as of 11/30/24

International economics summary

- The Eurozone grew only 0.9% YoY Q3. The region is also expected to show slow growth in 2025, with a +1.2% consensus estimate for the Euro Area. High energy prices have negatively impacted manufacturing and other business activities, while competition from China has also had dire impacts. Once the industrial heart of Europe, Germany's manufacturing sector faces an uncertain future.
- Inflation has moderated across most global economies, with the European Central Bank (ECB) rounding out the year with its fourth interest rate cut. The ECB has shown a shift in concern away from inflation and towards growth—removing official language regarding keeping rates "sufficiently restrictive." Economists now expect 4-5 rate cuts during 2025, to a rate level that is believed to be neutral to growth or slightly stimulative.
- After slipping into contractionary territory last quarter, the Japanese economy rebounded in Q3, delivering

- growth of +0.5%. This coincided with a slight uptick in inflation, now at 3%. Growth has been assisted by a weak Yen, which makes exports cheaper for other countries to purchase. Domestic consumer demand has also provided a tailwind for growth and led to expectations of a more normal interest rate environment, with the Bank of Japan now expected to increase interest rates to 0.50% by March.
- China was reportedly able to achieve the official GDP growth target in 2024, claiming growth of 5.4% year-overyear, though the economy still faces deep structural issues. China is heavily reliant on exports, which may be interrupted by U.S. tariffs in the case of a trade spat. Home prices continue to fall alongside oversupply and weaker economic conditions. Deflation fears are weighing on consumer spending. Alongside these near-term issues, a declining population poses a multitude of problems to the overall economy, spending, and the housing market.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United	2.5%	2.9%	4.1 % 12/31/24
States	12/31/24	12/31/24	
Eurozone	0.9 %	2.4%	6.3%
	9/30/24	12/31/24	11/30/24
Japan	0.5 % 9/30/24	3.0% 12/31/24	2.4% 11/30/24
BRICS	4.5 % 9/30/24	2.1%	5.2%
Nations		12/31/24	12/31/24
Brazil	4.0%	4.8%	6.1%
	9/30/24	12/31/24	11/30/24
Russia	3.1%	9.5%	2.3%
	9/30/24	12/31/24	11/30/24
India	5.4%	5.2%	7.1%
	9/30/24	12/31/24	12/31/24
China	5.4%	0.1%	5.1%
	12/31/24	12/31/24	12/31/24

NOTE: India lacks reliable government unemployment data. Unemployment rate shown above is estimated from the Centre for Monitoring Indian Economy. The Chinese unemployment rate represents the monthly surveyed urban unemployment rate in China.



International economics

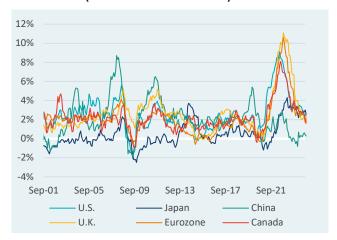
The Eurozone grew only 0.9% YoY Q3. The region is expected to show slow growth in 2025 of +1.2%. The ECB has communicated 4-5 rate cuts during the year, as low growth remains a concern, and the 2% inflation target has nearly been achieved. Although growth rates have ticked up slightly, strong headwinds remain. Many countries face high energy costs, greater competition from China, and deep side effects from a languishing Chinese economy. Europe's largest industrial power, Germany, has taken the brunt of these effects, with manufacturing activity contracting for many quarters.

The U.K. faces economic headwinds of its own, as tax increases introduced by the Labour Party, and uncertainty surrounding potential shifts in global trade due to a second Trump presidency, have made growth difficult for local companies. While inflation dropped in December to 2.5%, price

growth remains at levels that are too high for comfort. Despite the threat of inflation, economists expect four rate cuts in 2025.

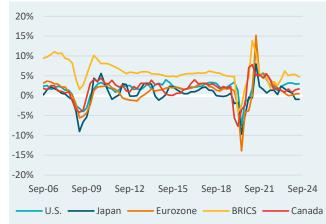
The Japanese economy has recently seen increasing costs, most notably in energy and food. An uptick in inflation following the pandemic and union wage negotiations led the Bank of Japan to reverse their negative interest rate policy in July, as they seek normalization and consistent growth. The BoJ is expected to hike interest rates to 0.5% in late January or March to the highest level in 17 years. Broad wage hikes were recently agreed upon between labor unions and employers, which were a prerequisite for the continued hiking of interest rates, which are expected to eventually reach 1%.

INFLATION (CPI YEAR-OVER-YEAR)



Source: BLS, Verus, as of 12/31/24

REAL GDP GROWTH (YEAR-OVER-YEAR)



Source: BLS, Verus, as of 9/30/24

Q3 REAL GDP GROWTH (YOY)



Source: BLS, Verus, as of Q3 2024

Fixed income rates & credit



Fixed income environment

- The Federal Reserve cut interest rates once in November and again in December—each time by a quarter point. This brought the target rate from 4.75-5.00% to 4.25-4.50%. Rate expectations for 2025 have shifted, as better economic growth expectations and firmer inflation will likely lead the Fed towards fewer rate cuts.
- The 10-year U.S. Treasury yield jumped from 3.79% to 4.55% during the quarter, amid growing evidence that the economy may remain hotter than expected, expectations around pro-growth policies of the Trump Administration, as well as the possibility that a tariff spat with trade partners could push inflation upwards.
- Most credit indices delivered negative to slightly positive returns, with rising interest rates impacting durationsensitive assets. Bank loans, which are much less sensitive to rate movements, returned +2.3%. High yield delivered slightly positive returns of +0.2% while investment grade lost -2.7%.

- Credit spreads were broadly tighter, a reflection of continued strength in the U.S. corporate sector. Lower-quality high yield bond spreads fell by -30bps to 2.7%, while investment grade spreads tightened slightly to 0.8%. Credit spreads across all ratings remain well below long-term historical averages, suggesting investors are confident in the ability of businesses to service debt.
- High yield default activity remained low, falling to 1.1%—down from 2.6% one-year prior. This compares to the long-term annual average of 3.4%.
 However, distressed exchange activity, particularly among LMEs, has continued to expand. Total distressed credit volume reached \$19.4 billion in Q4, far surpassing the previous quarter of \$13.5 billion. The level of Q4 was the second largest quarterly total on record since Q4 2008, with Q3 of 2024 being the third highest total on record.

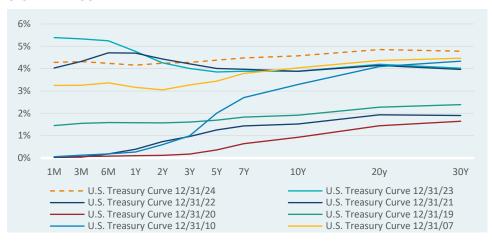
	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	(3.1%)	1.3%
Core Plus Fixed Income (Bloomberg U.S. Universal)	(2.7%)	2.0%
U.S. Treasuries (Bloomberg U.S. Treasury)	(3.1%)	0.6%
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	(9.4%)	(8.0%)
U.S. High Yield (Bloomberg U.S. Corporate HY)	0.2%	8.2%
Bank Loans (S&P/LSTA Leveraged Loan)	2.3%	9.0%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	(7.0%)	(2.4%)
Emerging Market Debt Hard (JPM EMBI Global Diversified)	(1.9%)	6.5%
Mortgage-Backed Securities (Bloomberg MBS)	(3.2%)	1.2%

Source: Standard & Poor's, J.P. Morgan, Bloomberg, as of 12/31/24



Yield environment

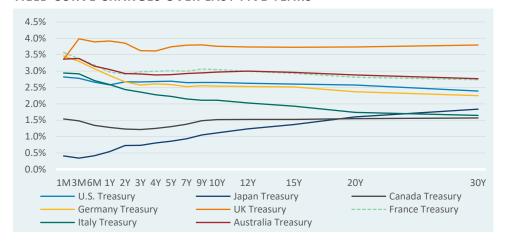
U.S. YIELD CURVE



GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 12/31/24



Credit environment

During the fourth quarter, longer duration credit underperformed shorter duration despite a 50bps rate cut by the Federal Reserve. Stronger economic growth expectations, sticky inflation, and a general repricing of the future Federal Funds Rate path, contributed to a rapid rise in the long end of the yield curve. Long duration investment grade corporate bonds (Bloomberg U.S. Long Corporate Credit) lost -6.3%. Bank loans added +2.3% (CS Leveraged Loans) while high yield returned +0.2% (Bloomberg U.S. Corporate High Yield).

Returns within the high yield bond market were mixed, with lower quality credits experiencing the best performance. Bonds rated CCC, which include distressed credit, returned +2.5%, compared to non-

distressed CCC-rated bonds which gained only +1.6%. Bonds rated B produced slightly positive returns of +0.3%, while BB-rated bonds lost -0.5% over the same period. Similarly, lower quality bank loans outperformed higher quality. CCC-rated loans returned +2.7%, compared to +2.6% and +2.1% for B- and BB-rated loans, respectively.

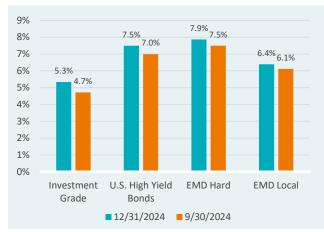
Credit spreads were broadly tighter, a reflection of continued strength in the U.S. corporate sector. Lower-quality high yield bond spreads fell by -30bps, to 2.7%, while investment grade spreads tightened slightly to 0.8%. Credit spreads across all ratings remain well below long-term historical averages, suggesting investors are confident in the ability of businesses to service debt.

SPREADS



Source: Barclays, Bloomberg, as of 12/31/24

YIELD TO MATURITY



Source: Bloomberg, J.P. Morgan as of 12/31/24

CREDIT SPREAD (OAS)

Market	12/31/24	12/31/23
Long U.S. Corp	1.0%	1.2%
U.S. Inv Grade Corp	0.8%	1.0%
U.S. High Yield	2.7%	3.2%
U.S. Bank Loans*	4.5%	5.0%

Source: Barclays, Credit Suisse, Bloomberg, as of 12/31/24 *Discount margin (4-year life)



Default & issuance

Default activity remained low during Q4, as economic data was strong and trends overall suggested a lower chance of near-term recession. During the period, \$27.9 billion of bank loans and high yield bonds were affected by default or distressed exchanges, well over double the \$11.0 billion in the prior quarter. Year-to-date, 38 companies defaulted, totaling more than \$4.8 billion in bonds and \$23.8 billion in loans.

While defaults have remained subdued, distressed exchange activity has increased rapidly. During the quarter, total distressed credit volume was roughly \$19.4 billion, surpassing the \$13.5 billion pace in Q2. This marked the second largest quarterly total on record since Q4 2008. However, the year-to-date combination of defaults and distressed exchanges of \$83.6 billion was still 3% less than the total of 2023.

High yield bond default rates continued their decline, falling to 1.1%, down from 2.6% one year ago. The current figures remain well below the long-term annual average of 3.4%. Recovery rates hit record lows in Q4, but ended the quarter at 24.8%, depressed relative to earlier quarters and 32.8% experienced during 2023.

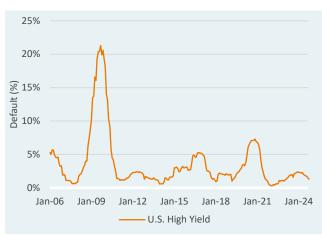
New issuance volume for high yield bonds was lower for the quarter, totaling \$49 billion, compared to \$74 billion in Q3. Bank loans saw record levels of issuance, reaching a record \$515 billion, up from \$204 billion. A further reduction in lending rates and credit spreads likely acted as a catalyst for higher issuance in bank loans as companies are able to issue and refinance their debt at more competitive rates.

U.S. BANK LOAN DEFAULTS (LAST 12 MONTHS)



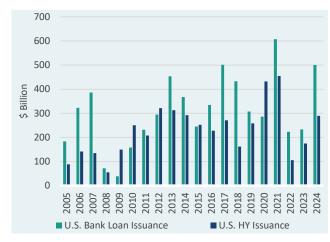
Source: BofA Merrill Lynch, Verus, as of 12/31/24 - par weighted

U.S. HY SECTOR DEFAULTS (LAST 12 MONTHS)



Source: BofA Merrill Lynch, as of 12/31/24 – par weighted

U.S. ISSUANCE (\$ BILLIONS)



Source: BofA Merrill Lynch, as of 12/31/24



Equity



Equity environment

- Global equities were mixed during Q4. Emerging markets (MSCI EM -8.0%) and international developed (MSCI EAFE -8.1%) delivered poor returns to U.S. investors with unhedged currency exposure, though most of those losses were driven by currency movement. During 2024, large currency moves created a wide gap between U.S. and non-U.S. returns. For example, currency hedged Japanese equities slightly outperformed U.S. (S&P 500 +25.0%, TOPIX +25.8%) but returned only +8.0% on an unhedged basis
- Expectations for interest rate cuts lessened after economic strength and stubborn inflation led the Fed to emphasize that they would not budge on their 2% inflation target. The higher for longer interest rate narrative likely contributed to U.S. dollar strength during the quarter.
- S&P 500 earnings growth is expected to be +11.9% for Q4,

- which would mark the highest growth rate of the past three years. Financials (+39.5%) led the way, followed by Communication Services (+20.7%), while Energy (-24.6%) was a drag on the index.
- Small cap and value both continued to underperform. Small cap trailed large cap by -2.4% (Russell 2000 +0.3% vs. Russell 1000 +2.7%) in Q4, while growth outperformed value by +9.1% (Russell 1000 Growth +7.1% vs. Russell 1000 Value -2.0%). This capped off a year of poor performance for both of these size and style factors, underperforming by -13% and -19%, respectively.
- Market-priced volatility (Cboe VIX Index) was stable during Q4, beginning the quarter at 16.7% and ending at 17.4%. While the level of volatility has been far less than what was experienced during the spike in August, a few bouts of volatility occurred throughout the quarter.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	2.4%		25.0%	
U.S. Small Cap (Russell 2000)	0.3%		11.5%	
U.S. Equity (Russell 3000)	2.6%		23.8%	
U.S. Large Value (Russell 1000 Value)	(2	2.0%)	14.4%	
U.S. Large Growth (Russell 1000 Growth)	7.1%		33.4%	
Global Equity (MSCI ACWI)	(1.0%)	1.4%	17.5%	21.0%
International Large (MSCI EAFE)	(8.1%)	0.1%	3.8%	14.1%
Eurozone (EURO STOXX 50)	(8.9%)	(1.4%)	4.1%	12.9%
U.K. (FTSE 100)	(6.8%)	(0.1%)	7.7%	9.9%
Japan (TOPIX)	5.4%	6.7%	8.0%	25.8%
Emerging Markets (MSCI Emerging Markets)	(8.0%)	(4.3%)	7.5%	13.3%

Source: Standard & Poor's, FTSE, MSCI, STOXX, JPX, as of 12/31/24



Domestic equity

U.S. equities outperformed both international and emerging markets, with the S&P 500 ending Q4 up +2.4%. The market rallied in early November following the re-election of President Trump, which seems to have provided an animal spirits boost to sentiment, with markets pricing in firmer growth, a bit higher inflation, and elevated interest rates. Later in December, comments from Fed Chair Jerome Powell led markets to expect fewer rate cuts in 2025, which was received poorly by investors.

Earnings came in above expectations. The S&P 500 delivered year-over-year earnings growth of +5.9% in Q3, greater than the +4.2% growth that was expected going into the quarter. Growth expectations are very bullish for the final quarter of the year, with the S&P 500 forecast to

deliver growth of +11.9%. Financials (+39.5%) are expected to deliver the highest growth, with expectations also lofty for Communication Services (+20.7%) and Information Technology (+12.9%).

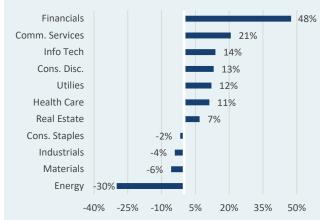
While valuations have been rising throughout the year, they remained at a consistent level over the course of Q4. On top of elevated valuations, U.S. equities are expected to deliver strong earnings growth of 14.8% and 13.6% in 2025 and 2026, respectively. If the U.S. market fails to achieve these estimates, it would place further upward pressure on valuation levels.

S&P 500 PRICE INDEX



Source: Standard & Poor's, as of 12/31/24

S&P 500 BLENDED EPS GROWTH (YOY)



Source: Factset, as of 12/31/24

S&P 500 EPS GROWTH (YEAR-OVER-YEAR)



Source: Factset, Verus, as of 1/17/25



Domestic equity size & style

Small cap and value both continued to underperform. Small cap trailed large cap by -2.4% (Russell 2000 +0.3% vs. Russell 1000 +2.7%) in Q4, while growth outperformed value by +9.1% (Russell 1000 Growth +7.1% vs. Russell 1000 Value -2.0%). This capped off a year of poor performance for both of those size and style factors, underperforming by -13% and -19%, respectively.

The Magnificent 7 stocks delivered an exceptional +67.3% during 2024, substantially outperforming the index. However, recent years have shown investors that mega-cap growth stocks can both act as a big boost to overall index returns or lead the index lower with large losses. The Magnificent 7 stocks delivered 21.7% earnings growth year-over-year in Q4, while the rest of the index reported 9.7% growth, per FactSet. But forecasts are for Magnificent 7 earnings growth to begin to converge with the broader index during 2025 (20.3% year-over-year in Q4 2025 relative to 15.4% overall for the index). If these stocks begin to stand out less from the rest of the S&P 500 in terms of growth, performance may become less differentiated, which could have a notable impact on size and style factor performance.

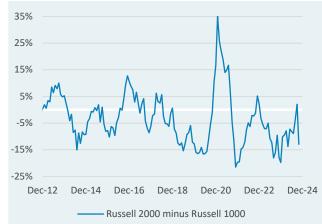
Small cap & value lagged in Q4, lagging in 2024 by -13% and -19%, respectively

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE, as of 12/31/24

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE Russell, as of 12/31/24

1-YEAR SIZE & STYLE PERFORMANCE

	Value	Core	Growth
Large Cap	14.4%	24.5%	33.4%
Mid Cap	13.1%	15.3%	22.1%
Small Cap	8.1%	11.5%	15.2%

Source: FTSE Russell, as of 12/31/24



International developed equity

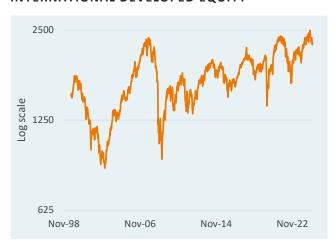
International developed shares (MSCI EAFE -8.1%) underperformed both the U.S. market (S&P 500 +2.4%) and emerging market equities (MSCI EM -8.0%). Most of this underperformance was due to currency movements rather than equity market behavior. On a hedged basis, international developed markets delivered slightly positive returns (+0.1%), with currency contributing losses of -8.2%.

European equities performed very poorly over the course of the quarter, falling -9.7% (MSCI Europe, -2.4% on a hedged basis), and acting as a drag on the overall index. European economies face turmoil due to political instability and a fairly bleak macroeconomic picture. Europe's largest economy, Germany, experienced a second consecutive year of contracting growth. Germany faces high energy costs, weak global demand for its

exports, and risks that its automobile manufacturers are left behind as electric vehicle competition heats up from Chinese and American manufacturers. In early December, the French government fell apart after Prime Minister Michel Barnier was ousted in a no-confidence vote. This followed Mr. Barnier's controversial move to use special powers to force through his budget without a vote.

Currency moves also played a major role during the past year. Domestic investors without a currency hedging program lost -10.3% from currency volatility regarding their international equities (MSCI EAFE). The impact from unhedged Japanese asset exposure was particularly extreme—investors without a currency hedging program lost -17.8% from currency moves over the past year (TOPIX Index).

INTERNATIONAL DEVELOPED EQUITY



Source: MSCI, as of 12/31/24

MSCI EAFE HEDGED VS UNHEDGED



Source: MSCI, as of 12/31/24

REGIONAL RETURNS OF INTL. DEVELOPED



Source: MSCI, as of 12/31/24



Emerging market equity

Emerging market equities (MSCI EM -8.0%) underperformed U.S. markets (S&P 500 +2.4%) during the quarter, and narrowly outperformed international developed equities (MSCI EAFE -8.1%). While not as drastic as seen across international developed equities, currency movements were also a drag on performance, with the hedged index returning -4.3%.

During 2024, Chinese equities clawed back some of the losses of prior years, gaining +19.4% (MSCI China) relative to the broader index return of +7.5%. The Chinese Communist Party (CCP) has struggled to instill confidence in its citizens to look

past China's various structural problems, and to have faith in the country's economic future and therefore to spend more freely. A severe drop in residential property prices has had a large impact on confidence, as the average citizen has most of their wealth and retirement savings in home equity. Much of that wealth has disappeared. Investors continue to wait for some sort of aggressive policy response or stimulus from the CCP. In September, major government announcements were made regarding market and economic stimulus, which sent the MSCI China Index up nearly +50%. However, the finer details of those plans were seen as lackluster by investors, and index prices had headed back down towards prior levels.

EMERGING MARKET EQUITY



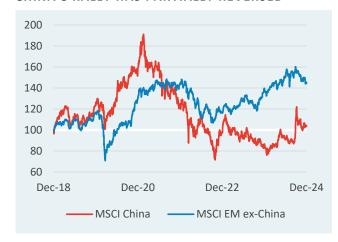
Source: MSCI, as of 12/31/24

MSCI EM 2024 COUNTRY RETURNS (USD)



Source: MSCI, J.P. Morgan, as of 12/31/24

CHINA'S RALLY HAS PARTIALLY REVERSED



Source: MSCI, as of 12/31/24



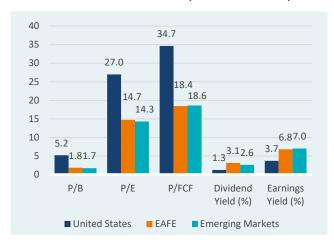
Equity valuations

Domestic equity valuations remained very elevated but were unchanged in Q4. A moderate return of +2.4%, combined with slightly higher expected earnings over the next 12 months, led the S&P 500 to continue to trade at a forward price-to-earnings of 22 during the quarter.

A historically wide gap between U.S. equity valuations and international equity valuations has drawn much attention in recent years. Domestic equities (S&P 500) trade at a 60% premium to international developed equity (MSCI EAFE Index) on a forward price-to-earnings bases, as of the end of the quarter. At first glance this may suggest that international

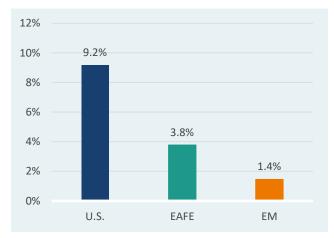
equities provide a particularly attractive opportunity for investors. However, these markets, specifically in Europe, face relatively sluggish growth—much of this due to China's structural problems and economic slowdown. Europe has also faced a fairly severe lack of business innovation and entrepreneurialism—much of that driven by weak venture capital funding activity—lagging the U.S. in terms of earnings growth and new business formation. Additionally, changes in marketplace characteristics within the U.S. index help describe some of the valuation "gap", with a greater proportion of the index being comprised of high growth companies that tend to command higher valuation multiples.

MSCI VALUATION METRICS (3-MONTH AVG)



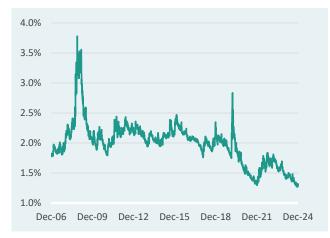
Source: MSCI, Verus, as of 12/31/24 – trailing P/E

FORWARD P/E PERCENTAGE CHANGE IN 2024



Source: MSCI, Verus, as of 12/31/24

S&P 500 HISTORICAL DIVIDEND YIELD



Source: Standard & Poor's, Verus, as of 12/31/24



Quant equity hedge funds outperform

Quantitative equity hedge funds in 2024 had their best year in at least 20 years, as measured by the HFRI Equity Market Neutral and Quantitative Directional indices. Equity Market Neutral returned 10.9% and Quantitative Directional gained 17.0%, the highest annual returns for each since 2000 and 2003, respectively.

These strategies have outpaced their fundamental peers in the last few years while keeping up with global equity indices over the same time. We think this quantitative outperformance and the success of Equity Market Neutral funds are related, as both strategies typically use similar techniques such as statistical arbitrage or factor investing.

One of the market factors that may be contributing to quantitative strategies' success is the increase in single stock dispersion, which measures the variance in index constituent returns vs. the overall index. Higher dispersion, along with lower intra-stock correlation, theoretically should support strong potential returns for quant programs, which typically hold large numbers of stocks and take a relative value approach.

CALENDAR YEAR RETURNS (%)



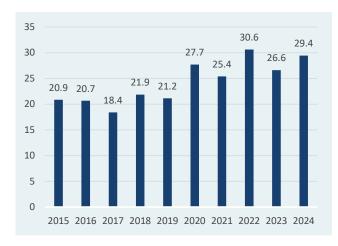
Source: MPI, Morningstar, MSCI, HFR

3-YEAR ROLLING RETURN



Source: HFR, MPI, as of 12/31/24

AVERAGE IMPLIED STOCK DISPERSION - S&P 500



Source: S&P DowJones, CBOE S&P 500 Dispersion Index (DSPX)



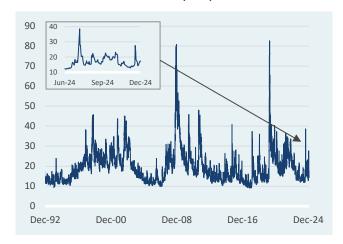
Market volatility

Market-priced volatility (Cboe VIX Index) rose slightly during Q4, beginning the quarter at 16.7% and ending at 17.4%. While the level of volatility was much less than what was experienced during the historic spike in August, a few bouts of volatility did occur throughout the quarter. Implied volatility was above average in the immediate lead-up to the presidential election, reaching 23.4%, while settling back down to below 17% after the results were known. Market volatility increased to its highest level of the quarter in mid-December, after Fed Chair Jerome Powell reiterated the Fed's 2% inflation target, which led markets to expect fewer interest rate cuts.

Implied bond market volatility continued to moderate, following the record highs that were experienced during the recent U.S. inflation scare. However, volatility levels remain materially above the longer-term average. We suspect that volatility will continue to be elevated as investors remain fixated on Federal Reserve actions and communications.

Recent realized one-year volatility drifted further lower, alongside positive equity performance and some easing of fears around recession or an inflation resurgence.

U.S. IMPLIED VOLATILITY (VIX)



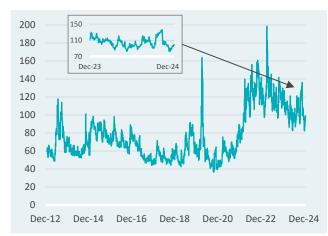
Source: Choe, as of 12/31/24

REALIZED VOLATILITY



Source: Standard & Poor's, MSCI, Verus, as of 12/31/24

U.S. TREASURY IMPLIED VOL ("MOVE" INDEX)



Source: BofA, as of 12/31/24



Long-term equity performance



Source: Standard & Poor's, FTSE, MSCI, Verus, as of 12/31/24



Other assets



Currency

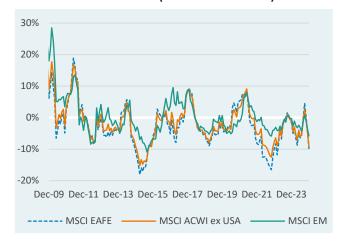
The U.S. dollar gained sharply in value during Q4—the DXY Index rising from 100.8 to 108.5. Strong economic data and evidence of sticky inflation led investors to reassess the number of upcoming Fed rate cuts and helped push up bond yields. Next, ongoing weak economic data in many international markets, as well as central bank rate cuts, created a bleaker outlook for foreign currency strength. Lastly, the U.S. election resulted in a rerating of expectations around the potential strength of the economy and led to some fears of higher inflation, which contributed to higher interest rates (lifting the U.S. dollar).

Dollar strength resulted in losses for investors with unhedged foreign asset exposure. Those without a currency hedging program lost -8.2% from international equities (MSCI EAFE) during Q4, and -10.3% over the past year. The impact from unhedged Japanese asset exposure was particularly

extreme. Investors without a currency hedging program lost -1.3% during the quarter from currency movements, and -17.8% over the past year (TOPIX Index).

A more thoughtful portfolio approach to currency exposure has provided lower portfolio volatility and higher returns—a rare proposition. This approach involves reducing the uncompensated risk of unhedged foreign currency exposure, and instead of unhedged exposure, making a passive investment in the currency market by investing in currencies with higher interest rates, undervalued currencies, and currencies showing positive price momentum. This approach, represented by the MSCI Currency Factor Mix Index, has offered a positive one-year rolling return over most periods with far lower volatility than an unhedged approach. The past year of intense currency volatility is testament to this approach.

EFFECT OF CURRENCY (1-YEAR ROLLING)



Source: MSCI, Verus, as of 12/31/24

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: FRED, Verus, as of 12/31/24

EMBEDDED CURRENCY VS CURRENCY FACTORS



Source: MSCI, Verus, as of 12/31/24 "Embedded Currency Exposure" is the currency return impact from not hedging currency risk



Appendix



Periodic table of returns

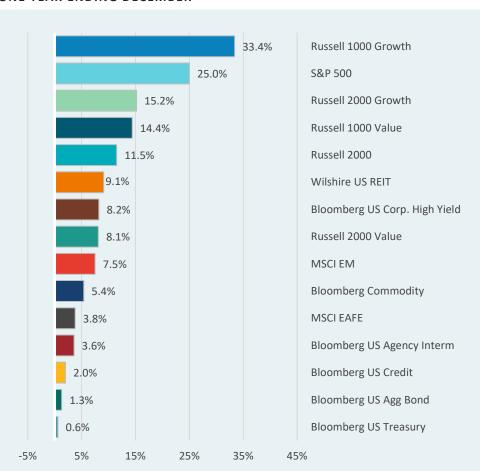
	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD	5-Yea	10-Year
Large Cap Growth	26.0	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	36.4	38.5	28.3	16.1	42.7	33.4	19.0	16.8
Large Cap Equity	22.2	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	1.9	31.4	34.6	27.6	9.4	26.5	24.5	14.3	12.9
Large Cap Value	20.7	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	0.0	28.5	21.0	27.1	1.5	18.7	15.2	8.7	8.5
Small Cap Growth	18.3	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	-1.5	26.5	20.0	26.5	-4.7	18.2	14.4	7.4	8.1
Emerging Markets Equity	16.5	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	-3.5	25.5	18.3	25.2	-7.5	16.9	11.5	7.3	7.8
Small Cap Equity	14.5	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.4	14.0	17.7	-13.0	15.4	9.9	6.9	7.1
60/40 Global Portfolio	14.3	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	-6.0	22.0	10.3	14.8	-14.5	14.6	9.5	6.8	5.9
Small Cap Value	12.9	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	-8.3	18.6	7.8	11.3	-14.5	11.5	8.1	5.4	5.7
International Equity	11.4	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	-9.3	18.4	7.5	8.9	-17.3	9.8	7.5	5.4	5.2
Hedge Funds of Funds	9.1	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-11.0	8.7	4.6	6.5	-19.1	6.3	5.4	4.7	3.9
Cash	6.9	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	7.0	-11.2	7.8	2.8	2.8	-20.1	5.5	5.3	3.3	3.6
Commodities	6.3	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	7.7	0.5	0.0	-20.4	5.0	3.8	2.4	1.7
US Bonds	4.3	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-13.8	6.4	0.5	-1.5	-26.4	-7.9	1.3	1.7	1.3
Real Estate	1.4	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-14.6	2.1	-3.1	-2.5	-29.1	-7.9	-0.5	-0.3	1.3
	Lar	ge Cap	Equity	у			:	Small (Cap Gro	owth				Com	nmodit	ies							
	Lar	ge Cap	Value	:				Interna	ationa	l Equity	/			Rea	l Estate	е							
	Lar	ge Cap	Grow	th				Emergi	ng Ma	rkets E	quity			Hed	ge Fun	ds of F	unds						
	Sm	all Cap	Equity	У				US Bon	ds					60%	MSCI A	ACWI/	40% Blo	oombe	rg Glob	al Bond			
	Sm	all Cap	Value	:				Cash															

Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 9/30/24.

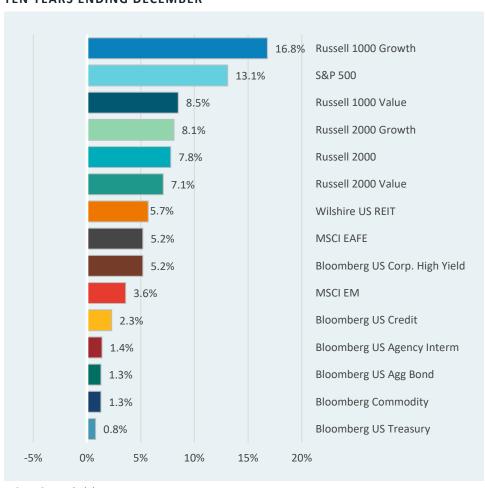


Major asset class returns

ONE YEAR ENDING DECEMBER



TEN YEARS ENDING DECEMBER



*Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.

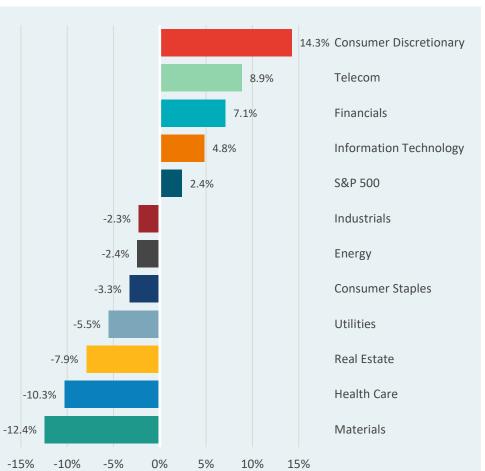
Source: Morningstar, as of 12/31/24

Source: Morningstar, as of 12/31/24

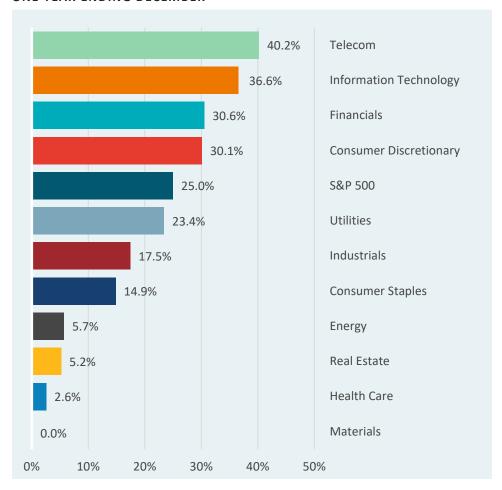


S&P 500 sector returns

QTD



ONE YEAR ENDING DECEMBER



Source: Morningstar, as of 12/31/24

Source: Morningstar, as of 12/31/24



Private equity vs. traditional assets performance

DIRECT PRIVATE EQUITY FUND INVESTMENTS



Direct P.E fund performance vs. public equites has been mixed

"PASSIVE" STRATEGIES



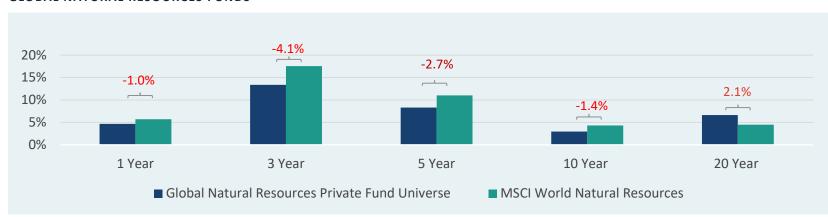
"Passive" strategy performance vs public equities has been mixed

Sources: FTSE PME: U.S. Direct Private Equity returns are as of September 30, 2024, whereas "Passive" strategies as of June 30, 2024. Public Market Equivalent returns resulted from "Total Passive" and Total Direct's identical cash flows invested into and distributed from respective traditional asset comparable.



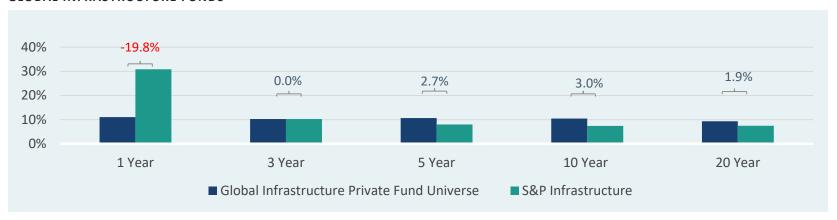
Private vs. liquid real assets performance

GLOBAL NATURAL RESOURCES FUNDS



N.R. funds underperformed the MSCI World Natural Resources benchmark across most periods

GLOBAL INFRASTRUCTURE FUNDS



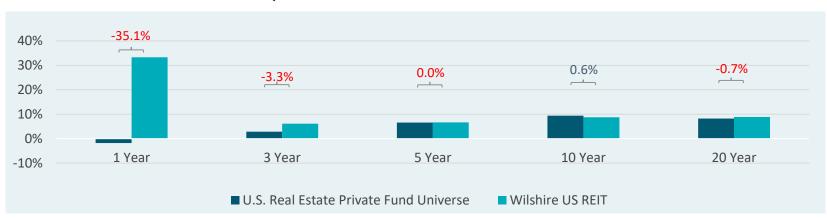
Infra. fund performance relative to the S&P Infra. was mixed

Sources: FTSE PME: Global Natural Resources (vintage 1999 and later, inception of MSCI World Natural Resources benchmark) and Global Infrastructure (vintage 2002 and later, inception of S&P Infrastructure benchmark) universes as of September 30, 2024. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real assets universes.



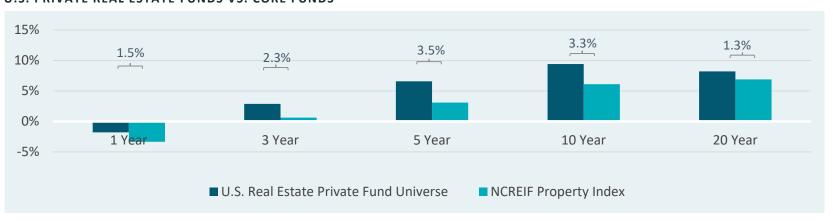
Private vs. liquid and core real estate performance

U.S. PRIVATE REAL ESTATE FUNDS VS. LIQUID UNIVERSE



U.S. Private
R.E. funds
underperformed
the Wilshire
U.S. REIT Index
across most time
periods.

U.S. PRIVATE REAL ESTATE FUNDS VS. CORE FUNDS



U.S. Private R.E. Funds outperformed the NCREIF Property Index across all time periods.

Sources: FTSE PME: U.S. Real Estate universes as of September 30, 2024. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real estate universes.



Detailed index returns

DOMESTIC EQUITY								FIXED INCOME							
	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year		Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index								Broad Index							
S&P 500	(2.4)	2.4	25.0	25.0	8.9	14.5	13.1	Bloomberg US TIPS	(1.6)	(2.9)	1.8	1.8	(2.3)	1.9	2.2
S&P 500 Equal Weighted	(6.3)	(1.9)	13.0	13.0	4.5	10.8	10.3	Bloomberg US Treasury Bills	0.4	1.2	5.3	5.3	3.9	2.5	1.8
DJ Industrial Average	(5.1)	0.9	15.0	15.0	7.6	10.6	11.6	Bloomberg US Agg Bond	(1.6)	(3.1)	1.3	1.3	(2.4)	(0.3)	1.3
Russell Top 200	(1.5)	3.4	27.4	27.4	9.9	15.8	14.0	Bloomberg US Universal	(1.5)	(2.7)	2.0	2.0	(2.0)	0.1	1.7
Russell 1000	(2.8)	2.7	24.5	24.5	8.4	14.3	12.9	Duration							
Russell 2000	(8.3)	0.3	11.5	11.5	1.2	7.4	7.8	Bloomberg US Treasury 1-3 Yr	0.2	(0.1)	4.0	4.0	1.4	1.4	1.4
Russell 3000	(3.1)	2.6	23.8	23.8	8.0	13.9	12.5	Bloomberg US Treasury Long	(5.3)	(8.6)	(6.4)	(6.4)	(12.0)	(5.2)	(0.6)
Russell Mid Cap	(7.0)	0.6	15.3	15.3	3.8	9.9	9.6	Bloomberg US Treasury	(1.5)	(3.1)	0.6	0.6	(2.9)	(0.7)	0.8
Style Index								Issuer							
Russell 1000 Growth	0.9	7.1	33.4	33.4	10.5	19.0	16.8	Bloomberg US MBS	(1.6)	(3.2)	1.2	1.2	(2.1)	(0.7)	0.9
Russell 1000 Value	(6.8)	(2.0)	14.4	14.4	5.6	8.7	8.5	Bloomberg US Corp. High Yield	(0.4)	0.2	8.2	8.2	2.9	4.2	5.2
Russell 2000 Growth	(8.2)	1.7	15.2	15.2	0.2	6.9	8.1	Bloomberg US Agency Interm	(0.2)	(0.6)	3.6	3.6	0.5	0.9	1.4
Russell 2000 Value	(8.3)	(1.1)	8.1	8.1	1.9	7.3	7.1	Bloomberg US Credit	(1.9)	(3.0)	2.0	2.0	(2.2)	0.2	2.3
INTERNATIONAL EQUITY								OTHER							
Broad Index								Index							
MSCI ACWI	(2.4)	(1.0)	17.5	17.5	5.4	10.1	9.2	Bloomberg Commodity	1.0	(0.4)	5.4	5.4	4.1	6.8	1.3
MSCI ACWI ex US	(1.9)	(7.6)	5.5	5.5	0.8	4.1	4.8	Wilshire US REIT	(7.3)	(5.0)	9.1	9.1	(2.5)	4.5	5.7
MSCI EAFE	(2.3)	(8.1)	3.8	3.8	1.6	4.7	5.2	CS Leveraged Loans	0.6	2.3	9.1	9.1	6.8	5.7	5.1
MSCI EM	(0.1)	(8.0)	7.5	7.5	(1.9)	1.7	3.6	S&P Global Infrastructure	(4.5)	(2.5)	15.1	15.1	7.1	5.3	5.9
MSCI EAFE Small Cap	(2.3)	(8.4)	1.8	1.8	(3.2)	2.3	5.5	Alerian MLP	(7.2)	5.6	26.7	26.7	27.2	14.8	3.3
Style Index								Regional Index							
MSCI EAFE Growth	(2.8)	(9.1)	2.0	2.0	(2.6)	4.0	5.8	JPM EMBI Global Div	(1.4)	(1.9)	6.5	6.5	(0.9)	0.1	3.1
MSCI EAFE Value	(1.8)	(7.1)	5.7	5.7	5.9	5.1	4.3	JPM GBI-EM Global Div	(1.9)	(7.0)	(2.4)	(2.4)	(1.0)	(1.9)	0.4
Regional Index								Hedge Funds							
MSCI UK	(2.8)	(6.8)	7.5	7.5	5.3	4.4	3.8	HFRI Composite	(0.2)	1.5	8.8	8.8	4.1	6.8	5.2
MSCI Japan	(0.3)	(3.6)	8.3	8.3	2.8	4.8	6.2	HFRI FOF Composite	0.5	2.7	9.9	9.9	3.3	5.4	3.9
MSCI Euro	(0.4)	(9.4)	2.1	2.1	1.9	5.3	5.2	Currency (Spot)							
MSCI EM Asia	0.2	(7.9)	12.0	12.0	(1.6)	3.0	4.8	Euro	(2.0)	(7.2)	(6.3)	(6.3)	(3.1)	(1.6)	(1.5)
MSCI EM Latin American	(6.1)	(15.8)	(26.4)	(26.4)	2.1	(3.4)	0.3	Pound Sterling	(1.5)	(6.6)	(1.8)	(1.8)	(2.6)	(1.1)	(2.2)
								Yen	(4.4)	(9.0)	(10.3)	(10.3)	(9.8)	(7.1)	(2.7)

Source: Morningstar, HFRI, as of 12/31/24



Definitions

Bloomberg US Weekly Consumer Comfort Index - tracks the public's economic attitudes each week, providing a high-frequency read on consumer sentiment. The index, based on cell and landline telephone interviews with a random, representative national sample of U.S. adults, tracks Americans' ratings of the national economy, their personal finances and the buying climate on a weekly basis, with views of the economy's direction measured separately each month. (www.langerresearch.com)

University of Michigan Consumer Sentiment Index - A survey of consumer attitudes concerning both the present situation as well as expectations regarding economic conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. (www.Bloomberg.com)

NFIB Small Business Outlook - Small Business Economic Trends (SBET) is a monthly assessment of the U.S. small-business economy and its near-term prospects. Its data are collected through mail surveys to random samples of the National Federal of Independent Business (NFIB) membership. The survey contains three broad question types: recent performance, near-term forecasts, and demographics. The topics addressed include: outlook, sales, earnings, employment, employee compensation, investment, inventories, credit conditions, and single most important problem. (http://www.nfib-sbet.org/about/)

NAHB Housing Market Index – the housing market index is a weighted average of separate diffusion induces for three key single-family indices: market conditions for the sale of new homes at the present time, market conditions for the sale of new homes in the next six months, and the traffic of prospective buyers of new homes. The first two series are rated on a scale of Good, Fair, and Poor and the last is rated on a scale of High/Very High, Average, and Low/Very Low. A diffusion index is calculated for each series by applying the formula "(Good-Poor + 100)/2" to the present and future sales series and "(High/Very High-Low/Very Low + 100)/2" to the traffic series. Each resulting index is then seasonally adjusted and weighted to produce the HMI. Based on this calculation, the HMI can range between 0 and 100.

Notices & disclosures

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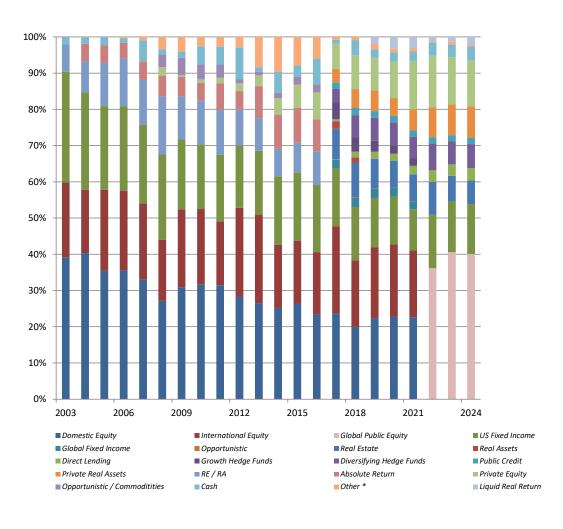




SCERS

Quarter ending December 31st, 2024

- The Total Fund returned -0.7% in the fourth quarter of 2024 and ranked in the second quartile among other public funds with assets over \$1 billion. The Total Fund matched the Policy Index over the quarter. Over the short term, the one-year return of +9.4% ranks better than median within the large public plan peer group. Similarly, the ten-year return of +7.7% places the fund's performance amongst the top quartile of the same peer group.
- Fourth quarter results (net) were enhanced by the following factors:
 - 1. Domestic Equity (+2.8%) was the portfolio's main outperformer, with Large Cap Active (+3.3%) and Large Cap Passive (+2.8%) being two of the top-performing sub-asset classes.
 - 2. Absolute Return up +1.9% over the quarter, outperforming its Benchmark by 40 bps.
- Fourth quarter results (net) were hindered by the following factors:
 - 1. International Equity (-8.2%), which detracted from the portfolio's overall performance, with International Emerging (-9.4%) and International Developed (-7.7%) being two of the bottom performing sub-asset classes.
 - 2. Fixed Income underperformed its index and the portfolio, down -3.2% compared to the index return of -2.6%.

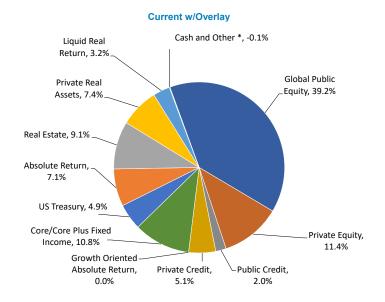


	2003	2004	2005	2006	2007	2008	2009	
US Equity	39.2	40.4	35.4	35.5	33.1	27.2	30.9	
International Equity	20.6	17.5	22.3	22.0	20.9	16.8	21.5	
US Fixed Income	30.6	26.9	23.1	23.3	21.7	23.5	19.3	
Real Estate / Real Assets	7.5	8.5	11.9	13.1	12.4	16.1	11.9	
Absolute Return	-	4.9	4.8	4.4	5.1	5.6	5.3	
Private Equity	-	-	-	-	0.1	2.5	0.5	
Opportunistic / Commodities	-	-	-	-	-	3.5	4.8	
Cash	2.1	1.8	2.4	1.2	5.8	1.4	1.7	
Other *	-	0.1	-	0.4	0.9	3.4	4.1	
	2010	2011	2012	2013	2014	2015	2016	
U0 5 . ''	04.7	04.4	00.4	00.5	05.0	00.4	00.4	
US Equity	31.7	31.4	28.4	26.5	25.2	26.4	23.4	
International Equity	20.7	17.6	24.5	24.3	17.5	17.3	17.2	
US Fixed Income	17.8	18.4	17.1	17.7	18.9	18.7	18.5	
Real Estate / Real Assets	12.2	12.4	9.9	9.0	7.6	8.3	9.3	
Absolute Return	4.9	7.3	5.2	8.8	9.4	9.7	8.8	
Private Equity	0.9	1.6	2.2	3.0	4.6	6.3	7.4	
Opportunistic / Commodities	4.1	3.7	1.1	1.0	1.4	2.1	2.2	
Cash	5.0	4.9	8.8	1.2	5.9	3.2	7.1	
Other *	2.6	2.7	2.9	8.4	9.6	7.9	6.0	
	2017	2018	2019	2020	2021	2022	2023	2024
Domestic Equity	23.8	20.0	22.4	22.8	22.6	-	-	-
International Equity	23.9	18.3	19.6	19.9	18.4	-	-	-
Global Public Equity	-	-	-	-	-	36.2	40.6	40.1
US Fixed Income	16.0	14.6	13.6	13.2	11.4	14.8	13.9	13.7
Global Fixed Income	2.4	2.6	2.5	2.5	2.1	-	-	-
Public Credit	1.8	1.9	1.8	1.7	1.7	1.7	1.7	1.8
Real Estate / Real Assets	-	-	-	-	-	-	-	-
Real Estate	8.4	9.7	8.3	7.3	7.6	9.0	7.1	6.5
Real Assets	2.1	1.4	-	-	-	-	-	-
Private Real Assets	3.7	5.2	5.7	4.9	5.8	8.2	8.5	8.6
Liquid Real Return	-	-	2.0	3.3	3.2	1.2	1.2	2.2
Absolute Return	-	-	-	-	-	-	-	-
Growth Hedge Funds	4.6	3.9	3.0	2.3	2.0	0.1	0.1	0.0
Diversifying Hedge Funds	3.8	6.2	6.4	6.4	6.0	7.5	6.3	6.6
Private Equity	6.9	9.3	9.0	10.1	13.4	14.2	13.0	12.6
Direct Lending	0.5	1.5	2.0	1.9	2.3	3.2	3.1	3.4
Opportunistic / Commodities	- 1	-	-	-	-	-	-	-
Opportunistic	0.1	0.1	0.1	0.0	0.0	-	-	-
		4.3	2.4	2.5	2.6	3.7	3.5	3.9
Cash	1.1	4.3	2.4	2.5	2.0	3.1	3.5	3.9

^{*} Allocations without overlay.



^{*} Other includes SSgA Overlay and closing accounts. Prior to Q2 2017 SSgA Real Assets is also included.



ASSET ALLOCATION	MARKET VALUE W/OVERLAY	W/ OVERLAY	W/O OVERLAY
Global Public Equity	5,436,363,556	39.2%	40.1%
Private Equity	1,584,946,006	11.4%	12.6%
Public Credit	276,736,366	2.0%	1.8%
Private Credit	708,251,672	5.1%	3.4%
Growth Oriented Absolute Return	33,523	0.0%	0.0%
Core/Core Plus Fixed Income	1,493,882,723	10.8%	10.8%
US Treasury	685,525,736	4.9%	2.9%
Absolute Return	986,295,676	7.1%	6.6%
Real Estate	1,258,578,569	9.1%	6.5%
Private Real Assets	1,025,411,884	7.4%	8.6%
Liquid Real Return	442,264,151	3.2%	2.2%
Cash and Other *	-17,535,093	-0.1%	4.3%
TOTAL	13,880,754,769	100.0%	100.0%

	Target	
Liquid Real Cash Return 2.0%	and Other * 1.0%	
Private Real Assets 7.0%		Global Public Equity 40.0%
Real Estate 9.0%		
Absolute Return 7.0%		
US Treasury J 4.0%		
Core/Core Plus	Public Credit 2.0%	ivate Equity 11.0%
Return 0.0%	Private Credit 5.0%	

ASSET ALLOCATION	ACTUAL	TARGET	DIFF
Global Public Equity	39.2%	40.0%	-0.8%
Private Equity	11.4%	11.0%	0.4%
Public Credit	2.0%	2.0%	0.0%
Private Credit	5.1%	5.0%	0.1%
Growth Oriented Absolute Return	0.0%	0.0%	0.0%
Core/Core Plus Fixed Income	10.8%	12.0%	-1.2%
US Treasury	4.9%	4.0%	0.9%
Absolute Return	7.1%	7.0%	0.1%
Real Estate	9.1%	9.0%	0.1%
Private Real Assets	7.4%	7.0%	0.4%
Liquid Real Return	3.2%	2.0%	1.2%
Cash and Other *	-0.1%	1.0%	-1.1%

^{*} Other includes Transition Account and SSgA Overlay.

	Market Value	% of Portfolio	3 Мо	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Total Fund - Gross	13,880,754,769	100.0	-0.7 (39)	3.7 (57)	9.4 (38)	3.2 (40)	7.7 (30)	7.7 (22)	8.3	Jul-86
Total Fund - Net			-0.7	3.7	9.2	3.1	7.5	7.5	8.1	Jul-86
Policy Index			-0.7 (39)	3.4 (67)	8.6 (55)	3.3 (39)	6.9 (53)	7.0 (48)	8.3	<i>Jul</i> -86
InvMetrics Public DB > \$1B Median			-0.9	3.9	8.8	2.8	7.0	7.0	-	
Total Fund ex Overlay - Gross	13,830,188,595	99.6	-0.6 (36)	3.8 (56)	9.6 (34)	3.4 (38)	7.7 (31)	7.8 (22)	8.3	Jul-86
Total Fund ex Overlay - Net			-0.6	3.7	9.4	3.2	7.5	7.6	8.1	Jul-86
Policy Index			-0.7 (39)	3.4 (67)	8.6 (55)	3.3 (39)	6.9 (53)	7.0 (48)	8.3	<i>Jul-</i> 86
Growth Asset Category - Gross	8,049,676,217	58.0	-0.7	4.6	13.8	4.2	10.4		11.1	Apr-17
Growth Asset Category - Net			-0.7	4.5	13.6	4.0	10.1		10.9	Apr-17
Growth Custom			-1.0	4.3	12.9	4.8	9.8	-	10.0	
Global Public Equity - Gross	5,572,965,654	40.1	-1.8 (46)	4.7 (46)	15.8 (38)	4.6 (43)	9.6 (37)	9.6 (37)	9.6	Jul-11
Global Public Equity - Net			-1.9	4.5	15.5	4.2	9.2	9.2	9.2	Jul-11
MSCI AC World IMI Index (Net)			-1.2	5.5	16.4	4.9	9.7	9.0	8.8	
Domestic Equity - Gross	2,959,317,594	21.3	2.9 (5)	9.0 (25)	25.6 (1)	8.7 (7)	14.4 (7)	12.8 (16)	10.8	Jul-86
Domestic Equity - Net			2.8	8.8	25.3	8.4	14.1	12.5	10.6	Jul-86
Russell 3000 Index			2.6 (20)	9.0 (22)	23.8 (16)	8.0 (26)	13.9 (19)	12.5 (27)	10.7	Jul-86
InvMetrics All DB US Equity Median			2.0	8.5	22.3	7.5	13.2	12.0	-	
Large Cap - Gross	2,668,664,414	19.2	3.1	9.1	26.6	9.6	15.1	13.2	8.3	Apr-98
Large Cap - Net			3.0	8.9	26.3	9.4	14.8	12.9	8.1	Apr-98
Russell 1000 Index			2.7	9.0	24.5	8.4	14.3	12.9	8.5	
Large Cap Passive - Gross	1,396,836,449	10.1	2.8	9.0	24.4	8.4	14.3	12.9	12.6	Oct-08
Large Cap Passive - Net			2.8	9.0	24.4	8.4	14.3	12.8	12.6	Oct-08
Russell 1000 Index			2.7	9.0	24.5	8.4	14.3	12.9	12.6	
AB - Gross	1,396,836,449	10.1	2.8 (26)	9.0 (26)	24.4 (63)	8.4 (57)	14.3 (59)	12.9 (61)	10.8	May-89
AB - Net			2.8	9.0	24.4	8.4	14.3	12.8	10.8	May-89
Russell 1000 Index			2.7 (30)	9.0 (24)	24.5 (58)	8.4 (63)	14.3 (60)	12.9 (60)	10.9	May-89
eV US Passive Large Cap Equity Median			2.4	8.4	24.9	8.6	14.4	13.1	-	
Large Cap Active - Gross	1,271,827,965	9.2	3.5	9.2	29.2	11.0	16.0	13.2	12.9	Oct-08
Large Cap Active - Net			3.3	8.9	28.6	10.5	15.4	12.6	12.3	Oct-08
Russell 1000 Index			2.7	9.0	24.5	8.4	14.3	12.9	12.6	
AQR US Enhanced Equity - Gross	424,831,651	3.1	5.2 (3)	10.8 (7)	27.9 (14)	11.2 (4)	16.0 (4)	-	14.4	Aug-18
AQR US Enhanced Equity - Net			5.1	10.7	27.6	10.9	15.7	-	14.1	Aug-18
Russell 1000 Index			2.7 (40)	9.0 (39)	24.5 (52)	8.4 (58)	14.3 (55)	-	13.8	Aug-18
eV US Enh Equity Median			2.5	8.5	24.6	8.6	14.3	12.9	_	Ŭ

See Policy Index and Benchmark History



^{**}Total Fund ex Overlay returns from 2/1/2006-12/31/2010 were calculated using the overlay impact provided by SSgA.

+ Since inception date denotes first day of the month. *Total Fund and asset class composites are ranked against Investment Metrics universes. Managers are ranked against eVestment manager universes. Ranking of 1 is a top ranking and ranking of

Sacramento County Employees' Retirement System Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
JP Morgan 130/30 - Gross	203,534,260	1.5	2.3 (57)	7.1 (70)	30.3 (14)	12.0 (39)	18.5 (22)	14.7 (34)	14.1	Aug-08
JP Morgan 130/30 - Net			2.2	6.8	29.8	11.4	17.8	14.0	13.3	Aug-08
Russell 1000 Index			2.7 (51)	9.0 (46)	24.5 (44)	8.4 (68)	14.3 (62)	12.9 (66)	11.9	Aug-08
eV Extended US Equity Median			2.8	8.8	23.0	10.9	15.9	14.2	-	
DE Shaw Broad Mkt Core Alpha Ext - Gross	228,284,819	1.6	4.4 (17)	13.8 (1)	34.6 (4)	11.0 (48)	15.0 (56)	-	15.9	Feb-19
DE Shaw Broad Mkt Core Alpha Ext - Net			4.0	13.1	33.6	10.5	14.5	-	15.4	Feb-19
Russell 1000 Index			2.7 (51)	9.0 (46)	24.5 (44)	8.4 (68)	14.3 (62)	-	15.6	Feb-19
eV Extended US Equity Median			2.8	8.8	23.0	10.9	15.9	14.2	-	
Eagle Capital - Gross	415,156,971	3.0	1.9 (44)	6.5 (66)	27.4 (18)	10.4 (17)	15.1 (24)	13.7 (17)	15.1	Mar-12
Eagle Capital - Net			1.8	6.2	26.5	9.6	14.3	12.8	14.3	Mar-12
Russell 1000 Index			2.7 (26)	9.0 (21)	24.5 (38)	8.4 (45)	14.3 (39)	12.9 (39)	14.0	Mar-12
eV US Large Cap Core Equity Median			1.6	7.5	22.5	8.0	13.6	12.5	-	
Small Cap - Gross	290,653,180	2.1	1.0	8.4	16.2	0.4	8.4	9.5	11.5	Jan-91
Small Cap - Net			0.9	8.1	15.6	-0.3	7.7	8.9	10.8	Jan-91
Russell 2000 Index			0.3	9.6	11.5	1.2	7.4	7.8	10.2	
Weatherbie - Gross	142,762,337	1.0	4.0 (24)	10.8 (34)	15.5 (50)	-6.1 (91)	7.2 (83)	12.3 (25)	12.1	Jan-03
Weatherbie - Net			4.0	10.7	15.3	-6.7	6.6	11.6	11.3	Jan-03
Russell 2000 Growth Index			1.7 (43)	10.3 (38)	15.2 (52)	0.2 (48)	6.9 (87)	8.1 (94)	10.2	Jan-03
eV US Small Cap Growth Equity Median			1.1	9.0	15.4	-0.3	9.4	10.7	-	
Snyder Capital Management - Gross	147,890,843	1.1	-1.7 (82)	6.0 (83)	16.2 (15)	6.9 (26)	-	-	9.1	Feb-21
Snyder Capital Management - Net			-1.9	5.6	15.3	6.1	-	-	8.3	Feb-21
Russell 2000 Value Index - Net			-1.1 (74)	9.0 (45)	8.1 (75)	1.9 (90)	-	-	6.7	Feb-21
eV US Small Cap Value Equity Median			-0.1	8.7	11.3	4.6	9.8	8.8	-	

Sacramento County Employees' Retirement System Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
International Equity - Gross	2,190,896,939	15.8	-8.1 (88)	-1.0 (71)	3.4 (86)	-0.3 (72)	4.0 (70)	5.8 (33)	6.3	Jan-88
International Equity - Net			-8.2 (89)	-1.2 (75)	3.0 (89)	-0.7 (80)	3.5 (83)	5.3 (59)	5.9	Jan-88
MSCI AC World ex USA (Net)			-7.6 (62)	-0.1 (37)	5.5 (41)	0.8 (45)	4.1 (67)	4.8 (78)	-	Jan-88
InvMetrics All DB Global ex-US Equity Median			-7.4	-0.4	5.3	0.7	4.5	5.4	-	
International - Developed - Gross	1,542,062,298	11.1	-7.6 (56)	-1.2 (82)	2.6 (94)	0.8 (54)	5.0 (54)	6.6 (39)	5.0	Apr-98
International - Developed - Net			-7.7 (60)	-1.4 (87)	2.2 (96)	0.2 (71)	4.4 (65)	6.0 (53)	4.5	Apr-98
MSCI World ex U.S. (Net)			-7.4 (53)	-0.2 (47)	4.7 (60)	1.9 (32)	5.1 (52)	5.3 (75)	4.6	<i>Apr</i> -98
InvMetrics All DB Developed Market ex-US Equity Median			-7.4	-0.5	5.4	1.2	5.2	6.1	-	
Large Cap - Gross	1,313,282,010	9.5	-8.2 (65)	-2.2 (79)	1.7 (82)	1.2 (63)	5.1 (67)	6.6 (33)	5.3	Jan-05
Large Cap - Net			-8.3 (67)	-2.4 (82)	1.3 (87)	0.7 (67)	4.5 (78)	6.0 (55)	4.8	Jan-05
MSCI World ex U.S. (Net)			-7.4 (50)	-0.2 (51)	4.7 (54)	1.9 (50)	5.1 (67)	5.3 (84)	5.0	Jan-05
eV EAFE Large Cap Equity Median			-7.5	-0.2	5.0	1.9	5.7	6.1	-	
Lazard - Gross	319,667,609	2.3	-8.7 (88)	-3.1 (89)	1.0 (85)	0.3 (59)	3.6 (83)	5.3 (79)	7.1	Jul-12
Lazard - Net			-8.8	-3.3	0.4	-0.2	3.2	4.9	6.8	Jul-12
MSCI World ex U.S. (Net)			-7.4 (64)	-0.2 (59)	4.7 (62)	1.9 (37)	5.1 (55)	5.3 (80)	6.5	Jul-12
eV All ACWI ex-US Equity Median			-6.9	0.2	5.8	0.9	5.4	6.3	-	
Walter Scott & Partners Limited - Gross	463,945,052	3.3	-11.0 (100)	-6.4 (100)	-4.2 (98)	-3.5 (72)	4.1 (76)	-	7.5	Apr-17
Walter Scott & Partners Limited - Net			-11.1	-6.6	-4.5	-4.1	3.3	-	6.7	Apr-17
MSCI World ex U.S. Growth (Net)			-8.3 (52)	-2.9 (84)	2.8 (62)	-2.3 (54)	4.3 (74)	-	6.4	Apr-17
eV EAFE Large Cap Growth Median			-8.2	-1.3	3.5	-1.8	5.5	6.8	-	
LSV - Gross	529,669,349	3.8	-5.2 (6)	2.4 (13)	7.9 (13)	7.0 (19)	7.2 (34)	6.9 (15)	5.5	Jan-05
LSV - Net			-5.3	2.2	7.5	6.6	6.7	6.4	5.0	Jan-05
MSCI World ex U.S. Value (Net)			-6.5 (28)	2.5 (10)	6.6 (35)	6.0 (29)	5.5 (53)	4.5 (76)	4.4	Jan-05
eV EAFE Large Cap Value Median			-7.5	1.2	5.6	4.8	5.8	5.8	-	

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Small Cap - Gross	228,780,287	1.6	-4.2 (10)	4.8 (18)	8.2 (29)	-3.4 (58)	3.0 (65)	5.8 (67)	7.6	Oct-08
Small Cap - Net			-4.4	4.4	7.4	-4.0	2.3	5.1	6.8	Oct-08
MSCI World ex U.S. Small Cap Index (Net)			-7.9 (52)	1.8 (42)	2.8 (53)	-2.8 (55)	2.9 (67)	5.5 (77)	6.7	Oct-08
eV EAFE Small Cap Equity Median			-7.7	1.0	3.2	-1.9	4.1	6.8	-	
William Blair Dev Small Cap - Gross	106,536,669	0.8	-4.3 (23)	3.8 (23)	2.3 (66)	-7.4 (79)	2.3 (90)	5.5 (90)	7.5	Oct-08
William Blair Dev Small Cap - Net			-4.5	3.4	1.4	-8.2	1.4	4.6	6.6	Oct-08
MSCI World ex U.S. Small Cap Index (Net)			-7.9 (78)	1.8 (46)	2.8 (64)	-2.8 (55)	2.9 (79)	5.5 (90)	6.7	Oct-08
eV ACWI ex-US Small Cap Equity Median			-6.0	1.1	4.3	-1.4	5.3	7.6	-	
Acadian Asset Management - Gross	122,243,618	0.9	-4.0 (22)	5.9 (8)	14.0 (11)	-	-	-	13.2	Apr-23
Acadian Asset Management - Net			-4.1 (22)	5.4 (10)	13.3 (14)	-	-	-	12.7	Apr-23
MSCI World ex U.S. Small Value (Net)			-8.1 (79)	1.9 (44)	3.0 (64)	-	-	-	7.5	Apr-23
eV ACWI ex-US Small Cap Equity Median			-6.0	1.1	4.3	-1.4	5.3	7.6	-	
International - Emerging - Gross	648,830,737	4.7	-9.3 (100)	-0.5 (58)	5.1 (89)	-3.0 (89)	1.0 (82)	3.5 (34)	5.5	Feb-00
International - Emerging - Net			-9.4	-0.7	4.8	-3.3	0.7	3.2	5.1	Feb-00
MSCI Emerging Markets (Net)			-8.0	0.0	7.5	-1.9	1.7	3.6	5.7	
Arga Emg - Gross	215,358,460	1.6	-9.0 (87)	2.9 (19)	8.2 (45)	-	-	-	7.9	Feb-23
Arga Emg - Net			-9.2	2.5	7.5	-	-	-	7.1	Feb-23
MSCI Emerging Markets (Net)			-8.0 (75)	0.0 (53)	7.5 (54)	-	-	-	4.8	Feb-23
eV Emg Mkts Equity Median			-6.9	0.1	7.8	-0.5	3.4	5.0	-	
Baillie Gifford Emg All Cap - Gross	225,943,379	1.6	-8.4 (81)	-4.1 (94)	6.1 (68)	-3.7 (82)	1.1 (86)	-	7.2	Apr-16
Baillie Gifford Emg All Cap - Net			-8.4	-4.1	6.1	-3.7	1.1	-	7.2	Apr-16
MSCI Emerging Markets (Net)			-8.0 (75)	0.0 (53)	7.5 (54)	-1.9 (63)	1.7 (75)	-	5.4	Apr-16
eV Emg Mkts Equity Median			-6.9	0.1	7.8	-0.5	3.4	5.0	-	
Oaktree Emg - Gross	201,249,285	1.4	-10.9 (97)	-0.1 (55)	-0.3 (92)	-	-	-	-1.8	Feb-23
Oaktree Emg - Net			-11.1	-0.3	-0.7	-	-	-	-2.4	Feb-23
MSCI Emerging Markets (Net)			-8.0 (75)	0.0 (53)	7.5 (54)	-	-	-	4.8	Feb-23
eV Emg Mkts Equity Median			-6.9	0.1	7.8	-0.5	3.4	5.0	-	

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Global/Unconstrained Equity - Gross	422,751,121	3.0	-0.3 (5)	5.3 (27)	19.7 (6)				6.4	Apr-22
Global/Unconstrained Equity - Net			-0.3	5.3	19.7	-	-	-	6.4	Apr-22
MSCI AC World IMI Index (Net)			-1.2 (24)	5.5 (21)	16.4 (37)	-	-	-	7.5	Apr-22
InvMetrics All DB Global Equity Median			-2.1	4.0	13.6	4.5	9.2	9.2	-	
Artisan Partners Global Opp - Gross	156,998,430	1.1	-1.6 (40)	2.6 (62)	15.3 (39)	-	-	-	13.5	Sep-22
Artisan Partners Global Opp - Net			-1.6	2.6	15.3	-	-	-	13.5	Sep-22
MSCI AC World IMI Index (Net)			-1.2 (37)	5.5 (32)	16.4 (35)	-	-	-	15.7	Sep-22
eV Global All Cap Equity Median			-2.5	3.8	13.3	4.3	9.5	9.4	-	
Nikko Asset Management - Gross	162,960,000	1.2	1.1 (15)	8.0 (10)	27.0 (5)	-	-	-	16.6	Sep-22
Nikko Asset Management - Net			1.1	8.0	27.0	-	-	-	16.6	Sep-22
MSCI AC World IMI Index (Net)			-1.2 (37)	5.5 (32)	16.4 (35)	-	-	-	15.7	Sep-22
eV Global All Cap Equity Median			-2.5	3.8	13.3	4.3	9.5	9.4	-	
Third Point Offshore Fund - Gross	4,225,140	0.0	-0.1 (23)	-0.8 (88)	8.2 (72)	-4.0 (94)	6.1 (89)	5.8 (96)	7.9	May-12
Third Point Offshore Fund - Net			-0.1	-0.8	8.2	-4.0	6.1	5.8	7.9	May-12
MSCI AC World IMI Index (Net)			-1.2 (37)	5.5 (32)	16.4 (35)	4.9 (43)	9.7 (47)	9.0 (57)	9.6	May-12
eV Global All Cap Equity Median			-2.5	3.8	13.3	4.3	9.5	9.4	-	
Allspring Global Investments - Gross	98,567,551	0.7	-0.7 (30)	5.7 (29)	17.1 (32)	-	-	-	24.0	Sep-23
Allspring Global Investments - Net			-0.7	5.7	17.1	-	-	-	24.0	Sep-23
MSCI AC World IMI Index (Net)			-1.2 (37)	5.5 (32)	16.4 (35)	-	-	-	18.6	Sep-23
eV Global All Cap Equity Median			-2.5	3.8	13.3	4.3	9.5	9.4	-	
Private Equity - Gross***	1,755,523,682	12.6	2.3 (15)	4.1 (14)	9.2 (15)	2.6 (60)	15.2 (26)	15.2 (4)	7.1	Mar-08
Private Equity - Net***			2.3	4.1	9.2	2.6	15.2	15.2	7.3	Mar-08
Cambridge Associates All PE 1 Qtr Lag			2.5 (15)	3.6 (21)	7.3 (25)	3.0 (56)	13.4 (47)	12.8 (25)	11.3	Mar-08
Russell 3000 +3% 1Q Lag			7.3 (2)	10.7 (1)	38.2 (1)	13.4 (1)	18.3 (5)	15.9 (3)	13.4	Mar-08
InvMetrics All DB Private Equity Median			0.0	1.8	4.4	3.6	13.4	11.4	-	
Abbott VI - Gross	18,382,296	0.1	0.8	-1.2	0.4	-5.2	8.4	12.0	6.2	Aug-08
Abbott VI - Net			0.8	-1.2	0.4	-5.2	8.4	12.0	-	Aug-08
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	11.9	
Accel-KKR V - Gross	31,741,201	0.2	7.2	12.9	36.1	19.8	26.3	-	24.4	Feb-17
Accel-KKR V - Net			7.2	12.9	36.1	19.8	26.3	-	24.4	Feb-17
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.9	
Accel-KKR VI - Gross	27,428,077	0.2	1.6	11.9	11.9	6.6	-	-	-13.3	Mar-21
Accel-KKR VI - Net			1.6	11.9	11.9	6.6	-	-	-13.3	Mar-21
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	13.8	



^{*} Account converted to Global/Unconstrained Equity from Growth Oriented Absolute Return in April 2022. Reflects linked historical returns up to March 2022.

^{**} Account converted to Global/Unconstrained Equity from Growth Oriented Absolute Return in April 2022. Reflects linked his
** Private Equity Composite includes the historical returns of Summit Credit and Athyrium Opportunities up to 4/1/17.

*** Returns are one-quarter lag.

+ Returns for private markets are shown on a time-weighted basis and may differ substantially from dollar weighted-returns.

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Accel-KKR Growth Partners II - Gross	8,517,981	0.1	0.3	-1.6	9.5	8.3	29.7	-	17.1	Mar-15
Accel-KKR Growth Partners II - Net			0.3	-1.6	9.5	8.3	29.7	-	17.1	Mar-15
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	12.4	
Accel-KKR Growth Partners III - Gross	37,680,768	0.3	1.0	2.8	6.5	4.5	11.6	-	4.7	Aug-19
Accel-KKR Growth Partners III - Net			1.0	2.8	6.5	4.5	11.6	-	4.7	Aug-19
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.2	
Accel-KKR Growth Partners IV - Gross	15,104,997	0.1	0.4	3.4	3.8	-	-	-	-12.0	Jul-22
Accel-KKR Growth Partners IV - Net			0.4	3.4	3.8	-	-	-	-12.0	Jul-22
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	1.7	
Alchemy Special Opportunities Fund V - Gross	1,656,260	0.0	-7.2	-3.4	-	-	-	-	-	May-24
Alchemy Special Opportunities Fund V - Net			-7.2	-3.4	-	-	-	-	-	May-24
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	-	-	-	-	4.8	
Atalaya Special Opp VI - Gross	826,795	0.0	-11.6	-20.8	-22.7	-14.0	1.0	-	4.3	May-16
Atalaya Special Opp VI - Net			-11.6	-20.8	-22.7	-14.0	1.0	-	4.3	May-16
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	14.4	
Canvas Ventures III - Gross	14,513,058	0.1	1.1	1.3	-6.9	4.0	-	-	-1.4	Dec-20
Canvas Ventures III - Net			1.1	1.3	-6.9	4.0	-	-	-1.4	Dec-20
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	15.6	
Cortec Group Fund VII - Gross	26,273,071	0.2	-4.7	-5.0	-1.6	8.9	18.8	-	18.8	Jan-20
Cortec Group Fund VII - Net			-4.7	-5.0	-1.6	8.9	18.8	-	18.8	Jan-20
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.4	
Cortec Group Fund VIII - Gross**	8,676,829	0.1	-5.7	9.8	-8.3	-	-	-	-13.2	Apr-23
Cortec Group Fund VIII - Net**			-5.7	9.8	-8.3	-	-	-	-13.2	Apr-23
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	6.0	
CRV Select Fund I - Gross	19,418,665	0.1	2.5	4.2	5.4	-1.7	-	-	1.6	Jun-21
CRV Select Fund I - Net			2.5	4.2	5.4	-1.7	-	-	1.6	Jun-21
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	10.2	
CRV Select Fund II - Gross	7,937,615	0.1	4.4	5.9	5.6	-	-	-	-4.0	Apr-22
CRV Select Fund II - Net	, , ,		4.4	5.9	5.6	-	-	-	-4.0	Apr-22
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	1.3	
CRV XVIII LP - Gross	18,307,981	0.1	4.0	4.5	-0.1	1.2	-	-	1.4	Mar-21
CRV XVIII LP - Net	.,,		4.0	4.5	-0.1	1.2	-	-	1.4	Mar-21
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	_	_	13.8	

See Policy Index and Benchmark History
* Account converted to Global/Unconstrained Equity from Growth Oriented Absolute Return in April 2022. Reflects linked historical returns up to March 2022.



Sacramento County Employees' Retirement System Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
CRV XIX LP - Gross	10,988,100	0.1	-2.0	-1.9	-6.6	-	-	-	-14.6	Jul-22
CRV XIX LP - Net			-2.0	-1.9	-6.6	-	-	-	-14.6	Jul-22
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	1.7	
CVC Capital Partners IX - Gross	4,751,501	0.0	-	-	-	-	-	-	-5.2	Dec-24
CVC Capital Partners IX - Net			-	-	-	-	-	-	-5.2	Dec-24
Cambridge Associates All PE 1 Qtr Lag			-	-	-	-	-	-	2.5	
Davidson Kempner LT Dist Opp IV - Gross	17,999,102	0.1	-3.7	-6.3	-2.5	17.6	15.2	-	14.0	Apr-18
Davidson Kempner LT Dist Opp IV - Net			-3.7	-6.3	-2.5	17.6	15.2	-	14.0	Apr-18
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	12.6	
Davidson Kempner LT Dist Opp V - Gross	35,923,004	0.3	2.7	9.9	19.7	9.6	-	-	15.2	Jun-20
Davidson Kempner LT Dist Opp V - Net			2.7	9.9	19.7	9.6	-	-	15.2	Jun-20
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	13.6	
Dyal Capital Partners II - Gross	35,683,117	0.3	-1.9	0.6	-0.7	9.7	19.1	4.3	4.3	Jan-15
Dyal Capital Partners II - Net			-1.9	0.6	-0.7	9.7	19.1	4.3	4.3	Jan-15
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	12.8	
Dyal Capital Partners III - Gross	30,503,340	0.2	0.9	-0.2	11.5	17.5	25.7	-	22.7	Jan-17
Dyal Capital Partners III - Net			0.9	-0.2	11.5	17.5	25.7	-	22.7	Jan-17
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.5	
Garrison Investment Group - Gross	530,133	0.0	-0.2	-62.0	-62.1	0.3	1.0	-0.8	1.0	Jun-12
Garrison Investment Group - Net			-0.2	-62.0	-62.1	0.3	1.0	-0.8	1.0	Jun-12
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	14.4	
Golden Capital Co Invest - Gross	52,477,676	0.4	4.5	5.5	14.3	-	-	-	9.7	Nov-22
Golden Capital Co Invest - Net			4.5	5.5	14.3	-	-	-	9.7	Nov-22
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	4.4	
Gridiron Capital Fund IV - Gross	43,410,382	0.3	-0.1	-0.7	0.5	15.1	-	-	23.3	Jun-20
Gridiron Capital Fund IV - Net	, ,		-0.1	-0.7	0.5	15.1	-	-	23.3	Jun-20
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	13.6	
Gridiron Capital Fund V - Gross	22,106,221	0.2	2.5	3.1	5.1	-	-	-	10.2	Feb-23
Gridiron Capital Fund V - Net	, ,		2.5	3.1	5.1	-	-	-	10.2	Feb-23
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	5.9	
Harbourvest VIII - Gross	1,851,558	0.0	41.4	46.2	14.1	-14.8	0.5	6.6	6.9	Jan-08
Harbourvest VIII - Net	.,,		41.4	46.2	14.1	-14.8	0.5	6.6	-	Jan-08
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	11.0	



Sacramento County Employees' Retirement System Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
H.I.G. Bayside Loan III - Gross	3,373,699	0.0	0.9	-1.7	-1.1	-8.6	-5.0	2.2	1.6	Feb-13
H.I.G. Bayside Loan III - Net			0.9	-1.7	-1.1	-8.6	-5.0	2.2	1.6	Feb-13
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	14.6	
H.I.G. Capital V - Gross	5,680,129	0.0	1.3	8.1	14.3	5.7	13.5	15.1	12.1	Aug-13
H.I.G. Capital V - Net			1.3	8.1	14.3	5.7	13.5	15.1	12.1	Aug-13
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	13.8	
I.I.G. Europe Capital II - Gross	8,616,119	0.1	3.3	2.3	4.8	0.7	10.4	-14.9	-13.4	Feb-14
I.I.G. Europe Capital II - Net			3.3	2.3	4.8	0.7	10.4	-14.9	-13.4	Feb-14
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	13.2	
FL Equity Investors VI - Gross	10,765,094	0.1	-	-	-	-	-	-	0.0	Nov-24
FL Equity Investors VI - Net			-	-	-	-	-	-	0.0	Nov-24
Cambridge Associates All PE 1 Qtr Lag			-	-	-	-	-	-	2.5	
Khosla IV - Gross	11,894,020	0.1	-1.9	-3.2	14.6	-13.3	14.7	18.1	16.6	Aug-11
hosla IV - Net			-1.9	-3.2	14.6	-13.3	14.7	18.1	16.6	Aug-11
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	13.8	
íhosla V - Gross	27,185,854	0.2	6.6	-11.4	-15.0	-12.0	16.3	12.6	12.5	Dec-14
íhosla V - Net			6.6	-11.4	-15.0	-12.0	16.3	12.6	12.5	Dec-14
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	12.5	
Khosla VI - Gross	83,578,514	0.6	15.4	14.6	44.5	25.4	21.8	-	16.1	Sep-18
Khosla VI - Net			15.4	14.6	44.5	25.4	21.8	-	16.1	Sep-18
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.0	
(hosla VII - Gross	18,089,767	0.1	-2.4	-17.4	-1.2	8.5	-	-	1.2	Feb-21
(hosla VII - Net			-2.4	-17.4	-1.2	8.5	-	-	1.2	Feb-21
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	13.5	
Khosla VIII - Gross	12,070,997	0.1	4.1	4.0	-1.5	-	-	-	-1.0	Jul-23
Khosla VIII - Net			4.1	4.0	-1.5	-	-	-	-1.0	Jul-23
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	5.7	
Linden Capital III - Gross	19,162,228	0.1	-2.5	-14.0	3.6	-14.3	9.0	-	14.4	Jul-16
inden Capital III - Net			-2.5	-14.0	3.6	-14.3	9.0	-	14.4	Jul-16
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.7	
inden Capital Partners IV - Gross	47,415,476	0.3	2.1	29.6	57.0	33.5	25.3	-	21.9	Oct-18
inden Capital Partners IV - Net			2.1	29.6	57.0	33.5	25.3	-	21.9	Oct-18
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	12.5	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Linden Capital Partners V - Gross	22,222,300	0.2	3.1	3.6	8.9	-	-	-	7.7	Aug-22
Linden Capital Partners V - Net			3.1	3.6	8.9	-	-	-	7.7	Aug-22
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	1.8	
Marlin Equity IV - Gross	7,656,554	0.1	-8.3	-10.9	-20.6	-11.1	-1.3	3.6	1.9	Dec-13
Marlin Equity IV - Net			-8.3	-10.9	-20.6	-11.1	-1.3	3.6	1.9	Dec-13
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	13.8	
Marlin Equity V - Gross	32,670,637	0.2	-0.2	0.9	3.5	10.9	17.8	-	16.7	Mar-18
Marlin Equity V - Net			-0.2	0.9	3.5	10.9	17.8	-	16.7	Mar-18
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.3	
Marlin Heritage - Gross	3,342,788	0.0	-7.3	-10.5	-21.6	-22.7	-6.1	11.3	9.0	Aug-14
Marlin Heritage - Net			-7.3	-10.5	-21.6	-22.7	-6.1	11.3	9.0	Aug-14
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	12.9	
Marlin Heritage II - Gross	9,897,331	0.1	1.8	1.9	-0.9	0.7	8.6	-	4.1	Nov-17
Marlin Heritage II - Net			1.8	1.9	-0.9	0.7	8.6	-	4.1	Nov-17
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.3	
Marlin Heritage III - Gross	10,471,336	0.1	6.3	4.3	15.9	-	-	-	-30.8	Jan-23
Marlin Heritage III - Net			6.3	4.3	15.9	-	-	-	-30.8	Jan-23
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	5.7	
Marlin Heritage Europe - Gross	15,422,916	0.1	4.2	2.3	2.3	3.9	20.4	-	18.2	Sep-17
Marlin Heritage Europe - Net			4.2	2.3	2.3	3.9	20.4	-	18.2	Sep-17
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.6	
New Enterprise 14 - Gross	35,781,902	0.3	0.4	-1.5	-2.8	-12.0	8.7	12.8	11.7	Jun-12
New Enterprise 14 - Net			0.4	-1.5	-2.8	-12.0	8.7	12.8	11.7	Jun-12
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	14.4	
New Enterprise 15 - Gross	24,064,346	0.2	2.3	-8.1	-10.9	-19.9	-3.2	-	6.0	May-15
New Enterprise 15 - Net			2.3	-8.1	-10.9	-19.9	-3.2	-	6.0	May-15
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	12.9	
New Enterprise 16 - Gross	37,068,408	0.3	0.7	-3.1	7.6	-3.9	8.0	-	6.6	Jun-17
New Enterprise 16 - Net			0.7	-3.1	7.6	-3.9	8.0	-	6.6	Jun-17
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.7	
New Enterprise 17 - Gross	21,783,745	0.2	2.6	-1.3	2.6	-6.1	8.3	-	7.0	Aug-19
New Enterprise 17 - Net			2.6	-1.3	2.6	-6.1	8.3	-	7.0	Aug-19
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.2	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Oaktree Power Opp Fund VI - Gross	30,205,045	0.2	11.0	14.1	23.5	-	-	-	12.2	Jun-22
Oaktree Power Opp Fund VI - Net			11.0	14.1	23.5	-	-	-	12.2	Jun-22
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	1.3	
OrbiMed Private Investments VIII - Gross	11,313,450	0.1	1.1	-1.5	13.8	9.3	-	-	5.2	Jan-21
OrbiMed Private Investments VIII - Net			1.1	-1.5	13.8	9.3	-	-	5.2	Jan-21
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	13.2	
OrbiMed Private Investments IX - Gross	7,202,204	0.1	9.0	7.6	14.9	-	-	-	-6.8	Dec-22
OrbiMed Private Investments IX - Net			9.0	7.6	14.9	-	-	-	-6.8	Dec-22
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	4.6	
RCP Multi-Fund Feeder - Gross	83,666,527	0.6	2.6	7.0	13.1	15.0	16.3	-	11.3	Dec-18
RCP Multi-Fund Feeder - Net			2.6	7.0	13.1	15.0	16.3	-	11.3	Dec-18
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	12.8	
Resurgens Tech Partners III - Gross	184,204	0.0	0.0	-	-	-	-	-	0.0	Oct-24
Resurgens Tech Partners III - Net			0.0	-	-	-	-	-	0.0	Oct-24
Cambridge Associates All PE 1 Qtr Lag			2.5	-	-	-	-	-	2.5	
RRJ Capital Master Fund II - Gross	4,128,456	0.0	14.5	23.9	43.0	-5.0	5.2	7.7	9.0	Jun-13
RRJ Capital Master Fund II - Net			14.5	23.9	43.0	-5.0	5.2	7.7	9.0	Jun-13
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	14.2	
RRJ Capital Master Fund III - Gross	8,811,351	0.1	6.9	3.5	2.3	-16.9	-10.0	-	-8.9	Jan-16
RRJ Capital Master Fund III - Net			6.9	3.5	2.3	-16.9	-10.0	-	-8.9	Jan-16
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	14.0	
Shamrock Capital II - Gross	14,150,775	0.1	2.9	10.9	18.8	12.0	-	-	-59.8	Aug-20
Shamrock Capital II - Net			2.9	10.9	18.8	12.0	-	-	-59.8	Aug-20
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	16.6	
Shamrock Capital III - Gross	8,191,597	0.1	-0.5	-4.3	-100.3	-	-	-	-100.0	Jan-23
Shamrock Capital III - Net			-0.5	-4.3	-100.3	-	-	-	-100.0	Jan-23
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	5.7	
Shamrock Capital Growth Fund V - Gross	19,606,768	0.1	1.4	2.6	20.6	-7.2	-	-	-16.6	Aug-21
Shamrock Capital Growth Fund V - Net			1.4	2.6	20.6	-7.2	-	-	-16.6	Aug-21
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	7.7	-
Sixth Street Opp Partners V - Gross	25,094,220	0.2	3.2	6.5	11.8	-	-	-	2.2	Jul-22
Sixth Street Opp Partners V - Net			3.2	6.5	11.8	-	-	-	2.2	Jul-22
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	1.7	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inceptior Date
Spectrum Equity VII - Gross	26,984,217	0.2	-2.0	-6.5	-2.0	-20.6	9.2	15.2	15.2	Jan-15
Spectrum Equity VII - Net			-2.0	-6.5	-2.0	-20.6	9.2	15.2	15.2	Jan-15
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	12.8	
Spectrum Equity Fund VIII - Gross	21,191,259	0.2	7.4	16.8	34.9	2.9	30.3	-	-6.6	Jul-18
Spectrum Equity Fund VIII - Net			7.4	16.8	34.9	2.9	30.3	-	-6.6	Jul-18
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	12.7	
Spectrum Equity Fund IX - Gross	19,906,637	0.1	6.0	5.4	5.0	-1.3	-	-	-5.9	Oct-20
Spectrum Equity Fund IX - Net			6.0	5.4	5.0	-1.3	-	-	-5.9	Oct-2
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	15.0	
Spectrum Equity Fund X - Gross	4,405,602	0.0	-2.1	-3.1	-7.2	-	-	-	-7.2	Jan-2
Spectrum Equity Fund X - Net			-2.1	-3.1	-7.2	-	-	-	-7.2	Jan-2
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	7.3	
Strategic Value Spl Fund V - Gross	28,283,168	0.2	5.4	11.1	23.1	16.3	-	-	13.6	Sep-2
Strategic Value Spl Fund V - Net			5.4	11.1	23.1	16.3	-	-	13.6	Sep-2
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	7.9	
Summit EUR Growth Equity II - Gross	51,749,203	0.4	3.5	20.3	43.1	46.4	46.8	-	65.4	Feb-1
Summit EUR Growth Equity II - Net			3.5	20.3	43.1	46.4	46.8	-	65.4	Feb-1
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.1	
Summit EUR Growth Equity III - Gross	22,017,480	0.2	4.6	8.4	27.7	10.9	-	-	1.8	Feb-2
Summit EUR Growth Equity III - Net	, ,		4.6	8.4	27.7	10.9	-	-	1.8	Feb-2
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	13.5	
Summit Ventures III - Gross	3,990,389	0.0	0.0	16.2	10.6	12.7	14.2	16.8	12.8	Jul-1
Summit Ventures III - Net	, ,		0.0	16.2	10.6	12.7	14.2	16.8	12.8	Jul-1
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	14.2	
Summit Ventures IV - Gross	65,473,635	0.5	3.6	15.9	38.0	16.3	31.0	-	33.0	Jun-1
Summit Ventures IV - Net	, ,		3.6	15.9	38.0	16.3	31.0	-	33.0	Jun-1
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	14.5	
Summit Ventures V - Gross	15,040,729	0.1	2.4	3.5	8.2	3.3	-	-	0.2	Jun-2
Summit Ventures V - Net	, ,		2.4	3.5	8.2	3.3	_		0.2	Jun-2
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	10.2	V 4.1 2
Thoma Bravo XI - Gross	24,570,543	0.2	-1.2	2.7	16.9	-1.2	19.0	22.3	20.8	Jul-
Fhoma Bravo XI - Net	21,070,010	V. <u>L</u>	-1.2	2.7	16.9	-1.2	19.0	22.3	20.8	Jul-1
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	12.9	Juli



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Thoma Bravo XII - Gross	34,749,551	0.3	0.2	1.9	14.3	11.5	16.0	-	11.7	Jun-16
Thoma Bravo XII - Net			0.2	1.9	14.3	11.5	16.0	-	11.7	Jun-16
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	14.5	
Thoma Bravo XIII - Gross	56,018,345	0.4	2.1	4.9	7.9	6.6	27.0	-	22.2	Mar-19
Thoma Bravo XIII - Net			2.1	4.9	7.9	6.6	27.0	-	22.2	Mar-19
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	12.8	
Threshold Ventures III - Gross	21,770,896	0.2	-6.6	0.6	-5.9	-5.3	5.2	-	5.0	Nov-19
Threshold Ventures III - Net			-6.6	0.6	-5.9	-5.3	5.2	-	5.0	Nov-19
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.1	
Threshold Ventures IV - Gross	12,845,709	0.1	2.7	0.4	-1.8	-	-	-	-61.2	Jul-22
Threshold Ventures IV - Net			2.7	0.4	-1.8	-	-	-	-61.2	Jul-22
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	-	-	-	1.7	
TPG Opp Partners III - Gross	5,854,689	0.0	0.5	0.9	-1.8	-8.0	2.0	4.9	-7.2	Apr-14
TPG Opp Partners III - Net			0.5	0.9	-1.8	-8.0	2.0	4.9	-7.2	Apr-14
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	12.8	
Trinity Ventures XI - Gross	11,807,162	0.1	0.4	-3.0	-11.3	-11.2	1.4	9.4	5.1	May-13
Trinity Ventures XI - Net			0.4	-3.0	-11.3	-11.2	1.4	9.4	5.1	May-13
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	14.2	,
Trinity Ventures XII - Gross	32,855,143	0.2	0.0	-1.4	-38.5	-25.8	1.7	-	9.8	May-16
Trinity Ventures XII - Net			0.0	-1.4	-38.5	-25.8	1.7	-	9.8	May-16
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	14.4	,
TSG7 A LP - Gross	9,432,577	0.1	-2.7	-1.7	11.9	-8.0	14.8	-	-183.9	Apr-16
TSG7 A LP - Net	-, - ,-		-2.7	-1.7	11.9	-8.0	14.8	-	-183.9	Apr-16
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	13.6	
TSG7 B LP - Gross	4,331,136	0.0	34.6	34.3	40.3	-0.9	17.8	-	-0.5	Feb-16
TSG7 B LP - Net	,,,,,,,,,		34.6	34.3	40.3	-0.9	17.8	-	-0.5	Feb-16
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	_	13.2	
TSG8 LP - Gross	36,186,065	0.3	-0.8	-4.7	-10.2	-4.7	-182.5	_	-56.8	Feb-19
TSG8 LP - Net	33,.30,000	0.0	-0.8	-4.7	-10.2	-4.7	-182.5	_	-56.8	Feb-19
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	_	12.6	1 00 10
TSG9 LP - Gross	9,443,920	0.1	-3.1	-2.6	-8.3	-	-	-	-24.7	Feb-23
TSG9 LP - Net	3, 1 10,020	0.1	-3.1	-2.6	-8.3	_	<u>-</u>	_	-24.7	Feb-23
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	_	_	_	5.9	1 00 20



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
TSSP Opportunities Partners IV - Gross	23,366,176	0.2	0.3	2.3	6.1	7.2	10.8	-	10.7	Feb-19
TSSP Opportunities Partners IV - Net			0.3	2.3	6.1	7.2	10.8	-	10.7	Feb-19
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	12.6	
Waterland V - Gross	534,671	0.0	-4.3	-0.1	-24.2	6.6	11.9	26.1	18.9	Sep-11
Waterland V - Net			-4.3	-0.1	-24.2	6.6	11.9	26.1	18.9	Sep-11
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	14.0	
Waterland VI - Gross	11,076,475	0.1	5.0	20.1	22.4	10.4	22.9	-	9.6	Aug-15
Waterland VI - Net			5.0	20.1	22.4	10.4	22.9	-	9.6	Aug-15
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	-	12.6	
Wayzata Opportunities III - Gross	696,352	0.0	-5.9	10.2	41.1	23.2	12.4	4.4	1.3	Mar-13
Wayzata Opportunities III - Net			-5.9	10.2	41.1	23.2	12.4	4.4	1.3	Mar-13
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	13.4	12.8	14.7	
Wynnchurch Capital Partners V - Gross	22,622,304	0.2	1.4	3.7	8.9	11.3	-	-	-1.2	May-20
Wynnchurch Capital Partners V - Net			1.4	3.7	8.9	11.3	-	-	-1.2	May-20
Cambridge Associates All PE 1 Qtr Lag			2.5	3.6	7.3	3.0	-	-	13.4	
Wynnchurch Capital Partners VI - Gross	4,861,166	0.0	4.5	-	-	-	-	-	0.0	Aug-24
Wynnchurch Capital Partners VI - Net			4.5	-	-	-	-	-	0.0	Aug-24
Cambridge Associates All PE 1 Qtr Lag			2.5	-	-	-	-	-	3.6	
Public Credit - Gross	246,325,795	1.8	1.4	6.6	10.2	3.4	5.6	5.3	4.9	Dec-13
Public Credit - Net			1.4	6.6	10.2	3.4	5.6	5.3	4.9	Dec-13
Brigade Custom			1.2	4.9	8.6	4.9	4.9	5.1	4.9	
Brigade Capital - Gross	246,325,795	1.8	1.4 (6)	6.6 (4)	10.2 (6)	3.4 (38)	5.6 (10)	5.3 (18)	4.9	Dec-13
Brigade Capital - Net			1.4 (6)	6.6 (4)	10.2 (6)	3.4 (38)	5.6 (10)	5.3 (18)	4.9	Dec-13
Brigade Custom			1.2 (10)	4.9 (35)	8.6 (23)	4.9 (7)	4.9 (18)	5.1 (26)	4.9	Dec-13
eV US High Yield Fixed Inc Median			0.2	4.6	7.7	3.0	3.9	4.7	-	
Private Credit - Gross	469,297,216	3.4	1.2	3.9	9.3	7.8	9.2	8.0	7.8	Nov-11
Private Credit - Net			1.2	3.9	9.3	7.8	9.2	8.0	7.8	Nov-11
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	7.7	6.9	7.0	
Ares Capital Europe Fund V - Gross	31,689,949	0.2	3.6	6.5	13.0	11.2	-	-	12.6	Aug-21
Ares Capital Europe Fund V - Net			3.6	6.5	13.0	11.2	-	-	12.6	Aug-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	-	-	8.3	



Sacramento County Employees' Retirement System Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Ares Capital Europe Fund VI - Gross	15,079,026	0.1	-	-	-	-	-	-	0.0	Dec-24
Ares Capital Europe Fund VI - Net			-	-	-	-	-	-	0.0	Dec-24
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			-	-	-	-	-	-	0.9	
Ares Senior Direct Lending Fund III - Gross	8,760,958	0.1	2.0	-	-	-	-	-	5.8	Aug-24
Ares Senior Direct Lending Fund III - Net			2.0	-	-	-	-	-	5.8	Aug-24
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	-	-	-	-	-	4.1	
Athyrium Opp II - Gross	4,096,153	0.0	1.6	-3.0	39.2	16.6	15.2	-	11.1	Jul-15
Athyrium Opp II - Net			1.6	-3.0	39.2	16.6	15.2	-	11.1	Jul-15
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	7.7	-	7.0	
Athyrium Opp III - Gross	8,181,729	0.1	-1.0	-2.7	-3.0	-5.3	0.2	-	-0.5	Jun-17
Athyrium Opp III - Net			-1.0	-2.7	-3.0	-5.3	0.2	-	-0.5	Jun-17
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	7.7	-	7.2	
Benefit St Pr Sr Secure Opp - Gross	11,495,151	0.1	1.8	3.5	6.7	6.4	6.5	-	6.1	Feb-18
Benefit St Pr Sr Secure Opp - Net	, ,		1.8	3.5	6.7	6.4	6.5	-	6.1	Feb-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	7.7	-	7.3	
Benefit St Pr Sr Secure Opp II - Gross	46,734,089	0.3	2.3	5.1	9.6	10.2	9.3	-	9.3	Jan-20
Benefit St Pr Sr Secure Opp II - Net	., . ,		2.3	5.1	9.6	10.2	9.3	-	9.3	Jan-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	7.7	-	7.7	
Brookfield Infra Debt Fund III - Gross	24,441,509	0.2	1.9	3.4	6.7	-	-	-	6.1	Apr-23
Brookfield Infra Debt Fund III - Net	, ,		1.9	3.4	6.7	-	-	-	6.1	Apr-23
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	-	_	_	13.5	į.
IFM US Infrastructure DB FD LP - Gross	66,672,316	0.5	1.7	4.1	3.9	6.1	-	-	6.8	Apr-21
IFM US Infrastructure DB FD LP - Net	,		1.7	4.1	3.9	6.1	_	_	6.8	Apr-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	_	-	8.4	· • ·
MCP Private Capital IV - Gross	29,350,010	0.2	9.9	15.3	22.7	15.8	_	_	9.0	May-20
MCP Private Capital IV - Net	_0,000,0.0	V. <u>–</u>	9.9	15.3	22.7	15.8	_	_	9.0	May-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	_	_	7.6	may 20
OrbiMed Royalty & Credit Opp III - Gross	12,150,545	0.1	0.1	1.3	3.4	5.4	15.3	_	13.4	Oct-19
OrbiMed Royalty & Credit Opp III - Net	12,100,040	0.1	0.1	1.3	3.4	5.4	15.3	_	13.4	Oct-19
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	7.7	_	7.6	00.13
OrbiMed Royalty & Credit Opp IV - Gross	16,568,907	0.1	0.9	4.7	11.0	0.4	1.1	- -	10.9	Oct-22
OrbiMed Royalty & Credit Opp IV - Gloss OrbiMed Royalty & Credit Opp IV - Net	10,500,907	0.1	0.9	4.7	11.0	-	•	_	10.9	Oct-22
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	-	-	-	10.9	OUI-22



Total Fund Performance Summary

Sacramento County Employees' Retirement System Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Shamrock Capital Debt Fund I - Gross	3,916,567	0.0	3.4	5.6	10.9	6.5	-	-	-28.6	Aug-21
Shamrock Capital Debt Fund I - Net			3.4	5.6	10.9	6.5	-	-	-28.6	Aug-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	-	-	8.3	
Silver Point Specialty Credit Fund II - Gross	32,478,111	0.2	2.4	6.2	12.0	9.2	-	-	12.9	Aug-20
Silver Point Specialty Credit Fund II - Net			2.4	6.2	12.0	9.2	-	-	12.9	Aug-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	-	-	10.5	
Silver Point Specialty Credit Fund III - Gross	13,786,681	0.1	2.9	5.0	22.7	-	-	-	6.6	Apr-23
Silver Point Specialty Credit Fund III - Net			2.9	5.0	22.7	-	-	-	6.6	Apr-23
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	-	-	-	13.5	
Sky Leasing Fund VI - Gross	16,801,811	0.1	6.1	-	-	-	-	-	6.1	Sep-24
Sky Leasing Fund VI - Net			6.1	-	-	-	-	-	6.1	Sep-24
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	-	-	-	-	-	3.0	
Summit Credit - Gross	4,356	0.0	18.0	23.8	241.4	47.1	28.8	17.1	14.6	Nov-11
Summit Credit - Net			18.0	23.8	241.4	47.1	28.8	17.1	14.6	Nov-11
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	7.7	6.9	7.0	
Summit Credit II - Gross	6,352,546	0.0	-4.2	-12.1	-38.7	-15.3	-8.5	-1.2	-1.2	Dec-14
Summit Credit II - Net			-4.2	-12.1	-38.7	-15.3	-8.5	-1.2	-1.2	Dec-14
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	7.7	6.9	6.9	
Summit Credit III - Gross	6,510,843	0.0	-7.8	-6.3	-11.4	0.2	7.7	-	8.1	Nov-18
Summit Credit III - Net			-7.8	-6.3	-11.4	0.2	7.7	-	8.1	Nov-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	7.7	-	7.3	
Summit Credit IV - Gross	7,482,869	0.1	-0.3	3.9	10.3	10.8	-	-	10.5	Dec-21
Summit Credit IV - Net			-0.3	3.9	10.3	10.8	-	-	10.5	Dec-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	-	-	8.5	
TCP Direct Lending VIII - Gross	106,743,090	0.8	-2.6	0.7	3.3	5.6	7.8	-	7.0	Mar-18
TCP Direct Lending VIII - Net			-2.6	0.7	3.3	5.6	7.8	-	7.0	Mar-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.6	5.0	11.8	8.4	7.7	-	7.4	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Growth Oriented Absolute Return - Gross	5,563,870	0.0	-0.6	0.0	-0.5	-3.0	2.7	3.3	4.3	Sep-04
Growth Oriented Absolute Return - Net			-0.6	0.0	-0.5	-3.0	2.7	3.3	4.3	Sep-04
HFRI FoF Composite Index + 1%			2.4	4.7	10.3	4.2	6.3	5.6	6.1	
Grosvenor SCARF Growth - Gross	5,563,870	0.0	-0.6 (46)	-0.1 (83)	-0.5 (79)	-1.8 (90)	1.2 (89)	2.4 (86)	4.0	Dec-11
Grosvenor SCARF Growth - Net			-0.6	-0.1	-0.5	-1.8	1.2	2.4	4.0	Dec-11
HFRI FoF Composite Index + 1%			2.4 (20)	4.7 (35)	10.3 (44)	4.2 (62)	6.3 (33)	5.6 (31)	5.4	Dec-11
eV Alt Fund of Funds - Multi-Strategy Median			-0.6	3.0	8.1	4.8	5.3	3.9	-	
Diversifying Asset Category - Gross	3,096,426,617	22.3	-1.4	2.5	3.6	0.1	1.8		2.5	Apr-17
Diversifying Asset Category - Net			-1.4	2.5	3.5	0.0	1.7		2.4	Apr-17
Diversifying Custom			-1.5	2.3	3.0	-0.4	1.2	-	2.1	
Fixed Income - Gross	1,907,599,257	13.7	-3.2	2.3	1.8	-2.1	0.2	2.0	2.4	Jul-11
Fixed Income - Net	1,907,599,257	13.7	-3.2	2.2	1.6	-2.2	0.1	1.8	2.2	Jul-11
Fixed Income Custom			-2.6	2.2	1.9	-1.7	0.0	1.5	-	
Core/Core Plus Fixed Income - Gross	1,500,555,657	10.8	-3.2	2.5	2.0	-1.9	0.5	2.2	2.5	Jul-11
Core/Core Plus Fixed Income - Net			-3.3	2.5	1.8	-2.1	0.3	2.0	2.4	Jul-11
Blmbg. U.S. Aggregate Index			-3.1	2.0	1.3	-2.4	-0.3	1.3	2.0	
Prudential - Gross	377,102,193	2.7	-2.6 (19)	2.6 (14)	3.5 (8)	-1.5 (26)	0.7 (23)	2.7 (4)	2.8	Aug-14
Prudential - Net			-2.6	2.5	3.4	-1.7	0.5	2.5	2.6	Aug-14
Blmbg. U.S. Aggregate Index			-3.1 (77)	2.0 (81)	1.3 (95)	-2.4 (91)	-0.3 (96)	1.3 (99)	1.5	Aug-14
eV US Core Fixed Inc Median			-2.9	2.2	2.0	-1.9	0.4	1.9	-	
TCW MetWest Fixed - Gross	369,506,711	2.7	-3.7 (99)	2.0 (72)	1.4 (91)	-2.0 (64)	0.5 (38)	2.0 (41)	4.7	Jan-02
TCW MetWest Fixed - Net			-3.7	1.9	1.2	-2.2	0.3	1.8	4.5	Jan-02
Blmbg. U.S. Aggregate Index			-3.1 (77)	2.0 (81)	1.3 (95)	-2.4 (91)	-0.3 (96)	1.3 (99)	3.4	Jan-02
eV US Core Fixed Inc Median			-2.9	2.2	2.0	-1.9	0.4	1.9	-	
Brandywine US FI - Gross	367,772,880	2.6	-3.5 (95)	3.3 (8)	1.3 (94)	-	-	-	0.6	Jun-22
Brandywine US FI - Net			-3.6	3.2	1.1	-	-	-	0.4	Jun-22
Blmbg. U.S. Aggregate Index			-3.1 (80)	2.0 (91)	1.3 (94)	-	-	-	0.8	Jun-22
eV US Core Plus Fixed Inc Median			-2.8	2.3	2.4	-1.9	0.6	2.1	-	
Reams Core Plus FI - Gross	386,173,873	2.8	-3.1 (84)	2.2 (76)	1.9 (85)	-	-	-	2.2	Jun-22
Reams Core Plus FI - Net	, ,-		-3.1	2.1	1.7	-	-	-	2.0	Jun-22
Blmbg. U.S. Aggregate Index			-3.1 (80)	2.0 (91)	1.3 (94)	-	-	-	0.8	Jun-22
eV US Core Plus Fixed Inc Median			-2.7	2.5	2.8	-1.5	0.9	2.4	-	



Sacramento County Employees' Retirement System Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
U.S. Treasury - Gross	407,043,600	2.9	-3.1	1.5	0.9	-2.7	-0.6		1.0	Mar-18
U.S. Treasury - Net			-3.1	1.5	8.0	-2.8	-0.6	-	1.0	Mar-18
Blmbg. U.S. Treasury Index			-3.1	1.5	0.6	-2.9	-0.7	-	0.9	
Neuberger Berman - Gross	407,043,600	2.9	-3.1 (44)	1.5 (78)	0.9 (77)	-2.7 (75)	-0.6 (80)	1.2 (70)	5.4	Jul-88
Neuberger Berman - Net			-3.1	1.5	0.8	-2.8	-0.6	1.1	5.4	Jul-88
Blmbg. U.S. Government Index			-3.1 (59)	1.5 (79)	0.6 (81)	-2.8 (78)	-0.6 (82)	0.9 (88)	4.9	Jul-88
eV US Government Fixed Inc Median			-3.1	1.9	1.4	-2.1	0.0	1.3	-	
Absolute Return - Gross	922,137,898	6.6	1.9	2.7	6.8	4.3	4.8	3.0	3.1	Dec-11
Absolute Return - Net			1.9	2.7	6.8	4.3	4.8	3.0	3.1	Dec-11
HFRI FoF Conservative Index			1.5	3.1	6.6	4.0	5.2	4.7	4.8	
Aristeia Partners LP - Gross	55,213,739	0.4	0.7 (45)	2.8 (19)	4.5 (33)	4.3 (20)	-	-	5.2	Jan-21
Aristeia Partners LP - Net			0.7	2.8	4.5	4.3	-	-	5.2	Jan-21
HFRI FoF Conservative Index			1.5 (41)	3.1 (19)	6.6 (23)	4.0 (21)	-	-	4.9	Jan-21
eV Alt Relative Value - Multi-Market Arbitrage Median			-0.1	0.5	2.0	1.6	-	-	-	
BlackRock Event Driven Equity Fund - Gross	57,852,792	0.4	-0.6 (61)	2.0 (68)	2.2 (74)	2.5 (70)	-	-	3.2	Mar-20
BlackRock Event Driven Equity Fund - Net			-0.6	2.0	2.2	2.5	-	-	3.2	Mar-20
HFRI FoF Conservative Index			1.5 (41)	3.1 (55)	6.6 (50)	4.0 (52)	-	-	5.5	Mar-20
eV Alt All Event Driven Median			0.8	4.2	6.5	4.1	6.0	8.3	-	
Capula Global Relative Value Fund - Gross	40,993,796	0.3	2.5 (34)	-	-	-	-	-	2.5	Oct-24
Capula Global Relative Value Fund - Net			2.5	-	-	-	-	-	2.5	Oct-24
HFRI FOF: Conservative Index			1.5 (41)	3.1 (19)	6.6 (23)	4.0 (21)	5.2 (-)	3.8 (-)	5.5	Jan-90
eV Alt Relative Value - Multi-Market Arbitrage Median			-0.1	0.5	2.0	1.6	-	-	-	
Capula Volatility Opportunity Fund - Gross	20,554,595	0.1	3.2 (29)	-	-	-	-	-	3.2	Oct-24
Capula Volatility Opportunity Fund - Net			2.8	-	-	-	-	-	2.8	Oct-24
HFRI FOF: Conservative Index			1.5 (41)	3.1 (19)	6.6 (23)	4.0 (21)	5.2 (-)	3.8 (-)	5.5	Jan-90
eV Alt Relative Value - Multi-Market Arbitrage Median			-0.1	0.5	2.0	1.6	-	-	-	
Davidson Kempner Instl Partners LP - Gross	4,595,840	0.0	0.0 (43)	3.1 (47)	7.6 (63)	4.3 (53)	5.4 (57)	-	5.3	May-19
Davidson Kempner Instl Partners LP - Net			0.0	3.1	7.6	4.3	5.4	-	5.3	May-19
HFRI FoF Conservative Index			1.5 (29)	3.1 (47)	6.6 (68)	4.0 (58)	5.2 (58)	-	5.0	May-19
eV Alt All Multi-Strategy Median			-0.3	2.6	9.8	4.5	7.1	5.0	-	
Elliott Associates - Gross	90,964,733	0.7	3.8 (17)	3.8 (52)	8.5 (38)	7.0 (27)	9.5 (34)	7.9 (56)	8.1	May-12
Elliott Associates - Net			3.8	3.8	8.5	7.0	9.5	7.9	8.1	May-12
HFRI FoF Conservative Index			1.5 (41)	3.1 (55)	6.6 (50)	4.0 (52)	5.2 (60)	4.7 (96)	4.8	Jan-11
eV Alt All Event Driven Median			0.8	4.2	6.5	4.1	6.0	8.3	-	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Graham Global Inv II - Gross	46,670,447	0.3	0.3 (12)	-8.6 (95)	5.9 (31)	7.7 (21)	5.5 (60)	-	3.9	Mar-17
Graham Global Inv II - Net			0.3	-8.6	5.9	7.7	5.5	-	3.9	Mar-17
HFRI FoF Conservative Index			1.5 (6)	3.1 (8)	6.6 (20)	4.0 (50)	5.2 (62)	-	4.6	Mar-17
eV Alt All Managed Futures Median			-1.8	-0.6	3.4	4.0	6.4	2.6	-	
Grosvenor SCARF Diversifying - Gross	272,004,702	2.0	4.6 (1)	6.4 (12)	14.8 (9)	7.4 (7)	7.0 (29)	3.4 (58)	3.7	Dec-11
Grosvenor SCARF Diversifying - Net			4.6	6.4	14.8	7.4	7.0	3.4	3.7	Dec-11
HFRI FoF Conservative Index			1.5 (35)	3.1 (50)	6.6 (55)	4.0 (65)	5.2 (52)	4.7 (42)	4.8	Dec-11
eV Alt Fund of Funds - Multi-Strategy Median			-0.6	3.0	8.1	4.8	5.3	3.9	-	
Hudson Bay Fund - Gross	51,156,427	0.4	-	-	-	-	-	-	2.3	Nov-24
Hudson Bay Fund - Net			-	-	-	-	-	-	2.3	Nov-24
HFRI FoF Conservative Index			1.5 (35)	3.1 (50)	6.6 (55)	4.0 (65)	5.2 (52)	4.7 (42)	4.8	Jan-11
eV Alt Fund of Funds - Multi-Strategy Median			2.4	5.0	10.0	3.9	6.5	5.3	-	
Junto Capital Partners - Gross	54,897,048	0.4	4.3 (23)	5.3 (47)	9.8 (67)	-	-	-	9.8	Jan-24
Junto Capital Partners - Net			4.3	5.3	9.8	-	-	-	9.8	Jan-24
HFRI FoF Conservative Index			1.5 (39)	3.1 (64)	6.6 (75)	4.0 (65)	5.2 (88)	4.7 (91)	4.8	Jan-11
eV Alt Fundamental - Long/Short Equity Median			0.8	4.3	11.5	4.0	8.3	7.1	-	
Laurion Capital - Gross	57,395,185	0.4	1.4 (17)	-4.1 (100)	-7.7 (100)	-2.7 (100)	7.2 (32)	6.5 (-)	6.2	Mar-14
Laurion Capital - Net			1.4	-4.1	-7.7	-2.7	7.2	6.5	6.2	Mar-14
HFRI FoF Conservative Index			1.5 (17)	3.1 (23)	6.6 (60)	4.0 (74)	5.2 (97)	4.7 (-)	4.7	Mar-14
eV Alt Relative Value - Equity Relative Value Median			-2.8	1.4	11.7	6.2	6.8	-	-	
MW Global Opportunities Fund - Gross	62,517,441	0.5	-3.4 (69)	-2.6 (86)	5.3 (77)	6.1 (50)	5.8 (85)	-	5.9	Jan-19
MW Global Opportunities Fund - Net			-3.4	-2.6	5.3	6.1	5.8	-	5.9	Jan-19
HFRI FoF Conservative Index			1.5 (39)	3.1 (64)	6.6 (75)	4.0 (65)	5.2 (88)	-	5.4	Jan-19
eV Alt Fundamental - Long/Short Equity Median			0.2	4.7	13.9	5.9	11.8	9.3	-	
PSquared Event Driven Opp Fund - Gross	52,268,068	0.4	-4.5 (73)	-0.8 (77)	-6.1 (96)	-0.2 (81)	-	-	1.1	Aug-20
PSquared Event Driven Opp Fund - Net			-4.5	-0.8	-6.1	-0.2	-	-	1.1	Aug-20
HFRI FoF Conservative Index			1.5 (41)	3.1 (55)	6.6 (50)	4.0 (52)	5.2 (60)	4.7 (96)	4.8	Jan-11
eV Alt All Event Driven Median			0.8	4.2	6.5	4.1	6.0	8.3	-	
Tudor BVI Global Fund - Gross	55,053,086	0.4	1.6 (30)	6.9 (1)	6.5 (60)	-	-	-	4.9	Jan-23
Tudor BVI Global Fund - Net			1.6	6.9	6.5	-	-	-	4.9	Jan-23
HFRI FOF Conservative Index			1.5 (31)	3.1 (22)	6.6 (60)	4.0 (59)	5.2 (54)	3.8 (72)	5.5	Jan-90
eV Alt Macro - Discretionary Median			-0.4	1.4	6.3	5.7	7.0	4.4	-	



	Market Value	% of Portfolio	3 Мо	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Dedicated Cash Allocation - Gross	266,689,463	1.9	1.2	2.5	5.2	4.0	2.6		2.4	Jul-19
Dedicated Cash Allocation - Net			1.2	2.5	5.2	4.0	2.6		2.4	Jul-19
Secured Overnight Financing Rate			1.2	2.6	5.4	4.1	2.6	-	2.5	
Real Return Asset Category - Gross	2,414,340,290	17.4	0.5	2.6	3.5	3.0	5.8		7.3	Apr-17
Real Return Asset Category - Net			0.5	2.6	3.5	3.0	5.7		7.2	Apr-17
Real Return Custom			0.2	1.0	0.5	3.0	5.2	-	5.4	
Real Estate - Gross	902,002,959	6.5	0.7 (36)	0.2 (65)	-2.4 (56)	-2.7 (32)	3.6 (21)	6.6 (13)	8.4	Jul-11
Real Estate - Net			0.7	0.2	-2.5	-2.9	3.4	6.3	7.8	Jul-11
Real Estate Custom			0.8 (31)	0.8 (40)	-3.7 (79)	-1.2 (21)	3.1 (23)	5.7 (24)	7.2	Jul-11
InvMetrics All DB Real Estate Private Median			0.5	0.6	-2.2	-3.4	1.8	4.7	-	
Core RE - Limited Partnership - Gross	581,108,141	4.2	0.7	1.4	-0.1	-2.4	4.4	7.6	5.0	Oct-08
Core RE - Limited Partnership - Net			0.6	1.3	-0.3	-2.6	4.2	7.3	4.6	Oct-08
NFI-ODCE			1.2	1.4	-1.4	-2.3	2.9	5.9	4.7	
Brookfield Premier RE Partners - Gross*	90,943,655	0.7	0.0	-1.3	-8.3	-6.2	0.7	-	2.2	Oct-18
Brookfield Premier RE Partners - Net*			0.0	-1.3	-8.3	-6.2	0.7	-	2.2	Oct-18
NFI-ODCE			1.2	1.4	-1.4	-2.3	2.9	-	3.4	
Clarion Lion Properties - Gross	102,402,983	0.7	2.0	2.2	-2.2	-3.3	2.7	-	3.6	Oct-18
Clarion Lion Properties - Net			1.8	1.8	-3.1	-4.1	1.8	-	2.8	Oct-18
NFI-ODCE			1.2	1.4	-1.4	-2.3	2.9	-	3.4	
Metlife Core Property - Gross	70,508,500	0.5	1.9	0.7	-1.9	-2.6	3.5	6.7	7.7	Jan-14
Metlife Core Property - Net			1.9	0.6	-2.0	-2.9	3.2	6.3	7.2	Jan-14
NFI-ODCE			1.2	1.4	-1.4	-2.3	2.9	5.9	6.5	
Principal US Property - Gross	54,414,277	0.4	1.1	0.9	-2.1	-3.1	2.3	-	4.9	Nov-15
Principal US Property - Net	, ,		1.1	0.9	-2.1	-3.1	2.3	-	4.9	Nov-15
NFI-ODCE			1.2	1.4	-1.4	-2.3	2.9	-	5.1	
Prologis Targeted Euro Logistics - Gross*	60,268,722	0.4	0.0	2.4	3.6	-5.4	4.2	-	7.9	Nov-15
Prologis Targeted Euro Logistics - Net*	, ,		0.0	2.4	3.6	-5.4	4.2	-	7.9	Nov-15
NFI-ODCE			1.2	1.4	-1.4	-2.3	2.9	-	5.1	
Prologis Targeted US Logistics - Gross*	74,517,516	0.5	0.0	1.6	5.1	1.0	11.0	-	13.8	Aug-15
Prologis Targeted US Logistics - Net*	, ,		0.0	1.5	4.8	0.8	10.9	-	13.7	Aug-15
NFI-ODCE			1.2	1.4	-1.4	-2.3	2.9	-	5.3	. 5 . 0
Townsend Real Estate - Gross*	128,052,488	0.9	0.0	-0.1	-2.1	-1.8	4.4	-	6.5	Apr-16
Townsend Real Estate - Net*	,,		0.0	-0.1	-2.1	-1.8	4.4	-	6.5	Apr-16
NFI-ODCE			1.2	1.4	-1.4	-2.3	2.9	_	4.8	Ψ

^{*}Value as of 9/30/2024.



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Non-Core RE - Opportunistic - Gross	97,062,951	0.7	-1.1	-6.8	-14.5	-7.7	-1.1	4.8	9.8	Mar-14
Non-Core RE - Opportunistic - Net			-1.1	-6.8	-14.5	-7.7	-1.1	4.5	9.5	Mar-14
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	6.2	6.8	
Carlyle China Realty - Gross	4,296,336	0.0	-1.1	-7.7	-32.7	-21.9	-12.0	-	-9.9	Jul-17
Carlyle China Realty - Net			-1.1	-7.7	-32.7	-21.9	-12.0	-	-9.9	Jul-17
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	-	4.4	
Carlyle China Rome Logistics - Gross	19,282,657	0.1	-0.9	-7.3	-32.1	-21.4	-13.0	-	-9.4	Jul-17
Carlyle China Rome Logistics - Net			-0.9	-7.3	-32.1	-21.4	-13.0	-	-9.4	Jul-17
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	-	4.4	
CIM Opportunity VIII - Gross	10,601,233	0.1	-9.8	-45.1	-53.5	-29.1	-23.0	-	-9.7	Mar-15
CIM Opportunity VIII - Net			-9.8	-45.1	-53.5	-29.1	-23.0	-	-10.2	Mar-15
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	-	6.2	
Kohlberg Kravis Roberts - Gross	310,951	0.0	-19.8	-10.2	-35.2	-22.4	-17.6	-9.8	-4.2	Mar-14
Kohlberg Kravis Roberts - Net			-19.8	-10.2	-35.2	-22.4	-17.6	-9.8	-4.3	Mar-14
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	6.2	6.8	
Lasalle China Logistics Venture LP - Gross	11,094,717	0.1	-0.5	-5.0	-12.4	-5.9	-	-	-21.0	Oct-21
Lasalle China Logistics Venture LP - Net			-0.5	-5.0	-12.4	-5.9	-	-	-21.0	Oct-21
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	-	-	1.8	
Sculptor Real Estate Fund III - Gross	2,768,186	0.0	5.3	7.6	16.6	36.0	27.2	18.7	16.7	Oct-14
Sculptor Real Estate Fund III - Net			5.3	7.6	16.6	36.0	27.2	16.5	14.5	Oct-14
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	6.2	6.3	
Sculptor Real Estate Fund IV - Gross	18,258,691	0.1	2.8	6.1	11.2	9.0	-	-	7.2	Jul-20
Sculptor Real Estate Fund IV - Net			2.8	6.1	11.2	9.0	-	-	7.2	Jul-20
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	-	-	2.8	
Non-Core RE - Value Added - Gross	223,831,867	1.6	1.6	2.4	2.5	2.2	5.6	7.4	0.9	Oct-08
Non-Core RE - Value Added - Net			1.6	2.4	2.5	2.2	5.6	7.1	0.1	Oct-08
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	6.3	6.2	
Asana Partners Fund II - Gross	33,500,585	0.2	-2.9	-3.5	-7.3	-0.4	-4.2	-	-179.0	May-19
Asana Partners Fund II - Net			-2.9	-3.5	-7.3	-0.4	-4.2	-	-179.0	May-19
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	-	3.3	
Asana Partners Fund III - Gross	20,203,269	0.1	0.7	1.1	0.6	-	-	-	-10.0	May-22
Asana Partners Fund III - Net			0.7	1.1	0.6	-	-	-	-10.0	May-22
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	-	-	-	-2.9	

^{**}Returns for private markets are shown on a time-weighted basis and may differ substantially from dollar-weighted returns.



See Policy Index and Benchmark History
* Non-Core RE returns are lagged one quarter

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
ECE Euro Prime Shopping II - Gross	35,817,833	0.3	4.6	4.6	12.4	5.1	3.2	-	7.7	Aug-15
ECE Euro Prime Shopping II - Net			4.6	4.6	12.4	5.1	3.2	-	7.3	Aug-15
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	-	6.0	
European RE Debt II - Gross*	245,331	0.0	-12.3	-13.5	-12.2	-32.1	-33.9	-16.6	-14.9	Dec-13
European RE Debt II - Net*			-12.3	-13.5	-12.2	-32.1	-33.9	-16.6	-14.9	Dec-13
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	6.3	7.2	
Hammes II - Gross	3,035,782	0.0	1.4	3.6	8.3	10.8	109.8	-	61.7	Aug-15
Hammes II - Net			1.4	3.6	8.3	10.8	109.8	-	60.1	Aug-15
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	-	6.0	
Hammes III - Gross	21,864,815	0.2	2.1	4.4	7.2	8.5	13.4	-	-0.9	Nov-18
Hammes III - Net			2.1	4.4	7.2	8.5	13.4	-	-0.9	Nov-18
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	-	3.7	
Hammes IV - Gross	4,365,057	0.0	3.2	-45.0	-60.5	-	-	-	-49.3	Dec-22
Hammes IV - Net			3.2	-45.0	-60.5	-	-	-	-49.3	Dec-22
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	-	-	-	-9.0	
NREP Nordic Strat II - Gross	15,624,414	0.1	4.5	2.6	-1.7	-0.1	14.1	-	13.9	Jul-16
NREP Nordic Strat II - Net			4.5	2.6	-1.7	-0.1	14.1	-	13.9	Jul-16
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	-	4.9	
NREP Nordic Strat III - Gross	31,066,103	0.2	-3.5	-4.1	0.4	1.9	11.0	-	4.0	Aug-18
NREP Nordic Strat III - Net			-3.5	-4.1	0.4	1.9	11.0	-	4.0	Aug-18
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	3.4	-	3.9	
NREP Nordic Strat IV - Gross	24,203,009	0.2	2.8	2.2	-1.5	-1.1	-	-	5.4	Aug-20
NREP Nordic Strat IV - Net			2.8	2.2	-1.5	-1.1	-	-	5.4	Aug-20
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	0.5	-	-	2.8	•
NREP Nordic Strat V - Gross	17,329,897	0.1	0.0	-0.1	-14.5	-	-	-	-16.7	Nov-22
NREP Nordic Strat V - Net			0.0	-0.1	-14.5	-	-	-	-16.7	Nov-22
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	-	-	-	-8.6	
Seven Seas Japan Opp Fund - Gross	16,575,771	0.1	14.2	20.3	18.0	-	-	-	7.0	Apr-22
Seven Seas Japan Opp Fund - Net	,		14.2	20.3	18.0	-	-	-	7.0	Apr-22
NFI-ODCE net +1% 1Q Lag			0.3	-0.1	-7.1	-	-	-	-2.8	
WCP NewCold III - Gross	30,450,180	0.2	-	-	-	-	-	-	0.0	Dec-24
WCP NewCold III - Net	, 11,		-	-	-	-	-	-	0.0	Dec-24
NFI-ODCE net +1% 1Q Lag			-	-	-	-	-	-	0.0	

⁺⁺Returns for private markets are shown on a time-weighted basis and may differ substantially from dollar-weighted returns.



See Policy Index and Benchmark History
* Non-Core RE returns are lagged one quarter

Sacramento County Employees' Retirement System Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Private Real Assets - Gross	1,200,086,626	8.6	1.6	4.5	8.3	10.9	9.4	9.8	7.0	Feb-13
Private Real Assets - Net			1.6	4.5	8.3	10.9	9.4	9.8	7.0	Feb-13
Private Real Assets Custom			2.3	4.0	8.5	10.3	9.0	7.5	7.3	
ACM II - Gross	12,661,507	0.1	-0.8	-7.9	-15.6	-13.9	-12.4	-	-9.8	Oct-16
ACM II - Net			-0.8	-7.9	-15.6	-13.9	-12.4	-	-9.8	Oct-16
NCREIF Farmland 1 Qtr Lag			-0.2	-0.4	2.6	6.2	5.6	-	5.8	
ARA Partners Fund III LP - Gross	7,382,280	0.1	-5.9	-8.5	-23.4	-	-	-	-19.2	Oct-23
ARA Partners Fund III LP - Net			-5.9	-8.5	-23.4	-	-	-	-19.2	Oct-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	-	-	-	9.6	
ArcLight Energy VI - Gross	13,625,813	0.1	6.7	11.2	6.2	9.6	0.0	-	3.5	Sep-15
ArcLight Energy VI - Net			6.7	11.2	6.2	9.6	0.0	-	3.5	Sep-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	-	11.7	
Brookfield Infra III - Gross	43,650,079	0.3	4.7	5.8	13.3	14.0	12.2	-	12.4	Jun-16
Brookfield Infra III - Net			4.7	5.8	13.3	14.0	12.2	-	12.4	Jun-16
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	-	11.4	
Brookfield Infra IV - Gross	43,575,957	0.3	3.7	6.4	11.2	12.8	11.5	-	10.8	Oct-19
Brookfield Infra IV - Net			3.7	6.4	11.2	12.8	11.5	-	10.8	Oct-19
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	-	10.2	
Brookfield Super Core Infra - Gross	111,273,744	0.8	2.0	4.1	10.9	-	-	-	8.2	Aug-22
Brookfield Super Core Infra - Net			2.0	4.1	10.9	-	-	-	8.2	Aug-22
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	-	-	-	8.3	-
Carlyle Power II - Gross	29,934,351	0.2	-11.9	-5.6	-6.6	8.4	8.6	-	5.5	Nov-15
Carlyle Power II - Net			-11.9	-5.6	-6.6	8.4	8.6	-	5.5	Nov-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	-	11.1	
Digital Colony Partners II - Gross	38,478,311	0.3	1.7	5.9	9.6	7.9	-	-	7.5	Jun-21
Digital Colony Partners II - Net			1.7	5.9	9.6	7.9	-	-	7.5	Jun-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	-	-	10.5	
EnCap Energy IX - Gross	7,180,935	0.1	-4.3	-2.1	9.4	29.0	18.1	10.6	5.9	Feb-13
EnCap Energy IX - Net	,		-4.3	-2.1	9.4	29.0	18.1	10.6	5.9	Feb-13
Cambridge Associates Private Energy 1 Qtr Lag			0.3	3.2	5.1	12.3	8.1	2.3	3.8	
EnCap Energy X - Gross	20,088,944	0.1	3.8	19.8	28.6	37.5	25.2	-	12.1	May-15
EnCap Energy X - Net	.,,		3.8	19.8	28.6	37.5	25.2	-	12.1	May-15
Cambridge Associates Private Energy 1 Qtr Lag			0.3	3.2	5.1	12.3	8.1	-	3.8	- ,



Sacramento County Employees' Retirement System Period Ending: December 31, 2024

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
EnCap Flatrock Midstream III - Gross	10,077,073	0.1	0.6	2.0	1.1	9.4	5.4	9.9	6.8	Aug-14
EnCap Flatrock Midstream III - Net			0.6	2.0	1.1	9.4	5.4	9.9	6.8	Aug-14
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	10.8	10.7	
EnCap Flatrock Midstream IV - Gross	15,143,935	0.1	1.6	7.7	6.7	8.0	5.9	-	4.3	Mar-18
EnCap Flatrock Midstream IV - Net			1.6	7.7	6.7	8.0	5.9	-	4.3	Mar-18
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	-	10.5	
EQT Infrastructure Fund IV - Gross	45,816,953	0.3	4.8	6.4	14.0	10.0	12.2	-	4.7	Jul-19
EQT Infrastructure Fund IV - Net			4.8	6.4	14.0	10.0	12.2	-	4.7	Jul-19
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	-	10.3	
First Reserve - Gross	9,858,538	0.1	13.1	12.7	4.2	-7.7	-6.7	-3.2	-3.2	Jan-15
First Reserve - Net			13.1	12.7	4.2	-7.7	-6.7	-3.2	-3.2	Jan-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	10.8	10.8	
Harrison St Social Infra Fd - Gross	111,403,592	0.8	0.8	2.1	4.3	6.1	-	-	5.8	Aug-21
Harrison St Social Infra Fd - Net			0.8	2.1	4.3	6.1	-	-	5.8	Aug-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	-	-	10.6	
IFM Global Infrastructure US LP - Gross	177,061,961	1.3	2.2	5.7	8.4	8.7	9.5	-	10.9	May-17
IFM Global Infrastructure US LP - Net			2.2	5.7	8.4	8.7	9.5	-	10.9	May-17
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	-	11.4	
ISQ Global Infrastructure Fund II - Gross	63,066,733	0.5	6.4	8.2	14.9	11.5	12.8	-	12.6	Nov-18
ISQ Global Infrastructure Fund II - Net			6.4	8.2	14.9	11.5	12.8	-	12.6	Nov-18
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	-	10.4	
ISQ Global Infrastructure Fund III - Gross	33,466,787	0.2	3.9	6.1	16.1	16.5	-	-	16.5	Jan-22
ISQ Global Infrastructure Fund III - Net			3.9	6.1	16.1	16.5	-	-	16.5	Jan-22
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	-	-	9.9	
KKR Asia Pacific Infrastructure Investors II - Gross	18,373,536	0.1	4.6	16.0	-	-	-	-	8.9	Mar-24
KKR Asia Pacific Infrastructure Investors II - Net			4.6	16.0	-	-	-	-	8.9	Mar-24
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	-	-	-	-	11.2	
Meridiam Infra N America III - Gross	54,923,275	0.4	6.8	10.0	23.8	13.4	10.7	-	-47.1	Oct-17
Meridiam Infra N America III - Net			6.8	10.0	23.8	13.4	10.7	-	-47.1	Oct-17
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	-	10.6	
Meridiam Infra N America IV - Gross	11,039,703	0.1	6.1	0.8	8.7	-	-	-	6.1	Aug-23
Meridiam Infra N America IV - Net	. ,		6.1	0.8	8.7	-	-	-	6.1	Aug-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	-	-	-	9.6	•



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Meridiam Sa Infra Euro IV - Gross	18,616,209	0.1	7.2	6.8	19.5	-11.8	-	-	-35.7	Aug-21
Meridiam Sa Infra Euro IV - Net			7.2	6.8	19.5	-11.8	-	-	-35.7	Aug-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	-	-	10.6	
NGP Royalty Partners - Gross	23,679,032	0.2	9.6	20.5	21.8	38.7	-	-	33.7	Sep-20
NGP Royalty Partners - Net			9.6	20.5	21.8	38.7	-	-	33.7	Sep-20
Cambridge Associates Private Energy 1 Qtr Lag			0.3	3.2	5.1	12.3	-	-	17.0	
NGP Royalty Partners II - Gross	61,066,413	0.4	-1.3	5.5	7.1	-	-	-	-3.1	Jan-23
NGP Royalty Partners II - Net			-1.3	5.5	7.1	-	-	-	-3.1	Jan-23
Cambridge Associates Private Energy 1 Qtr Lag			0.3	3.2	5.1	-	-	-	6.3	
Paine Schwartz Food Chain V - Gross	37,254,742	0.3	1.3	3.4	5.7	17.1	-	-	9.4	Feb-20
Paine Schwartz Food Chain V - Net			1.3	3.4	5.7	17.1	-	-	9.4	Feb-20
NCREIF Farmland 1 Qtr Lag			-0.2	-0.4	2.6	6.2	-	-	5.7	
Pantheon Ventures - Gross	34,439,766	0.2	4.4	5.9	-0.3	1.4	3.9	8.2	12.5	Aug-14
Pantheon Ventures - Net			4.4	5.9	-0.3	1.4	3.9	8.2	12.5	Aug-14
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	10.8	10.7	
Quantum Energy VI - Gross	6,564,518	0.0	-14.1	-12.5	-17.0	-2.0	4.3	14.5	14.4	Dec-14
Quantum Energy VI - Net			-14.1	-12.5	-17.0	-2.0	4.3	14.5	14.4	Dec-14
Cambridge Associates Private Energy 1 Qtr Lag			0.3	3.2	5.1	12.3	8.1	2.3	2.2	
Quantum Energy VII - Gross	30,499,314	0.2	-8.3	-8.7	1.4	12.4	15.9	-	10.0	Sep-17
Quantum Energy VII - Net			-8.3	-8.7	1.4	12.4	15.9	-	10.0	Sep-17
Cambridge Associates Private Energy 1 Qtr Lag			0.3	3.2	5.1	12.3	8.1	-	5.6	
Quantum Energy VIII - Gross	21,288,593	0.2	1.5	-	-	-	-	-	1.5	Sep-24
Quantum Energy VIII - Net			1.5	-	-	-	-	-	1.5	Sep-24
Cambridge Associates Private Energy 1 Qtr Lag			0.3	-	-	-	-	-	3.2	
Quantum Energy VIII Co-Investment Fund - Gross	3,557,501	0.0	13.1	-	-	-	-	-	13.1	Sep-24
Quantum Energy VIII Co-Investment Fund - Net			13.1	-	-	-	-	-	13.1	Sep-24
Cambridge Associates Private Energy 1 Qtr Lag			0.3	-	-	-	-	-	3.2	
Ridgewood Water & Strategy Infra II - Gross	19,609,647	0.1	1.5	3.3	4.5	-	-	-	-126.2	Jan-23
Ridgewood Water & Strategy Infra II - Net	, ,		1.5	3.3	4.5	-	-	-	-126.2	Jan-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	-	-	-	10.2	
Stonepeak Opportunities Fund - Gross	13,234,288	0.1	-1.1	-	-	-	-	-	-1.1	Oct-24
Stonepeak Opportunities Fund - Net	., ., .,		-1.1	_	-	_	-	-	-1.1	Oct-24
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	-	_	-	-	-	3.7	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Tailwater Energy Fund III - Gross	18,635,551	0.1	-16.3	-16.5	-11.0	1.7	-0.5	-	-0.3	Oct-18
Tailwater Energy Fund III - Net			-16.3	-16.5	-11.0	1.7	-0.5	-	-0.3	Oct-18
Cambridge Associates Private Energy 1 Qtr Lag			0.3	3.2	5.1	12.3	8.1	-	5.0	
Tailwater Energy IV - Gross	32,579,912	0.2	0.7	8.2	19.6	24.8	8.8	-	8.5	Nov-19
Tailwater Energy IV - Net			0.7	8.2	19.6	24.8	8.8	-	8.5	Nov-19
Cambridge Associates Private Energy 1 Qtr Lag			0.3	3.2	5.1	12.3	8.1	-	7.0	
Wastewater Opportunity - Gross	977,131	0.0	-2.4	-37.2	-54.9	-16.3	-9.5	-	-15.7	Jan-16
Wastewater Opportunity - Net			-2.4	-37.2	-54.9	-16.3	-9.5	-	-15.7	Jan-16
Cambridge Associates Private Infrastructure 1 Qtr Lag			3.7	5.1	11.2	9.9	10.5	-	11.1	
Liquid Real Return - Gross	312,250,705	2.2	-3.6	3.6	5.2	1.9	4.3		4.5	Jul-19
Liquid Real Return - Net			-3.6	3.5	5.1	1.2	3.7		3.9	Jul-19
SSgA Real Asset			-3.6	-0.9	0.9	0.5	3.1	-	3.5	
SSgA Passive Real Return Proxy - Gross	312,177,342	2.2	-3.6	3.6	5.3	2.2	4.4	3.5	2.6	Feb-08
SSgA Passive Real Return Proxy - Net			-3.6	3.5	5.3	2.0	4.2	3.3	2.4	Feb-08
SSgA Real Asset			-3.6	-0.9	0.9	0.5	3.1	2.8	-	
Brookfield Liquid Real Return	73,363	0.0								
Cash - Gross	269,745,471	1.9	0.9	2.3	5.3	4.3	3.0	2.5	3.1	Aug-92
Cash - Net			0.9	2.3	5.3	4.3	3.0	2.5		Aug-92
Secured Overnight Financing Rate			1.2	2.6	5.4	4.1	2.6	1.8	2.6	
Cash Account - Gross	269,745,471	1.9	0.9	2.3	5.3	4.3	3.2	2.6	3.2	Jul-92
Cash Account - Net			0.9	2.3	5.3	4.3	3.2	2.6	-	Jul-92
Secured Overnight Financing Rate			1.2	2.6	5.4	4.1	2.6	1.8	2.6	

AB	\$1,396,836,449	10.1
AQR US Enhanced Equity	\$1,390,630,449 \$424,831,651	3.1
JP Morgan 130/30	\$424,631,601 \$203,534,260	1.5
DE Shaw Broad Mkt Core Alpha Ext	\$203,334,200 \$228,284,819	1.6
	\$220,204,019 \$415,156,971	3.0
Eagle Capital Huber Capital	\$415,150,971 \$20,264	0.0
Weatherbie	\$20,204 \$142,762,337	1.0
Snyder Capital Management	\$147,890,843	1.1
Lazard Walter Scott & Partners Limited	\$319,667,609	2.3
	\$463,945,052	3.3
LSV	\$529,669,349	3.8
Acadian Asset Management	\$122,243,618	0.9
William Blair Dev Small Cap	\$106,536,669	0.8
Arga Emg	\$215,358,460	1.6
Baillie Gifford Emg All Cap	\$225,943,379	1.6
Transition Account	\$6,279,613	0.0
Oaktree Emg	\$201,249,285	1.4
CBRE Clarion	\$3,904	0.0
Allspring Global Investments	\$98,567,551	0.7
Artisan Partners Global Opp	\$156,998,430	1.1
Nikko Asset Management	\$162,960,000	1.2
Third Point Offshore Fund	\$4,225,140	0.0
Abbott VI	\$18,382,296	0.1
Accel-KKR V	\$31,741,201	0.2
Accel-KKR VI	\$27,428,077	0.2
Accel-KKR Growth Partners II	\$8,517,981	0.1
Accel-KKR Growth Partners III	\$37,680,768	0.3
Accel-KKR Growth Partners IV	\$15,104,997	0.1
Alchemy Special Opportunities Fund V	\$1,656,260	0.0
Blue Owl Asset Special Opp VI	\$826,795	0.0
Canvas Ventures III	\$14,513,058	0.1
Cortec Group Fund VII	\$26,273,071	0.2
Cortec Group VIII	\$8,676,829	0.1
CRV Select Fund I	\$19,418,665	0.1
CRV Select Fund II	\$7,937,615	0.1
CRV XVIII LP	\$18,307,981	0.1



CRV XIX LP	\$10,988,100	0.1
CVC Capital Partners IX	\$4,751,501	0.0
Davidson Kempner LT Dist Opp IV	\$17,999,102	0.1
Davidson Kempner LT Dist Opp V	\$35,923,004	0.3
Dyal Capital Partners II	\$35,683,117	0.3
Dyal Capital Partners III	\$30,503,340	0.2
Garrison Investment Group	\$530,133	0.0
Golden Capital Co Invest	\$52,477,676	0.4
Gridiron Capital Fund IV	\$43,410,382	0.3
Gridiron Capital Fund V	\$22,106,221	0.2
Harbourvest VIII	\$1,851,558	0.0
H.I.G. Bayside Loan III	\$3,373,699	0.0
H.I.G. Capital V	\$5,680,129	0.0
H.I.G. Europe Capital II	\$8,616,119	0.1
JFL Equity Investors VI	\$10,765,094	0.1
Khosla IV	\$11,894,020	0.1
Khosla V	\$27,185,854	0.2
Khosla VI	\$83,578,514	0.6
Khosla VII	\$18,089,767	0.1
Khosla VIII	\$12,070,997	0.1
Linden Capital III	\$19,162,228	0.1
Linden Capital Partners IV	\$47,415,476	0.3
Linden Capital Partners V	\$22,222,300	0.2
Marlin Equity IV	\$7,656,554	0.1
Marlin Equity V	\$32,670,637	0.2
Marlin Heritage	\$3,342,788	0.0
Marlin Heritage II	\$9,897,331	0.1
Marlin Heritage III	\$10,471,336	0.1
Marlin Heritage Europe	\$15,422,916	0.1
New Enterprise 14	\$35,781,902	0.3
New Enterprise 15	\$24,064,346	0.2
New Enterprise 16	\$37,068,408	0.3
New Enterprise 17	\$21,783,745	0.2
Oaktree Power Opp Fund VI	\$30,205,045	0.2
OrbiMed Private Investments VIII	\$11,313,450	0.1
Orbimed Private Investments IX	\$7,202,204	0.1



RCP Multi-Fund Feeder	\$83,666,527	0.6
Resurgens Tech Partners III	\$184,204	0.0
RRJ Capital Master Fund II	\$4,128,456	0.0
RRJ Capital Master Fund III	\$8,811,351	0.1
Shamrock Capital II	\$14,150,775	0.1
Shamrock Capital III	\$8,191,597	0.1
Shamrock Capital Growth Fund V	\$19,606,768	0.1
Sixth Street Opp Partners V	\$25,094,220	0.2
Spectrum Equity VII	\$26,984,217	0.2
Spectrum Equity Fund VIII	\$21,191,259	0.2
Spectrum Equity Fund IX	\$19,906,637	0.1
Spectrum Equity Fund X	\$4,405,602	0.0
Strategic Value Spl Fund V	\$28,283,168	0.2
Summit EUR Growth Equity II	\$51,749,203	0.4
Summit EUR Growth Equity III	\$22,017,480	0.2
Summit Ventures III	\$3,990,389	0.0
Summit Ventures IV	\$65,473,635	0.5
Summit Ventures V	\$15,040,729	0.1
Thoma Bravo XI	\$24,570,543	0.2
Thoma Bravo XII	\$34,749,551	0.3
Thoma Bravo XIII	\$56,018,345	0.4
Threshold Ventures III	\$21,770,896	0.2
Threshold Ventures IV	\$12,845,709	0.1
TPG Opp Partners III	\$5,854,689	0.0
Trinity Ventures XI	\$11,807,162	0.1
Trinity Ventures XII	\$32,855,143	0.2
TSG7 A LP	\$9,432,577	0.1
TSG7 B LP	\$4,331,136	0.0
TSG8 LP	\$36,186,065	0.3
TSG9 LP	\$9,443,920	0.1
TSSP Opportunities Partners IV	\$23,366,176	0.2
Waterland V	\$534,671	0.0
Waterland VI	\$11,076,475	0.1
Wayzata Opportunities III	\$696,352	0.0
Wynnchurch Capital Partners V	\$22,622,304	0.2
Wynnchurch Capital Partners VI	\$4,861,166	0.0



Brigade Capital	\$246,325,795	1.8
Ares Capital Europe Fund V	\$240,323,793 \$31,689,949	0.2
Ares Capital Europe Fund VI	\$11,009,949 \$15,079,026	0.2
Ares Senior Direct Lending Fund III	\$8,760.958	0.1
Athyrium Opp II	\$4,096,153	0.0
Athyrium Opp III	\$8,181,729	0.0
Benefit St Pr Sr Secure Opp	\$6,161,729 \$11,495,151	0.1
·	\$11,495,151 \$46,734,089	0.1
Benefit St Pr Sr Secure Opp II		
Brookfield Infra Debt Fund III	\$24,441,509	0.2
IFM US Infrastructure DB FD LP	\$66,672,316	0.5
MCP Private Capital IV	\$29,350,010	0.2
OrbiMed Royalty & Credit Opp III	\$12,150,545	0.1
Orbimed Royalty & Credit Opp IV	\$16,568,907	0.1
Shamrock Capital Debt Fund I	\$3,916,567	0.0
Silver Point Specialty Credit Fund II	\$32,478,111	0.2
Silver Point Specialty Credit Fund III	\$13,786,681	0.1
Sky Leasing Fund VI	\$16,801,811	0.1
Summit Credit	\$4,356	0.0
Summit Credit II	\$6,352,546	0.0
Summit Credit III	\$6,510,843	0.0
Summit Credit IV	\$7,482,869	0.1
TCP Direct Lending VIII	\$106,743,090	0.8
Grosvenor SCARF Growth	\$5,563,870	0.0
Prudential	\$377,102,193	2.7
TCW MetWest Fixed	\$369,506,711	2.7
Brandywine US FI	\$367,772,880	2.6
Reams Core Plus FI	\$386,173,873	2.8
Neuberger Berman	\$407,043,600	2.9
Aristeia Partners LP	\$55,213,739	0.4
BlackRock Event Driven Equity Fund	\$57,852,792	0.4
Capula Global Relative Value Fund	\$40,993,796	0.3
Capula Volatility Opportunity Fund	\$20,554,595	0.1
Davidson Kempner Instl Partners LP	\$4,595,840	0.0
Elliott Associates	\$90,964,733	0.7
Graham Global Inv II	\$46,670,447	0.3
Grosvenor SCARF Diversifying	\$272,004,702	2.0



Hudson Bay Fund	\$51,156,427	0.4
Junto Capital Partners	\$54,897,048	0.4
Laurion Capital	\$57,395,185	0.4
MW Global Opportunities Fund	\$62,517,441	0.5
PSquared Event Driven Opp Fund	\$52,268,068	0.4
Tudor BVI Global Fund	\$55,053,086	0.4
Dedicated Cash Allocation	\$266,689,463	1.9
Brookfield Premier RE Partners	\$90,943,655	0.7
Clarion Lion Properties	\$102,402,983	0.7
Metlife Core Property	\$70,508,500	0.5
Principal US Property	\$54,414,277	0.4
Prologis Targeted Euro Logistics	\$60,268,722	0.4
Prologis Targeted US Logistics	\$74,517,516	0.5
Townsend Real Estate	\$128,052,488	0.9
Carlyle China Realty	\$4,296,336	0.0
Carlyle China Rome Logistics	\$19,282,657	0.1
CIM Opportunity VIII	\$10,601,233	0.1
Kohlberg Kravis Roberts	\$310,951	0.0
Lasalle China Logistics Venture LP	\$11,094,717	0.1
Sculptor Real Estate Fund III	\$2,768,186	0.0
Sculptor Real Estate Fund IV	\$18,258,691	0.1
Asana Partners Fund II	\$33,500,585	0.2
Asana Partners Fund III	\$20,203,269	0.1
ECE Euro Prime Shopping II	\$35,817,833	0.3
European RE Debt II	\$245,331	0.0
Hammes II	\$3,035,782	0.0
Hammes III	\$21,864,815	0.2
Hammes IV	\$4,365,057	0.0
NREP Nordic Strat II	\$15,624,414	0.1
NREP Nordic Strat III	\$31,066,103	0.2
NREP Nordic Strat IV	\$24,203,009	0.2
NREP Nordic Strat V	\$17,329,897	0.1
Seven Seas Japan Opp Fund	\$16,575,771	0.1
WCP NewCold III	\$30,450,180	0.2
ACM II	\$12,661,507	0.1
ARA Partners Fund III LP	\$7,382,280	0.1



ArcLight Energy VI Brookfield Infra III Brookfield Infra IV Brookfield Super Core Infra Carlyle Power II	\$13,625,813 \$43,650,079 \$43,575,957 \$111,273,744 \$29,934,351	0.1 0.3 0.3
Brookfield Infra IV Brookfield Super Core Infra	\$43,575,957 \$111,273,744	0.3
Brookfield Super Core Infra	\$111,273,744	
		0.0
Carlyle Power II	\$29.934.351	0.8
	\$20,00 i,00 i	0.2
Digital Colony Partners II	\$38,478,311	0.3
EnCap Energy IX	\$7,180,935	0.1
EnCap Energy X	\$20,088,944	0.1
EnCap Flatrock Midstream III	\$10,077,073	0.1
EnCap Flatrock Midstream IV	\$15,143,935	0.1
EQT Infrastructure Fund IV	\$45,816,953	0.3
First Reserve	\$9,858,538	0.1
Harrison St Social Infra Fd	\$111,403,592	0.8
IFM Global Infrastructure US LP	\$177,061,961	1.3
ISQ Global Infrastructure Fund II	\$63,066,733	0.5
ISQ Global Infrastructure Fund III	\$33,466,787	0.2
KKR Asia Pacific Infrastructure Investors II	\$18,373,536	0.1
Meridiam Infra N America III	\$54,923,275	0.4
Meridiam Infra N America IV	\$11,039,703	0.1
Meridiam Sa Infra Euro IV	\$18,616,209	0.1
NGP Royalty Partners	\$23,679,032	0.2
NGP Royalty Partners II	\$61,066,413	0.4
Paine Schwartz Food Chain V	\$37,254,742	0.3
Pantheon Ventures	\$34,439,766	0.2
Quantum Energy VI	\$6,564,518	0.0
Quantum Energy VII	\$30,499,314	0.2
Quantum Energy VIII	\$21,288,593	0.2
Quantum Energy VIII Co-Investment Fund	\$3,557,501	0.0
Ridgewood Water & Strategy Infra II	\$19,609,647	0.1
Stonepeak Opportunities Fund	\$13,234,288	0.1
Tailwater Energy Fund III	\$18,635,551	0.1
Tailwater Energy IV	\$32,579,912	0.2
Wastewater Opportunity	\$977,131	0.0
Brookfield Liquid Real Return	\$73,363	0.0
SSgA Barclays 1-10 Yrs TIPS Index	\$95,516,377	0.7
SSgA Real Asset	\$216,660,964	1.6



Total Fund
Manager Allocation Analysis

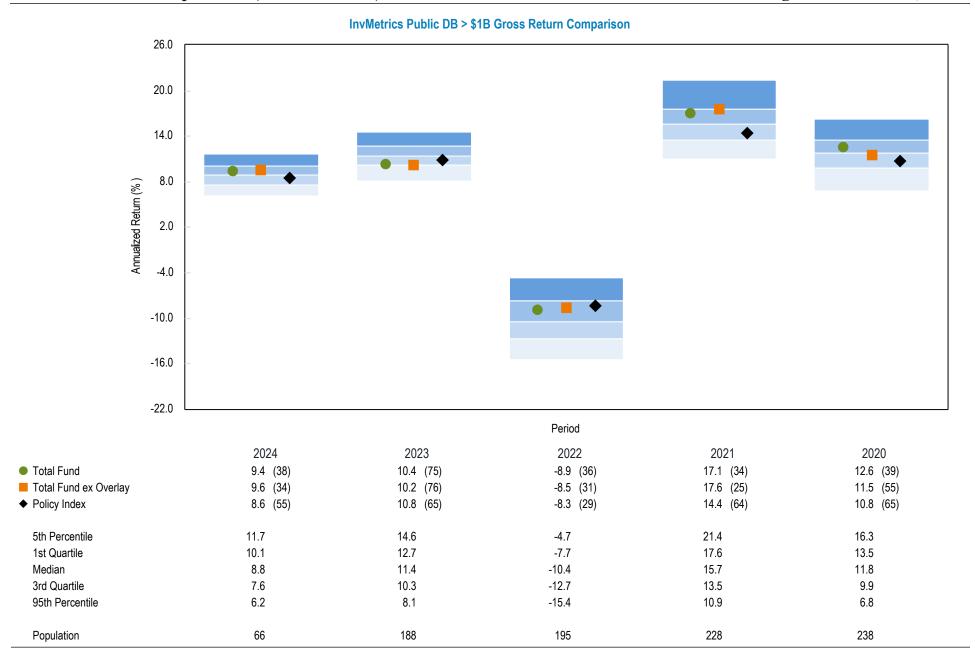
Cash Account	\$269,745,471	1.9
SSgA Overlay	\$50,566,174	0.4
Total Fund	\$13,880,754,769	100.0

		3 '	Years		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	3.2 (40)	7.4 (23)	0.0 (46)	-0.1 (51)	1.3 (13)
Policy Index	3.3 (39)	7.9 (31)	0.0 (39)	- ' '	0.0
Total Fund ex Overlay	3.4 (38)	6.9 (6)	0.0 (42)	0.0 (41)	1.5 (15)
Policy Index	3.3 (39)	7.9 (31)	0.0 (39)	-	0.0
		5	Years		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	7.7 (30)	8.4 (16)	0.6 (12)	0.3 (25)	2.8 (30)
Policy Index	6.9 (53)	8.3 (11)	0.6 (26)	- ' '	0.0
otal Fund ex Overlay	7.7 (31)	8.1 (10)	0.7 (10)	0.2 (28)	2.9 (34)
Policy Index	6.9 (53)	8.3 (11)	0.6 (26)	-	0.0
		7	Years		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	7.8 (19)	7.9 (15)	0.7 (9)	0.4 (15)	2.5 (25)
Policy Index	6.8 (51)	7.7 (11)	0.6 (23)	- ' '	0.0
otal Fund ex Overlay	7.7 (20)	7.6 (10)	0.7 (8)	0.4 (16)	2.6 (30)
Policy Index	6.8 (51)	7.7 (11)	0.6 (23)	-	0.0
		10	Years		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
otal Fund	7.7 (22)	7.3 (16)	0.8 (11)	0.3 (16)	2.3 (28)
Policy Index	7.0 (48)	6.9 (8)	0.8 (17)	<u>-</u> ` ` `	0.0
otal Fund ex Overlay	7.8 (22)	7.0 (11)	0.9 (9)	0.3 (16)	2.3 (29)
Policy Index	7.0 (48)	6.9 (8)	0.8 (17)	-	0.0

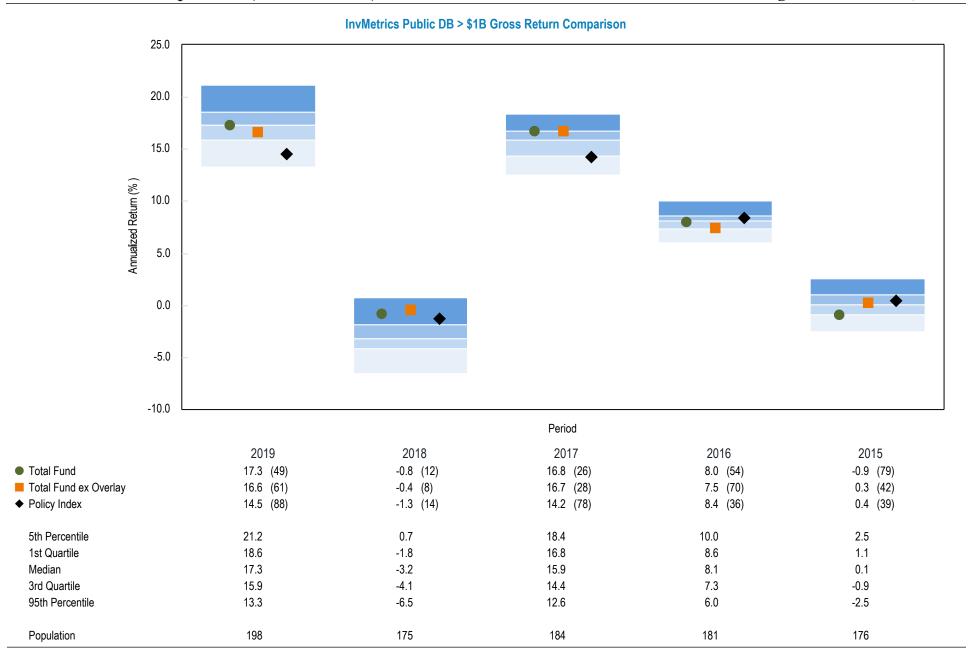


InvMetrics Public DB > \$1B Gross Return Comparison 14.0 11.0 8.0 Annualized Return (%) 5.0 2.0 -1.0 -4.0 Period QTD Fiscal YTD 1 Yr 3 Yrs 5 Yrs 7 Yrs 10 Yrs -0.7 (39) 3.7 (57) 9.4 (38) 3.2 (40) 7.7 (30) 7.8 (19) 7.7 (22) Total Fund ■ Total Fund ex Overlay -0.6 (36) 3.8 (56) 9.6 (34) 3.4 (38) 7.7 (31) 7.7 (20) 7.8 (22) ◆ Policy Index -0.7 (39) 3.4 (67) 8.6 (55) 3.3 (39) 6.9 (53) 6.8 (51) 7.0 (48) 5th Percentile 0.3 5.4 11.7 4.9 8.7 8.3 8.4 1st Quartile -0.3 4.4 10.1 3.7 7.8 7.4 7.6 Median -0.9 3.9 8.8 2.8 7.0 6.8 7.0 2.2 -1.4 6.5 3rd Quartile 3.3 7.6 6.4 6.2 95th Percentile -2.1 2.1 6.2 1.3 4.9 5.0 5.5 62 Population 67 66 66 63 61 60











Total Plan Policy Index	As of:									
A	7/1/23	4/1/22	7/1/19	7/1/17	4/1/17	1/1/14	1/1/12	1/1/08	2/1/06	9/1/04
91-day UST Bill +5% (AR)	40.004	10.00/	40.00/	10.00/	10.0%	10.0%	10.0%	5.0%	5.0%	5.0%
Bloomberg Aggregate	12.0%	12.0%	10.0%	10.0%	10.0%	15.0%	20.0%	20.0%	25.0%	25.0%
Bloomberg US Treasury	4.0%	4.0%	5.0%	5.0%	5.0%	4.004				
ICE BofA ML High Yield II	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%		5.00/		
Bloomberg Commodity	0.40/	0.40/	0.50/	2.0%	2.0%			5.0%		
Cambridge Associates Private Energy 1 Qtr Lag	2.1%	2.1%	2.5%	2.5%						
Cambridge Associates Private Infrastructure 1 Qtr Lag	4.2%	4.2%	3.2%	3.2%						
FTSE BIG			0.40/	0.40/	0.40/	0.40/				
FTSE WGBI ex US Unhedged			2.4%	2.4%	2.4%	2.4%	45.00/			
CPI-U +5% (PRA)	4.00/	4.00/	4.00/	4.00/	7.0%	15.0%	15.0%			
Credit Suisse Leveraged Loans	1.0%	1.0%	1.0%	1.0%	1.0%	1.0%				
Credit Suisse Leveraged Loans +2% 1 Qtr Lag	5.0%	5.0%	4.0%	4.0%	4.0%	0.00/				
JPM GBI EM Diversified			0.6%	0.6%	0.6%	0.6%				
HFRI FoF Composite Index + 1%	7.00/	7.00/	3.0%	3.0%						
HFRI FoF Conservative Index	7.0%	7.0%	7.0%	7.0% 20.0%	20.00/	20 50/	20 50/	20.00/		
MSCI ACWI ex US (Net)	40.00/	40.00/	20.0%	20.0%	20.0%	22.5%	22.5%	20.0%		
MSCI ACWI IMI (Net) MSCI EAFE	40.0%	40.0%							15.0%	15.0%
									5.0%	5.0%
MSCI Emerging Markets NAREIT								3.0%	3.0%	5.0%
NFI-ODCE	5.9%	5.9%	4.6%	4.6%				3.0%	3.0%	
NFI-ODCE net +1% 1Q Lag	3.2%	3.2%	2.5%	2.5%						
NCREIF	J.Z /0	J.Z /0	2.5/0	2.5/0	7.0%			12.0%	12.0%	15.0%
NCREIF NCREIF Farmland 1 Qtr Lag	0.7%	0.7%	0.7%	0.7%	7.070			12.0 /0	12.0 /0	15.0 /6
NCREIF Timberland Index Lagged	0.7 /0	0.7 /0	0.7%	0.7%						
Russell 1000			0.7 /0	0.7 /0					30.0%	30.0%
Russell 1000 +3% 1QL (PE)						10.0%	10.0%		30.070	30.070
Russell 2000						10.070	10.070		5.0%	5.0%
Russell 3000			20.0%	21.0%	21.0%	22.5%	22.5%	30.0%	0.070	3.070
S&P 500 +2% 1QL (PE)			20.070	21.070	21.070	22.5 /0	22.570	5.0%		
Cambridge Associates All PE 1 Qtr Lag	11.0%	11.0%	9.0%	9.0%	9.0%			J.U /0		
· · · · · · · · · · · · · · · · · · ·	0.1%	0.2%	0.2%	9.070	9.0 /0					
Bloomberg Roll Select Commodity Total Return										
Bloomberg U.S. Floating Rate Note < 5 Yr	0.1%	0.2%	0.2%							
S&P Global LargeMidCap Commodity and Resources	0.1%	0.2%	0.2%							
S&P Global Infrastructure Index - Net of Tax on Dividend	0.3%	0.5%	0.5%							
Bloomberg U.S. Government Inflation-Linked 1-10 Yrs	0.3%	0.6%	0.6%							
FTSE EPRA Nareit Developed Liquid Index	0.2%	0.3%	0.3%							
ICE LIBOR Spot/Next Overnight USD	2.0%	1.0%	1.0%	400.00/	00.00/	00.00/	00.00/	0= 00/	05.00/	05.004
	100.0%	100.0%	100.0%	100.0%	90.0%	90.0%	90.0%	95.0%	95.0%	95.0%



Growth Benchmark	As of:			
	4/1/22	7/1/19	7/1/17	4/1/17
91 Day T-Bill +5%				5.08%
ICE BofA ML High Yield II	1.73%	1.73%	1.70%	1.70%
Credit Suisse Leveraged Loans	1.73%	1.73%	1.70%	1.70%
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag	8.62%	6.90%	6.78%	6.78%
HFRI FoF Composite Index + 1%		5.17%	5.08%	
MSCI ACWI ex US (Net)	27.58%	34.48%	33.90%	33.90%
MSCI ACWI IMI (Net)	6.89%			
Russell 3000	34.48%	34.48%	35.59%	35.59%
Cambridge Associates All PE 1 Qtr Lag	18.97%	15.52%	15.25%	15.25%
	100.0%	100.0%	100.0%	94.9%
Global Public Equity Benchmark	As of:			
	4/1/22	7/1/11		
MSCI ACWI	-1 1/LL	100.0%		
MSCI ACWI IMI (Net)	100.0%	100.070		
ino and the first of the first	100.0%	100.0%		
Domestic Equity Benchmark	As of:			
	1/1/08	9/1/04	1/1/00	7/1/86
Russell 1000		85.71%	87.5%	
Russell 2000		14.29%	12.5%	
Russell 3000	100.0%			100.0%
	100.0%	100.0%	100.0%	100.0%
Large Cap Active Benchmark	As of:			
	2/1/19	9/1/08		
Russell 1000 Value		100.0%		
Russell 1000	100.0%			
	100.0%	100.0%		
International Equity Benchmark	As of:			
international Equity Benchmark	1/1/08	1/1/00	7/1/86	
MSCI ACWI ex US (Net)	100.0%	1/1/00	1/1/00	
MSCI EAFE	100.076	75.0%	100.0%	
MSCI Emerging Markets		25.0%	100.070	
MOOI Emerging Markets	100.0%	100.0%	100.0%	
	100.070	100.070	100.070	
Private Equity Benchmark	As of:			
· · · 4. A	4/1/17	1/1/12	1/1/08	
Russell 1000 +3% 1QL		100.0%	., ., 55	
S&P 500 +2% 1QL		.00.070	100.0%	
Cambridge Associates All PE 1 Qtr Lag	100.0%		100.070	
	100.0%	100.0%	100.0%	

Public Credit Benchmark	As of:			
ICE Doff MI High Viold II	4/1/17 50.0%			
ICE BofA ML High Yield II	50.0%			
Credit Suisse Leveraged Loans				
	100.0%			
Private Credit Benchmark	As of:			
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag	4/1/17 100.0%			
	100.0%			
Growth Oriented Absolute Return Benchmark	As of:			
91-day UST Bill +5%	7/1/17	4/1/17 100.0%		
HFRI FoF Composite Index + 1%	100.0%			
	100.0%	100.0%		
Diversifying Benchmark	As of:			
91 Day T-Bill +5%	7/1/23	4/1/22	7/1/17	4/1/17 28.00%
Bloomberg US Aggregate	48.00%	50.00%	40.00%	40.00%
Bloomberg US Treasury	16.00%	16.67%	20.00%	20.00%
FTSE WGBI ex US Unhedged			9.60%	9.60%
HFRI FoF Conservative Index	28.00%	29.17%	28.00%	
JPM GBI EM Diversified			2.40%	2.40%
ICE LIBOR Spot/Next Overnight USD	8.00%	4.16%		
	100.0%	100.0%	100.0%	100.0%
Diversifying Absolute Return Benchmark	As of:			
, -	7/1/17	4/1/17		
91-day UST Bill +5%		100.0%		
HFRI FoF Conservative Index	100.0%			
	100.0%	100.0%		
Real Return Benchmark	As of:			
	4/1/22	4/1/19	4/1/17	
Real Estate Benchmark	50.00%	43.75%	43.75%	
Private Real Assets Benchmark	38.89%	43.75%	43.75%	
Bloomberg Commodity			12.50%	
Liquid Real Return Custom Benchmark	11.11%	12.50%		
	100.0%	100.0%	100.0%	
Real Estate Benchmark	As of:			
	4/1/22	7/1/17 71		
NCREIF			100.0%	
NFI-ODCE	60.0%	65.0%		
NFI-ODCE net +1% 1Q Lag	40.0%	35.0%		
	100.0%	100.0%	100.0%	



RE-Value Added Benchmark	As of: 7/1/16	10/1/08			Lazard Benchmark	As of: 4/1/22	7/1/12	
NCREIF +2% 1Q Lag		100.0%			MSCI ACWI ex USA	4/1/22	100.0%	
NFI-ODCE net +1% 1Q Lag	100.0%	100.070			MSCI World ex US	100.0%	100.070	
18 10 50 18 17 10 10 10g		100.0%			WIGOT WORLD CA GO		100.0%	
Private Real Assets Benchmark	As of:				Brigade Benchmark	As of:		
	4/1/22	7/1/17	4/1/17			12/1/13		
CPI-U Headline +5%			100.0%		ICE BofA ML High Yield II	50.0%		
Cambridge Associates Private Energy 1 Qtr Lag	30.0%	35.0%			Credit Suisse Leveraged Loans	50.0%		
Cambridge Associates Private Infrastructure 1 Qtr Lag	60.0%	45.0%				100.0%		
NCREIF Farmland 1 Qtr Lag	10.0%	10.0%						
NCREIF Timberland Index Lagged	100.0%	10.0% 100.0%	100.0%		Brookfield Real Return Custom	As of: 12/1/2019		
					FTSE Global Core Infrastructure 50/50 Index	30.0%		
Liquid Real Return Custom Benchmark	As of:					20.0%		
	7/1/19				FTSE EPRA Nareit Developed Index	10.0%		
Bloomberg Roll Select Commodity Total Return	10.0%				ICE BofA 7% Constrained REIT Preferred Securities Index			
Bloomberg U.S. Floating Rate Note < 5 Yr	10.0%				ICE BofA USD Real Asset High Yield Custom Index	16.0%		
S&P Global LargeMidCap Commodity and Resources	10.0%				ICE BofA USD Real Asset Corporate Custom Index	24.0%		
S&P Global Infrastructure Index - Net of Tax on Dividend	25.0%					100.0%		
Bloomberg U.S. Government Inflation-Linked 1-10 Yrs	30.0%				00 4 B 14 (B 1 1			
FTSE EPRA Nareit Developed Liquid Index	15.0%				SSgA Real Asset Benchmark	As of:	40/4/45	014100
	100.0%					3/2/2018		2/1/08
					Bloomberg US Govt Inflation-Linked 1-10 Yrs		10.0%	
Cash Benchmark	As of:				Bloomberg US TIPS		10.0%	20.0%
	4/1/22	7/1/92			Bloomberg 1-10 Yr US TIPS	30.0%		
91 Day T-Bills		100.0%			Bloomberg Roll Select Commodity TR	10.0%	20.0%	
NFI-ODCE net +1% 1Q Lag	100.0%	100.070			Bloomberg USD Floating Rate Note <5yr	10.0%		
NF1-ODGE Het +176 TQ Lag	100-100-100-100-1	400.00/			DJ US Select REIT			30.0%
	100.0%	100.0%			FTSE EPRA/NAREIT Developed Liquid	15.0%	10.0%	
IlianceBernstein Benchmark	As of:				MSCI World Natural Resources		20.0%	25.0%
	1/1/01	1/1/9	8	5/1/89	S&P Global Large Mid Cap Commodity Resources	10.0%		
ussell 1000	100.0%				S&P Global Infrastructure	25.0%	20.0%	
ussell 3000		100.09	%		S&P GS Commodities			25.0%
/ilshire 2500		,		100.0%	S&P MLP		10.0%	
IIIII Zooo	100.0%	100.0		100.0%		100.0%	100.0%	100.0%
agle Capital Benchmark	As of:				Cash Benchmark	As of:		
agis sapital politicing	2/1/19	9/1/0	8			4/1/22	7/1/92	
	LITTI				91 Day T-Bills		100.0%	
ussell 1000 Value		100.09	10		or Day 1-Dillo			
ussell 1000 Value ussell 1000	100.0%	100.09	%		Secured Overnight Financing Rate	100.0%	100.070	



Glossary

Allocation Effect: An attribution effect that describes the amount attributable to the managers' asset allocation decisions, relative to the benchmark.

Alpha: The excess return of a portfolio after adjusting for market risk. This excess return is attributable to the selection skill of the portfolio manager. Alpha is calculated as: Portfolio Return [Risk free Rate + Portfolio Beta x (Market Return Risk free Rate)].

Benchmark R squared: Measures how well the Benchmark return series fits the manager's return series. The higher the Benchmark R squared, the more appropriate the benchmark is for the manager.

Beta: A measure of systematic, or market risk; the part of risk in a portfolio or security that is attributable to general market movements. Beta is calculated by dividing the covariance of a security by the variance of the market.

Book to Market: The ratio of book value per share to market price per share. Growth managers typically have low book to market ratios while value managers typically have high book to market ratios.

Capture Ratio: A statistical measure of an investment manager's overall performance in up or down markets. The capture ratio is used to evaluate how well an investment manager performed relative to an index during periods when that index has risen (up market) or fallen (down market). The capture ratio is calculated by dividing the manager's returns by the returns of the index during the up/down market, and multiplying that factor by 100.

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

Excess Return: A measure of the difference in appreciation or depreciation in the price of an investment compared to its benchmark, over a given time period. This is usually expressed as a percentage and may be annualized over a number of years or represent a single period.

Information Ratio: A measure of a manager's ability to earn excess return without incurring additional risk. Information ratio is calculated as: excess return divided by tracking error.

Interaction Effect: An attribution effect that describes the portion of active management that is contributable to the cross interaction between the allocation and selection effect. This can also be explained as an effect that cannot be easily traced to a source.

Portfolio Turnover: The percentage of a portfolio that is sold and replaced (turned over) during a given time period. Low portfolio turnover is indicative of a buy and hold strategy while high portfolio turnover implies a more active form of management.

Price to Earnings Ratio (P/E): Also called the earnings multiplier, it is calculated by dividing the price of a company's stock into earnings per share. Growth managers typically hold stocks with high price to earnings ratios whereas value managers hold stocks with low price to earnings ratios.

R Squared: Also called the coefficient of determination, it measures the amount of variation in one variable explained by variations in another, i.e., the goodness of fit to a benchmark. In the case of investments, the term is used to explain the amount of variation in a security or portfolio explained by movements in the market or the portfolio's benchmark.

Selection Effect: An attribution effect that describes the amount attributable to the managers' stock selection decisions, relative to the benchmark.

Sharpe Ratio: A measure of portfolio efficiency. The Sharpe Ratio indicates excess portfolio return for each unit of risk associated with achieving the excess return. The higher the Sharpe Ratio, the more efficient the portfolio. Sharpe ratio is calculated as: Portfolio Excess Return / Portfolio Standard Deviation.

Sortino Ratio: Measures the risk adjusted return of an investment, portfolio, or strategy. It is a modification of the Sharpe Ratio, but penalizes only those returns falling below a specified benchmark. The Sortino Ratio uses downside deviation in the denominator rather than standard deviation, like the Sharpe Ratio.

Standard Deviation: A measure of volatility, or risk, inherent in a security or portfolio. The standard deviation of a series is a measure of the extent to which observations in the series differ from the arithmetic mean of the series. For example, if a security has an average annual rate of return of 10% and a standard deviation of 5%, then two thirds of the time, one would expect to receive an annual rate of return between 5% and 15%.

Style Analysis: A return based analysis designed to identify combinations of passive investments to closely replicate the performance of funds

Style Map: A specialized form or scatter plot chart typically used to show where a Manager lies in relation to a set of style indices on a two dimensional plane. This is simply a way of viewing the asset loadings in a different context. The coordinates are calculated by rescaling the asset loadings to range from 1 to 1 on each axis and are dependent on the Style Indices comprising the Map.



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