

Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agenda Item 14

MEETING DATE: May 15, 2024

SUBJECT: Total Fund Investment Performance Review Report—

First Quarter 2024

		Deliberation		Receive
SUBMITTED FOR: $_$	_ Consent	and Action	<u>X</u>	_ and File

RECOMMENDATION

Receive and file the SCERS Total Fund Investment Performance Review report, prepared by Verus, for the guarter ended March 31, 2024.

PURPOSE

This 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 ended March 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 FU	ND PERFO	DRMAN	CE SUMM/	ARY
Quarter	Reporting	Periods	Ending I	March 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	3.8%	7.6%	10.4%	5.4%	8.3%	8.2%	Jun-86
Policy Index	3.0%	7.4%	10.2%	4.9%	7.5%	8.3%	
InvestorForce Public DB > \$1B	4.0%	9.1%	11.9%	4.7%	7.8%	-	
SCERS TOTAL FUND Return w/o Overlay	3.9%	7.7%	10.5%	5.6%	8.3%	8.1%	Jun-86
Policy Index	3.0%	7.4%	10.2%	4.9%	7.5%	8.3%	
GROWTH ASSET CATEGORY	6.3%	12.1%	17.3%	6.9%	11.2%	11.0%	Mar-17
Custom Benchmark	5.6%	12.2%	17.5%	6.8%	10.6%	10.1%	
DIVERSIFYING ASSET CATEGORY	0.7%	3.7%	3.5%	0.0%	2.1%	2.2%	Mar-17
Custom Benchmark	0.2%	3.5%	3.2%	-0.6%	1.6%	2.0%	
REAL RETURN ASSET CATEGORY	0.1%	-2.0%	-2.1%	7.0%	6.0%	7.5%	Mar-17
Custom Benchmark	-1.5%	-2.8%	-3.7%	7.0%	5.4%	5.7%	

SCERS' Total Fund return was up 3.8% for the quarter, net of fees, outperforming the Policy Index return of 3.0% and underperforming the median public fund return of 4.0%. Through the first three quarters of the fiscal year (Fiscal YTD), SCERS' portfolio was up 7.6% compared to the Policy Index return of 7.4% and the median public fund return of 9.1%. Over the 3- and 5-year periods, SCERS' Total Fund performance is 5.4% and 8.3%, respectively, outperforming the Policy Index and median public fund benchmarks.

The first quarter of 2024 delivered strong positive results, once again led by global public equity, which was up nearly 8% in the quarter. Fixed income markets were slightly negative for the quarter, as yields increased and expectations for rate cuts from the Federal Reserve declined. SCERS' Real Return asset category was flat during the quarter, as Real Estate continued to struggle in the face of higher interest rates and declining property values.

During the first quarter, equity markets continued the trend from the fourth quarter of last year, posting impressive first quarter returns as U.S. economic growth remained strong and earnings results (particularly in large cap stocks) bolstered equities. Fourth quarter GDP in the U.S. was revised upward to +3.4% (from +3.2%) and Q4 earnings surprised mostly to the upside. While large cap tech stocks continued to lead the market supported by optimism around Artificial Intelligence (AI) technologies, the equity market overall exhibited greater breadth compared to the prior year, which was dominated by the "Magnificent Seven" stocks. U.S. equities delivered strong returns, up over 10%, despite inflation readings that were above expectations and increased during the quarter. The uptick in inflation in the U.S. led to markets pricing in a lower expectation for rate cuts during the year and increased yields, with the U.S. 10-year Treasury yield increasing to 4.20% from 3.88% at the start of the year. The increase in yields created a headwind for fixed income, as prices move inversely to yields.

Geopolitical tensions continued to dominate global headlines, as the conflicts in the Middle East and Russia-Ukraine remain ongoing with no signs of resolution. Geopolitical conflict helped support commodity prices, particularly oil prices, which were up roughly 15% in the first quarter. Overall, the S&P GSCI commodity index was up over 10% in the first quarter, which contributed to the rise in inflation to start the year.

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Growth Asset Category

SCERS GROWTH Performance Summary for the periods ending 3/31/24	Quarter	Fiscal YTD	1-Year	Since Inception	Since Inception Date
SCERS GROWTH ASSET CATEGORY	6.3%	12.1%	17.3%	11.0%	Mar-17
Custom Benchmark	5.6%	12.2%	17.5%	10.1%	
Global Public Equity	7.9%	15.3%	22.0%	9.2%	Jun-11
MSCI ACWI IMI	7.7%	15.6%	22.5%	8.6%	
Private Equity (lagged 1 quarter)	2.8%	4.5%	6.1%	7.2%	Feb-08
Cambridge All PE	0.0%	1.2%	3.1%	11.3%	
Public Credit	2.8%	8.7%	12.0%	4.6%	Nov-13
Custom Benchmark	2.0%	9.2%	11.8%	4.6%	
Private Credit (lagged 1 quarter)	1.8%	6.6%	10.4%	7.7%	Mar-17
Credit Suisse Leveraged Loan + 2%	3.4%	11.3%	15.3%	6.8%	

SCERS' Growth asset category was the largest contributor to the positive results in the first quarter, as Global Public Equity was up 7.9% net of fees. The equity market rally during the quarter was led by Domestic Equity, with the Russell 3000 index up 10.0% and outperforming the MSCI ACWI ex-U.S. Index, which was up 4.7%. Emerging markets continued to lag developed markets, with the MSCI Emerging Markets index up just 2.4% during the first quarter. Across Domestic and International equity markets, large cap stocks outperformed small cap stocks, particularly in the U.S. where the Russell 1000 index outperformed the Russell 2000 index by over 5% (10.3% versus 5.2%). Small cap stocks have lagged large cap stocks since 2022, as higher interest rates have had a greater impact on the profitability and market valuations for these companies. From a style perspective, growth stocks outperformed value stocks across nearly all segments of the equity market, with the exception in international small cap stocks where value outperformed.

Private Equity delivered positive results for the quarter and outperformed the benchmark, with SCERS' portfolio up 2.8% versus flat performance for the benchmark. Private Equity has struggled as capital markets have been relatively quiet in the face of higher interest rates, but there have been some positive signs with recent IPOs and the expectation that rates have peaked and may be coming down.

Public Credit and Private Credit also delivered positive results for the first quarter, up 2.8% and 1.8%, respectively. Credit markets continue to deliver positive returns despite the higher interest rate environment and the potential for increased stress to borrowers. For the trailing 1-year period, SCERS' Public Credit portfolio is up 12.0% and the Private Credit portfolio is up 10.4%.

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Diversifying Asset Category

SCERS DIVERSIFYING Performance Summary for the periods ending 3/31/24	Quarter	Fiscal YTD	1-Year	Since Inception	Since Inception Date
SCERS DIVERSIFYING ASSET CATEGORY	0.7%	3.7%	3.5%	2.2%	Mar-17
Custom Benchmark	0.2%	3.5%	3.2%	2.0%	
Fixed Income	-0.8%	2.3%	1.4%	2.2%	Jun-11
Custom Benchmark	-0.5%	3.0%	2.4%	-	
Core/Core Plus Fixed Income	-0.7%	2.6%	1.9%	2.3%	Jun-11
Bloomberg Barclays U.S. Aggregate TR	-0.8%	2.6%	1.7%	1.9%	
U.S. Treasury	-0.9%	1.5%	0.0%	0.8%	Feb-18
Bloomberg Barclays US Treasury TR	-1.0%	1.4%	0.1%	0.8%	
Diversifying Absolute Return	3.6%	6.7%	7.9%	3.1%	Nov-11
HFRI FoF Conservative Index	2.5%	6.0%	7.1%	4.7%	
Dedicated Cash	1.3%	4.1%	5.4%	2.0%	Jul-19
Secured Overnight Financing Rate (SOFR)	1.4%	4.1%	5.4%	2.1%	

SCERS' Diversifying Asset Category ended the first quarter with positive returns, as contributions from Absolute Return and Cash offset negative returns from Fixed Income. Following a strong fourth quarter rally for fixed income, interest rates significantly rose during the first quarter and completely erased the decline in interest rates in the final quarter of last year, as represented by the U.S. 10-year Treasury yield¹. Expectations for rate cuts in the U.S. reversed course during the first quarter of the year as inflation readings came in stronger than expected, leading market participants to significantly scale back expectations for Federal Reserve rates cuts during the first half of 2024. SCERS' Fixed Income portfolio underperformed the benchmark during the quarter and trailing 1-year as Core/Core Plus managers have slightly outperformed and the U.S. Treasury segment delivering lower relative returns.

Absolute Return and Cash both delivered positive results during the quarter and trailing year. SCERS' Absolute Return portfolio, focused on diversifying strategies with low correlation to equity and bond markets, had balanced positive contributions from most managers during the quarter, with notable outperformance from the trend following allocation². For the trailing year, SCERS' Absolute Return portfolio was up 7.9%, generating a +2.5% spread above cash, net of fees. SCERS' Dedicated Cash allocation has continued to benefit from higher short-term interest rates and was up 1.3% and 5.4% for the quarter and trailing 1-year, in line with the benchmark SOFR rate.

¹ U.S. 10-Year Treasury yield ended Q3 2023 at 4.57%, ended Q1 at 4.20%, and ended April 30, 2024 at 4.68%

² SCERS' Macro Systematic Trend allocation was up 17% in Q1 2024 following a -15% decline in Q4 2023.

Real Return Asset Category

SCERS REAL RETURN Performance Summary	Quarter	Fiscal YTD	1-Year	Since Inception	Since Inception Date
SCERS REAL RETURN ASSET CATEGORY					
SCERS Real Return w/ SSgA Proxy Custom Benchmark	0.1% -1.5%	-2.0% -2.8%	-2.1% -3.7%	7.5% 5.7%	Mar-17 Mar-17
SCERS Real Estate	-2.0%	-8.9%	-10.7%	8.3%	Jun-11
Custom Benchmark	-3.3%	-8.9%	-11.5%	7.6%	
Core Real Estate (as of 3/31/24)					
Commingled Funds NFI-ODCE	-1.5% -2.4%	-8.2% -8.8%	-11.4% -11.3%	4.7% 4.9%	Sep-08 Sep-08
Non-Core Real Estate (as of 12/31/23)					
Opportunistic Value Add NFI-ODCE net +1%	-6.3% 1.7% -4.8%	-17.4% -0.9% -9.0%	-15.9% 2.4% -11.8%	11.2% 0.0% 7.6% 6.7%	Feb-14 Sep-08 Feb-14 Sep-08
SCERS Real Assets (as of 12/31/23)	1.9%	4.4%	6.2%	6.9%	Jan-13
Custom Benchmark	0.2%	3.2%	4.8%	7.1%	
SCERS Liquid Real Return (as of 3/31/24)	0.2%	1.0%	1.6%	3.5%	Jun-19
SSgA Real Assets	0.7%	4.4%	3.4%	4.0%	

SCERS' Real Return asset category was able to deliver slightly positive returns during the first quarter as positive contributions from the Real Assets and Liquid Real Return helped to mitigate negative returns from Real Estate. The Real Return asset category outperformed the benchmark for the quarter and trailing 1-year, with both Real Assets and Real Estate outperforming their respective benchmarks, despite negative absolute returns from Real Estate. SCERS' Real Estate portfolio declined -2.0% during the quarter and -10.7% for the trailing 1-year, outperforming the benchmark returns of -3.3% and -11.5%, respectively. SCERS' Real Assets portfolio, where returns are lagged one quarter, contributed positively to returns during the quarter, up 1.9% and above benchmark performance. SCERS' Liquid Real Return portfolio was up 0.2% during the quarter and 1.6% for the past year, trailing the benchmark return.

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, 2023					
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				
Public Credit	50% (BofA High Yield) + 50% (CS High Yield)				
Private Credit	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 Conservtive 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.

ATTACHMENTS

- Board Order
- Verus' Investment Performance Review for SCERS for the period ended March 31, 2024

Prepared by:	Reviewed by:	
/s/	/s/	
Brian Miller Senior Investment Officer	Eric Stern Chief Executive Officer	
/s/		
Steve Davis Chief Investment Officer		



Retirement Board Order Sacramento County Employees' Retirement System

Before the Board of Retirement May 15, 2024

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Total Fund Investment Performance Review Report— First Quarter 2024

THE BOARD OF RETIREMENT hereby approves Staff's recommendation to receive and file the SCERS Total Fund Investment Performance Review report, prepared by Verus, for the quarter ended March 31, 2024.

I HEREBY CERTIFY that the above order was passed and adopted on May 15, 2024 by the following vote of the Board of Retirement, to wit:

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







PERIOD ENDING: MARCH 31, 2024

Investment Performance Review for

Sacramento County Employees' Retirement System



Verus business update

Since our last Investment Landscape webinar:

- Verus hired Joe Ratliffe as a Performance Analyst in our Los Angeles office
- Brent Nelson, Managing Director | Senior Consultant, received the 2023 Verus North Star Award for championing client success
- Verus will be partnering with Rainier Scholars for a 2024 Summer internship in our Seattle office
- Recent research, found at <u>verusinvestments.com/research</u>:
 - Market concentration & equal weighted indexing
 - Ten thoughts for 2024
 - What are continuation funds?

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Recent Verus research

Visit: <u>verusinvestments.com/research</u>

Topics of interest

TEN THOUGHTS FOR 2024

Every January we write a list of 10 things we expect to be important in the coming year. Many firms do this—we do something unusual, which is mark ourselves on the success or failure of the previous year's predictions. Some years we do well in our predictions, some years less well, but we find the self-enforced humility worthwhile when taking on the task of forecasting. This year is no different. We can look back with some pleasure: in a year where many forecasts went awry, five of our ten forecasts can be counted as a success, with two more a partial success, and three misses.

Other thought leadership

WHAT ARE CONTINUATION FUNDS?

Continuation funds are an innovative financial tool that have been transforming the landscape of private equity. But this new opportunity leaves many investors wondering: What are they? Who can invest in them? What are the risks? Our video explores this concept and how Verus recommends to assess them.

MARKET CONCENTRATION & EQUAL-WEIGHTED INDEXING

Equal-weighted indexing presents an intriguing proposition to the issue of market concentration often seen in market cap-weighted indexes, such as the S&P 500. However, a closer look shows that this approach has failed to deliver on many of the qualities that investors may be seeking. This video provides a look into the equal-weighted index strategy and examines its track record from a few vital angles.

1st quarter summary

THE ECONOMIC CLIMATE

- Real GDP growth unexpectedly slowed in Q1 to 1.6% quarter-over-quarter (3.0% year-over-year), falling short of economist forecasts for 2.5% growth. The GDP release reflected positive but decelerating spending by households, slowing exports, and less government expenditures. Residential fixed investment accelerated partly driven by new single-family home construction, while private inventory investment fell. p. 8
- The U.S. job market has been incredibly resilient, with unemployment rising slightly from 3.7% to 3.8% but labor participation improving from 62.5% to 62.7%. Some economists and investors have begun to partially attribute surprisingly strong labor conditions to substantial immigration (both legal and illegal) in recent years. p. 14

PORTFOLIO IMPACTS

- The 10-year U.S. Treasury yield rose 32 basis points to 4.20% during Q1 on broad acknowledgment that disinflation trends have stalled and that the Federal Reserve may not cut rates in 2024 as significantly as markets had hoped for. p. 21
- Market-priced volatility (Cboe VIX Index) remained incredibly low during the quarter, ending at 13.0 in March. Historically, market volatility of this level has coincided with strong upward trending risk markets and investor enthusiasm. p. 33

THE INVESTMENT CLIMATE

- Equity markets delivered another quarter of large gains—much of the performance fueled by richer valuations rather than fundamentals. Credit spreads declined further to very low levels, leading to moderate returns for higher risk credit. Many markets appear to be priced to perfection as recession fears subside. p. 45
- U.S. inflation increased in Q1, following a handful of hotter-than-expected inflation and jobs reports. Headline inflation increased from 3.3% to 3.5% year-over-year in March, while core CPI (ex-food & energy) declined slightly from 3.9% to 3.8%. It now seems more likely that inflation ends this year closer to, or above, 3% rather than 2%. p. 10

ASSET ALLOCATION ISSUES

- U.S. equities (S&P 500 +10.6%) once again outpaced international developed equities (MSCI EAFE +5.8%) and emerging market equities (MSCI EM +2.4%) during the quarter. The domestic market has also delivered outperformance over the past year, fueled by the artificial intelligence boom. Telecom (+49.8%) and Technology (+46.0%) saw the biggest gains across the S&P 500. p. 28
- Style factor investing underperformed during Q1. Small cap lagged large cap by -5.1% (Russell 2000 +5.2% vs. Russell 1000 +10.3%). Value underperformed Growth by -2.4% (Russell 1000 Value +9.0% vs. Russell 1000 Growth +11.4%). Mega cap companies continue to dominate large cap index performance and affect style behavior. p. 29

Equity
markets
delivered
another large
rally in Q1,
while credit
showed mildly
positive
returns

Stubborn inflation and fewer Fed interest rate cuts seem likely for 2024



What drove the market in Q1?

"U.S. Consumer Prices Heat Up in March; Seen Delaying Fed Rate Cut"

FED FUNDS FUTURES IMPLIED RATES: END OF 2024						
Jan 15th	Jan 31st	Mar 15th	Mar 31st			
3.76%	3.86%	4.37%	4.48%	4.61%	4.66%	

Article Source: Reuters, April 10th, 2024

"Resilient U.S. Boosts IMF Forecast for Global Economic Growth"

IMF WORLD ECONOMIC OUTLOOK 2024 GLOBAL GDP FORECAST					
Jan 23	April 23	July 23	Oct 23	Jan 24	April 24
3.1%	3.0%	3.0%	2.9%	3.1%	3.2%

Article Source: U.S. News & World Report, January 30th, 2024

"A Persistently Strong Labor Market Delivers Economic Stability"

NONFARM PAYROLL GROWTH						
	Oct	Nov	Dec	Jan	Feb	Mar
	165k	182k	290k	256k	270k	303k

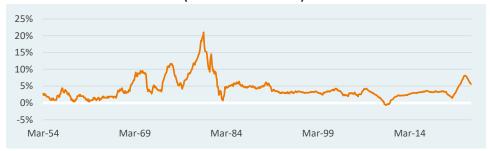
Article Source: Forbes, January 27th, 2024

"Earnings, Big Tech Gave Investors Reasons to Buy U.S. Stocks"

S&P 500 YEAR-OVER-YEAR EARNINGS GROWTH (DECLINE)							
Q3 2022 Q4 2022 Q1 2023 Q2 2023 Q3 2023 Q4 2023							
2.3% -4.7% -1.7% -4.2% 4.9% 4.2%							

Article Source: Bloomberg, March 2nd, 2024

CPI COMPONENT: SHELTER (YEAR-OVER-YEAR)



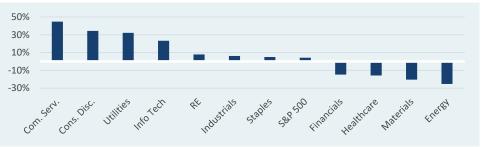
Source: BLS, as of 3/31/24

U.S. GDP FORECASTS



Source: Bloomberg, as of 3/31/24

Q4 2023 U.S. SECTOR EARNINGS GROWTH (YEAR-OVER-YEAR)



Source: FactSet, as of 3/31/24



Economic environment



U.S. economics summary

- Real GDP growth unexpectedly slowed in Q1 to 1.6% quarter-over-quarter (3.0% year-over-year), falling short of economist forecasts for 2.5% growth. The GDP release reflected positive but decelerating spending by households, slowing exports, and less government expenditures. Residential fixed investment accelerated partly driven by new single-family home construction, while private inventory investment fell.
- U.S. inflation increased in Q1, following a handful of hotter-than-expected inflation and jobs reports. Headline inflation increased from 3.3% to 3.5% year-over-year in March, while core CPI (ex-food & energy) declined slightly from 3.9% to 3.8%. It seems more likely that inflation ends this year closer to, or above, 3% rather than 2%.
- Inflation adjusted consumer spending has remained moderate, at 2.4% YoY in February. Purchases of services have materially outpaced purchases of goods in recent years, a reversal of the historically unprecedented boom in

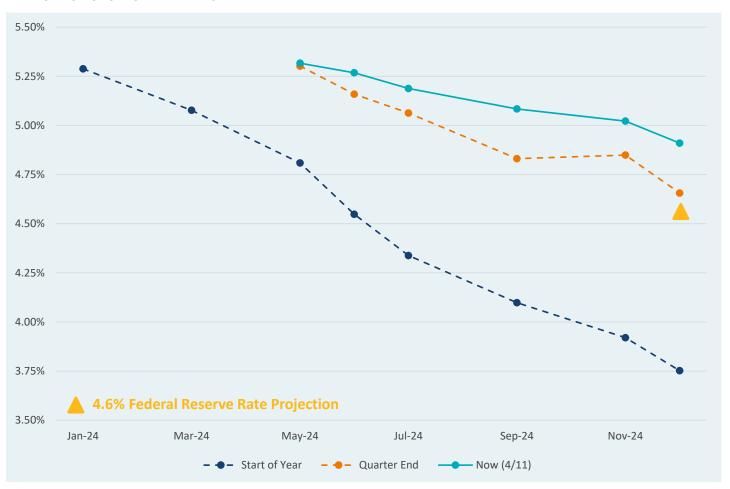
- goods purchases that occurred during the pandemic.
- Employment has been incredibly resilient. Unemployment was stable during Q1, while labor participation increased. Some economists and investors have partially attributed labor market gains to substantial immigration (both legal and illegal) in recent years—with millions of immigrants being of working age and seeking work. Given the level of immigration, we expect official labor data has been, and will continue to be, meaningfully impacted.
- Consumer sentiment has jumped significantly on better financial situations of households, expectations that inflation will further ease, and a steadying economy. At the same time, The NFIB Small Business Optimism index deteriorated to the weakest level since 2012. Inflation remains a top concern, and business owners indicated they could not find qualified candidates to fill job openings.

	Most Recent	12 Months Prior
Real GDP (YoY)	3.0% 3/31/24	1.7% 3/31/23
Inflation (CPI YoY, Core)	3.8% 3/31/24	5.6% 3/31/23
Expected Inflation (5yr-5yr forward)	2.3% 3/31/24	2.2% 3/31/23
Fed Funds Target Range	5.25–5.50% 3/31/24	4.75–5.00% 3/31/23
10-Year Rate	4.20% 3/31/24	3.47% 3/31/23
U-3 Unemployment	3.8% 3/31/24	3.5% 3/31/23
U-6 Unemployment	7.3% 3/31/24	6.7% 3/31/23



Federal Reserve policy

FED FUNDS FUTURES IMPLIED 2024 RATE PATH



Markets started the year pricing in six rate cuts by the end of 2024

Implied pricing now indicates expectations for just two rate cuts, a tighter path relative to the three forecasted rate cuts projected in the Federal Reserve's Summary of Economic Projections

Source: Bloomberg, as of 4/11/24



Inflation

U.S. inflation increased in Q1, following a handful of hotter-than-expected inflation and jobs reports. Headline inflation increased from 3.3% to 3.5% year-over-year in March, while core CPI (ex-food & energy) declined slightly from 3.9% to 3.8%. It seems more likely that inflation ends this year closer to, or above, 3% rather than 2%. Certain goods and services have further moderated in price growth, such as Used Vehicles and Food, while other price trends remain hot such as Housing and Auto Insurance.

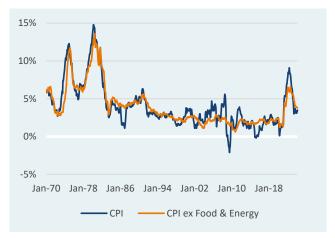
The outsized impact of Shelter—which makes up more than a third of the entire CPI basket—remains a major force keeping inflation elevated. While shelter prices reported by the Bureau

of Labor Statistics have moved closer to real-time price gauges, March's 0.4% month-over-month increase still reflected an annualized rate of nearly 5%.

Inflation appears to be flattening out rather than continuing lower towards the Federal Reserve 2% target, which has been a catalyst for changing monetary policy expectations. Stubborn inflation combined with strong labor and other economic activity provides little incentive for the Federal Reserve to ease rates. At the beginning of the year the market expected six rate cuts in 2024. That has since fallen to two cuts.

Q1 inflation remains above the Fed's target, affecting market expectations for a "higher for longer" rate environment

U.S. CPI (YOY)



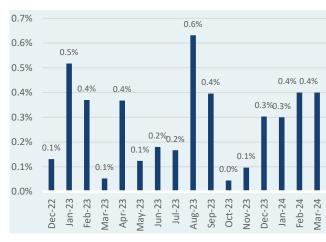
Source: BLS, as of 3/31/24

ZILLOW OBSERVED RENT VS. SHELTER CPI



Source: Zillow Observed Rent Index, FRED, of 3/31/24

MONTHLY PRICE MOVEMENT (CPI)

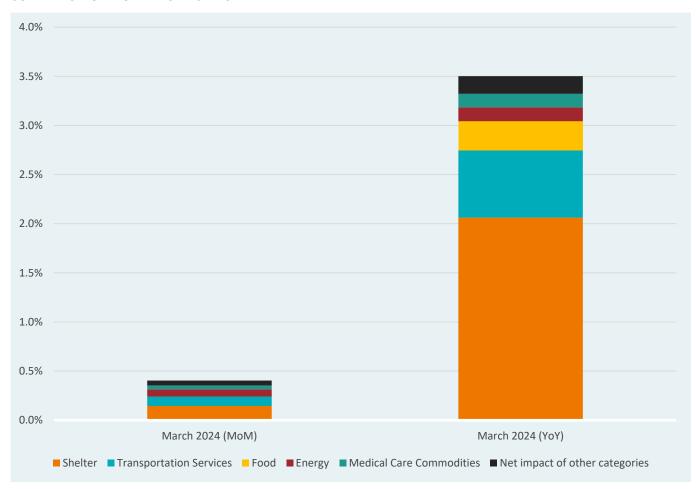


Source: BLS, as of 3/31/24



Inflation: shelter's outsized impact

CONTRIBUTION TO MARCH 2024 CPI



Shelter's contribution to inflation remains outsized, making up more than two-percent of the 3.5% year-overyear headline print

Amongst services, transportation costs have materially increased from the past year, notably amongst motor vehicle insurance (+22.2%) and maintenance and repair (+8.2%)

Source: BLS, as of 3/31/24.



GDP growth

Real GDP growth unexpectedly slowed in Q1 to 1.6% quarter-over-quarter (3.0% year-over-year), falling short of economist forecasts for 2.5% growth. The GDP release reflected positive but decelerating spending by households, slowing exports, and less government expenditures. Residential fixed investment accelerated partly driven by new single-family home construction, while private inventory investment fell.

Slower economic growth in the first quarter appears to have been mostly driven by weakness in exports and imports, as well as a moderation in government spending. Other aspects of the economy such as consumer spending and investment have slowed in recent quarters but growth remains moderately positive, as high inflation and weaker wage gains have not yet obviously resulted in a decline in spending. The first quarter GDP print marked the first instance of weak economic data after a seemingly months-long series of strong releases, from employment, to consumer sentiment, to spending. This was an abrupt change in direction of the data, and it will be important for investors to monitor whether it marks a true change in trend or is simply a bump in the road with further U.S. strength ahead.

U.S. growth slowed a bit in Q1 but continues to show resilience despite aggressive monetary tightening

U.S. REAL GROSS DOMESTIC PRODUCT



U.S. REAL GDP COMPONENTS (QOQ)

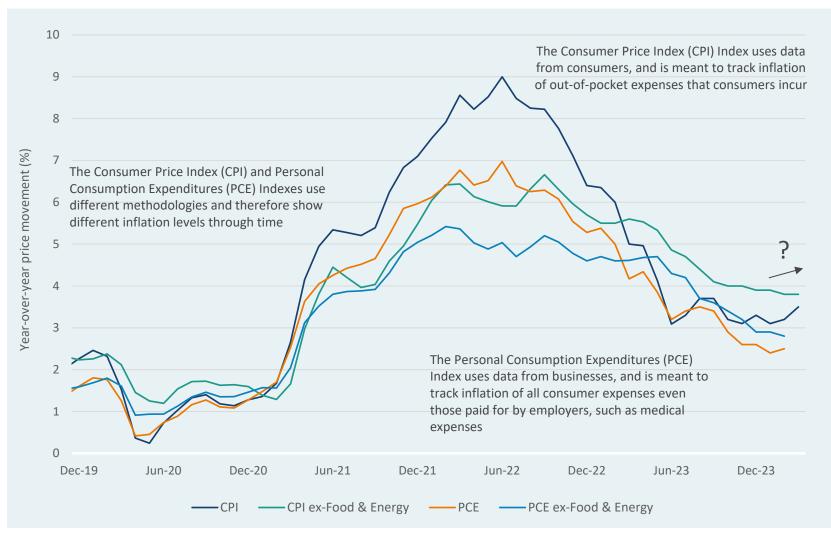


Source: FRED, as of 3/31/24

Source: FRED, as of 3/31/24



How are inflation conditions evolving?



Recent hot inflation numbers have created concerns that inflation may be stabilizing at a higher level than what is required for interest rate cuts to occur

Source: FRED, Verus, PCE data as of 3/31/24, CPI data as of 2/29/24



Labor market

The unemployment rate was fairly stable during the quarter, rising slightly from 3.7% to 3.8%. Meanwhile, labor participation improved from 62.5% to 62.7%.

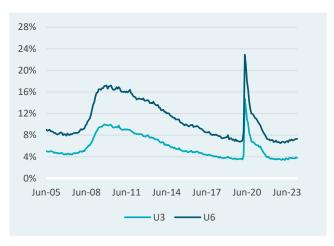
The U.S. job market has been incredibly resilient in the face of higher interest rates, and ongoing employment data releases continue to show outsized labor market gains. Some economists and investors have begun to partially attribute the record labor market gains to substantial immigration (both legal and illegal) into the country in recent years—with millions of immigrants being of working age and seeking employment. Given total immigration estimates, we would

expect that official jobs data, which is based on both phone surveys and also on employer payroll figures, to be meaningfully impacted.

Rebalancing within the labor market continued. The mismatch between the number of *workers available* and the number of *available jobs* was greater than 6 million in early 2022. Nearly two-thirds of that gap has now closed, with steady improvement over the past year.

A substantial rise in different types of immigration over recent years may partially describe strong labor data

U.S. UNEMPLOYMENT



TOTAL U.S. EMPLOYMENT



Source: FRED, as of 3/31/24

WORKERS AVAILABLE VS. AVAILABLE JOBS



Source: BLS, Verus, as of 2/29/24



Source: FRED, as of 3/31/24

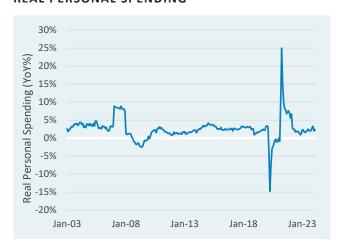
The consumer

Inflation adjusted spending has remained moderate, at 2.4% year-over-year in February. Purchases of services have materially outpaced purchases of goods in recent years in terms of growth, since the historically unprecedented boom in goods purchases that occurred during the pandemic. We believe that extreme surge in goods purchases effectively *pulled forward* these purchases from future years, such as in home sales activity, home improvement projects, and recreational vehicle sales, which has led to the recent lull.

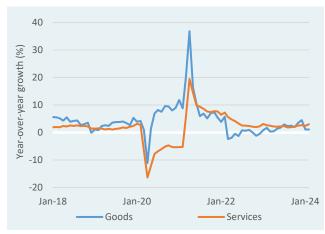
Personal savings rates had been improving through mid-2023

but have since fallen back to extremely low levels. The reason for this trend is unclear, though it coincides with a notable improvement in consumer sentiment, which suggests lower savings rates for some households might reflect an improved outlook for the economy and personal finances. However, high prices and cost of living is likely a greater contributing factor. Overall, Americans continue to spend rather freely despite higher costs of goods and services taking up a greater portion of take-home income. This includes nonessential spending such as for travel.

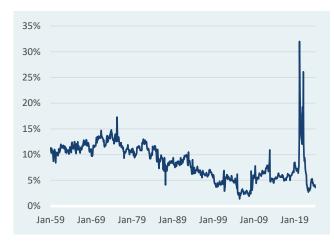
REAL PERSONAL SPENDING



GOODS VS. SERVICES SPENDING (REAL)



PERSONAL SAVINGS RATE



Source: FRED, as of 2/29/24

Source: FRED, as of 2/29/24



Source: FRED, as of 2/29/24

Sentiment

Consumer sentiment has seen significant improvement over the past year. The University of Michigan Consumer Sentiment survey bounced from 69.7 to 79.4 in Q1 on better financial positions of U.S. households, expectations that inflation will continue to ease, and impressions that the economy has achieved a "steady state".

Although the domestic annual inflation rate is now closer to the longer-term average, sentiment surveys continue to reflect discontent with high costs of living. As we have discussed in recent quarters, this effect might be termed the "lower inflation conundrum". As prices of many goods and services jumped significantly higher during and after the pandemic, the wages of

the average worker did not keep up in many respects. Although price *movement* (official inflation numbers) has come down recently, high prices persist and remain a thorn in household budgets, savings levels, and the overall financial security of Americans. This is reflected in sentiment survey responses.

The NFIB Small Business Optimism index has deteriorated to the weakest level since 2012. Inflation has been reported as a top business concern, and 37% of business owners indicated they could not find qualified candidates to fill job openings, overall reflecting a poor business climate.

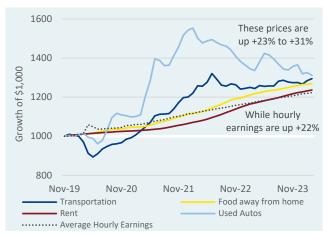
Consumer sentiment improved during Q1, while small business optimism dropped to the weakest level since 2012

CONSUMER SENTIMENT



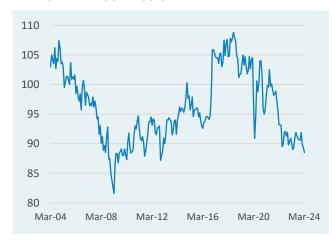
Source: University of Michigan, as of 3/31/24

HOUSEHOLDS STILL FEELING THE SQUEEZE



Source: FRED, Verus, as of 3/31/24

NFIB SMALL BUSINESS SENTIMENT



Source: NFIB, as of 3/31/24



Housing

Domestic housing market activity picked up in Q1. Existing home sales increased 10% quarter-over-quarter, and the number of homes listed for sale rose by a similar magnitude. According to Redfin, the median home sales price was up +5.3% in March from the prior year. After an extended period of high mortgage rates and difficult affordability, it is possible that many sellers and buyers are accepting market conditions and choosing to no longer wait on the sidelines.

Housing affordability improved slightly but remains extremely poor, with the 30-year average fixed mortgage rate jumping slightly from 6.6% to 6.8%. Prospects for lower interest rates and therefore better affordability have diminished as investors expect fewer upcoming rate cuts from the Federal Reserve, though a rebound in home sales activity may suggest that the

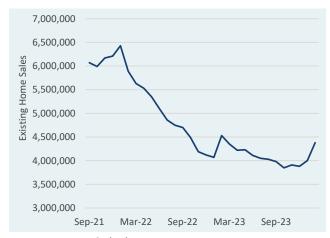
market has stabilized. Real estate markets can stay out of balance in terms of affordability for very long periods of time. A path to affordability in the current environment is not yet clear, as interest rates will most likely stay high, and homeowners are not willing to, and seemingly do not need to, adjust their selling prices downwards.

Mortgage delinquency levels of single-family homeowners remain muted, at 1.69% as of Q4. This compares to 2.34% in Q4 of 2019 prior to the onset of the pandemic. Conditions have been supported by steadily increasing home prices that have led to robust home equity balances, as well as ultra-low interest rates following COVID-19 which allowed for attractive refinancing opportunities and lower monthly payments.

30-YEAR MORTGAGE RATE (%)



EXISTING HOME SALES



Source: FRED, as of 2/28/24

HOUSING AFFORDABILITY



Source: FRED, as of 12/31/23 – Housing affordability is calculated as the cost of a median priced single-family home at the current mortgage rate, as a percentage of the median family income



International economics summary

- The broad global narrative remains similar to last quarter, as global metrics paint a picture of slowing yet resilient economic growth. While a hotter March inflation print in the U.S. changed expectations around the policy path of the Federal Reserve, inflation in international developed economies has shown greater signs of moderation, putting central banks such as the European Central Bank and Bank of England on a path to policy easing.
- Developed economies continue to juggle economic growth and inflation. Price pressures have shown signs of easing across the Eurozone and U.K., with inflation sitting at 2.4% and 3.2%, respectively. Despite inflation moderation, conditions remain weak across the Eurozone, with GDP nearly flat on a year-over-year basis and unemployment elevated at 6.5%.
- In Japan, growth conditions also remain shaky, as the country nearly avoided a technical recession

- following an upward revised GDP release. While the BOJ formally ended its zero-interest rate policy, the Japanese Yen weakened further against the U.S. dollar after unclear guidance from the BOJ and expectations for higher U.S. interest rates. The Japanese economic story remains challenged despite positive performance of the equity market.
- Growth in emerging markets continues to offset slowing activity in developed economies, as year-over-year GDP growth of 8.4% and 5.3% in India and China outpace most of the globe. China remains in the headlines given that economic and technological rivalry with the U.S. persists. Despite sentiment challenges, growth has remained above the target of 5%, even in the face of a lagging property market and financial stress seen amongst local-government financing vehicles and regional banks.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	3.0%	3.5%	3.8%
	3/31/24	3/31/24	3/31/24
Eurozone	0.1%	2.4%	6.5%
	12/31/23	3/31/24	2/29/24
Japan	1.2%	2.6%	2.6%
	12/31/23	3/31/24	2/29/24
BRICS Nations	5.3%	1.7%	4.8%
	12/31/23	3/31/24	12/31/22
Brazil	2.1%	3.9%	7.8%
	12/31/23	3/31/24	2/29/24
Russia	4.9%	7.7%	2.8%
	12/31/23	3/31/24	2/29/24
India	8.4%	4.9%	7.6%
	12/31/23	3/31/24	3/31/24
China	5.3% 3/31/24	0.1% 3/31/24	5.2 % <i>3/31/24</i>

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.



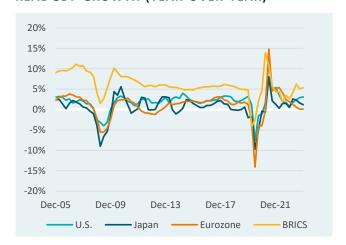
International economics

We believe the global narrative remains intact, and that many economies are set to slow in 2024 but will likely avoid recession. While hotter inflation data in the U.S. has led to changed policy expectations, inflation in international developed economies showed signs of moderation, putting central banks like the European Central Bank (ECB) and Bank of England (BOE) on a path to policy easing. The market is pricing three 25 bps interest rate cuts from the ECB and the BOE by end-of-year.

The IMF's April World Economic Outlook (WEO) communicated a much more balanced economic environment, as steady growth and disinflation has resulted in a lower likelihood of a "hard landing". The IMF sees global growth at 3.2% for 2024 and 2025, with the 2024 growth estimate revised up +0.1% from the January WEO update.

Going forward, we see material downside risks but also potential growth catalysts to the upside. Continuing and escalating conflicts in the Middle East and Eastern Europe have raised fears around energy market disruption, especially when considering that rising oil and natural gas prices were a major contributor to the recent four-decade-high bout of inflation. On the other hand, growth catalysts such as accelerated computing and artificial intelligence offer a broad range of applicability and impact that, although difficult to quantify, could act as a substantial driver of productivity and growth in the future. Additionally, if inflation pressures were to ease more quickly than expected, allowing for easier monetary policies, this may fuel growth and markets forward.

REAL GDP GROWTH (YEAR-OVER-YEAR)



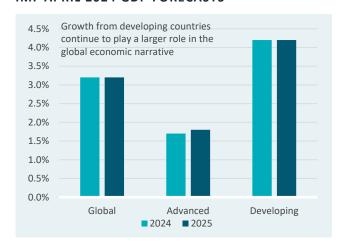
Source: Bloomberg, as of 12/31/23

INFLATION (CPI YEAR-OVER-YEAR)



Source: Bloomberg, as of 3/31/24 – or most recent release

IMF APRIL 2024 GDP FORECASTS



Source: IMF April World Economic Outlook, as of 4/16/24



Fixed income rates & credit



Fixed income environment

- The 10-year U.S. Treasury yield rose 32 basis points from 3.88% to 4.20% during Q1 on broad acknowledgment that disinflation trends have stalled and that the Federal Reserve may not cut rates in 2024 as significantly as markets had hoped for. Yields across the Treasury curve increased, with shorter-term rates rising more than longer-term.
- Domestic high-quality, duration-sensitive bonds experienced slight losses during the quarter, while most credit indices saw positive returns. High yield gained +1.5% (Bbg U.S. Corporate High Yield), while bank loans rose +2.5% (S&P/LSTA Leveraged Loan). Longer duration investment grade corporate bonds (Bloomberg U.S. Long Corporate Credit) declined by -1.7% during the quarter as both rising interest rates and concerns about inflation detracted from performance.
- The U.S. yield curve has remained inverted since June 6th, 2022, marking the longest yield curve inversion on

- record. This is indicated by the 10year minus 2-year Treasury yield—ending the quarter at -39bps, down slightly from -35bps in Q4. While the yield curve has historically been a reliable predictor of recession, economic growth remains robust.
- Although default activity remains low, volumes increased as slowing economic growth and rising borrowing costs acted as headwinds. During the period, \$20.6 billion of bank loan and high yield bonds were affected by default or distressed exchanges, up from \$15.8 billion in the prior quarter. Notable company defaults included Jo-Ann's (Retail), Hornblower (Travel & Leisure), and RobertShaw (Technology).
- Structured credit hedge funds, which focus on credit sectors such as CLOs, ABS (auto, credit card, etc), MBS, and CMBS, continue to deliver strong returns relative to traditional high yield and remain competitive versus leveraged loan indices.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	(0.8%)	1.7%
Core Plus Fixed Income (Bloomberg U.S. Universal)	(0.5%)	2.7%
U.S. Treasuries (Bloomberg U.S. Treasury)	(1.0%)	0.1%
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	(3.8%)	(7.3%)
U.S. High Yield (Bloomberg U.S. Corporate HY)	1.5%	11.2%
Bank Loans (S&P/LSTA Leveraged Loan)	2.5%	12.4%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	(2.1%)	4.9%
Emerging Market Debt Hard (JPM EMBI Global Diversified)	2.0%	11.3%
Mortgage-Backed Securities (Bloomberg MBS)	(1.0%)	1.4%

Source: Bloomberg, as of 3/31/24

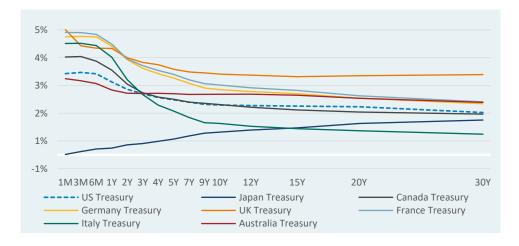


Yield environment

U.S. YIELD CURVE

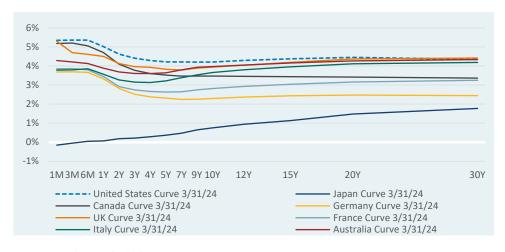


YIELD CURVE CHANGES OVER LAST FIVE YEARS

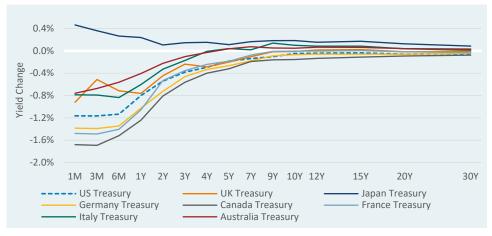


Source: Bloomberg, as of 3/31/24

GLOBAL GOVERNMENT YIELD CURVES



IMPLIED CHANGES OVER NEXT YEAR





Credit environment

During the first quarter, credit markets delivered mixed returns with lower-quality credits such as high yield bonds and bank loans leading. Bank loans rose +2.5% (CS Leveraged Loans), while high yield bonds increased by +1.5% (Bbg U.S. Corporate High Yield). Longer duration investment grade corporate bonds (Bloomberg U.S. Long Corporate Credit) fell by -1.7% as pressure from both rising interest rates and higher expected inflation acted as a headwind to performance.

Returns across credit ratings were mixed during Q1. Higher-quality BB-rated bonds returned +1.3% compared to +1.0% for B-rated and +1.3% for and CCC-rated bonds, respectively. Lower-quality bank loans experienced strong returns with CCC-rated loans rising by +6.0%,

compared to +2.5% and +1.9% for BB- and B-rated loans, respectfully,

Credit spreads were slightly narrower during the quarter as stronger-than-expected economic growth eased concerns related to potential recession. Lower-quality high yield bond spreads fell by 0.2% to roughly 3.2%, while investment grade spreads decreased by roughly 0.1% to 1.2%. Broadly, spreads remain below their long-term historical averages, which suggests that investors are staying confident about the ability of those businesses to service debt. That said, slower U.S. economic growth could lead to wider credit spreads as investors might seek safety in higher quality assets.

SPREADS



Source: Barclays, Bloomberg, as of 3/31/24

YIELD TO WORST



Source: Bloomberg, J.P. Morgan as of 3/31/24

CREDIT SPREAD (OAS)

Market	3/31/24	3/31/23
Long U.S. Corp	1.1%	1.6%
U.S. Inv Grade Corp	0.9%	1.4%
U.S. High Yield	3.1%	4.6%
U.S. Bank Loans*	3.9%	3.7%

Source: Barclays, Credit Suisse, Bloomberg, as of 3/31/24 *Discount margin (4-year life)



Default & issuance

Default activity increased during the quarter as slowing economic growth and rising borrowing costs acted as headwinds. During the period, \$20.6 billion of bank loan and high yield bonds were affected by default or distressed exchanges, up from \$15.8 billion in the prior quarter. Notable company defaults included Jo-Ann's (Retail), Hornblower (Travel & Leisure), and RobertShaw (Technology).

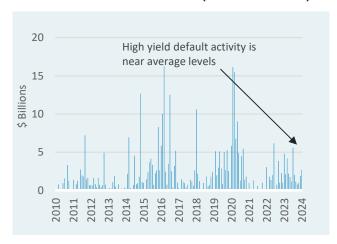
Year-to-date, the combined total of defaults and exchanges tracked slightly behind last year's pace by roughly -3.0%.

High yield bond default rates increased to 2.6%, up from 1.9% a year earlier, but were still below the long-term annual average of roughly 3.4%. High-yield default recovery rates ended the quarter at 33.1%, up slightly from

32.8% at the end of 2023, but below the long-term average of roughly 40%.

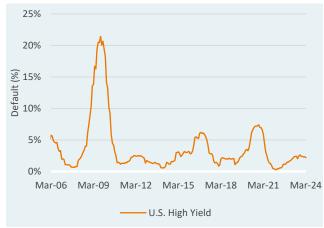
The issuance of investment grade credit increased significantly from the prior quarter, by \$328.0 billion (\$531.0 billion from \$208.0 billion). Despite higher borrowing costs, high-yield bond issuance climbed slightly to \$86.6 billion during the quarter (up from \$42.0 billion in Q4). On a year-over-year basis, the volume of both investment-grade and high yield issuance increased by roughly \$181.0 billion, (\$636.0 billion from \$436.0 billion). Low credit spreads improve the relative attractiveness of borrowing, which was likely a factor driving recent strong issuance.

U.S. HY MONTHLY DEFAULTS (PAR WEIGHTED)



Source: BofA Merrill Lynch, as of 3/31/24

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



Source: BofA Merrill Lynch, as of 3/31/24 - par weighted

DEVELOPED MARKET ISSUANCE (\$ BILLIONS)



Source: BofA Merrill Lynch, all developed markets, as of 3/31/24



Credit hedge funds

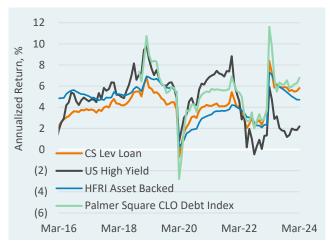
- Structured credit hedge funds, which focus on credit sectors such as CLOs, ABS (auto, credit card, etc), MBS, and CMBS, continue to deliver strong returns relative to traditional high yield and remain competitive relative to leveraged loan performance.
- Yields in those securitized markets remain wide in contrast to equivalent rating-risk corporate yields, with CLOs offering 150-300bps of spread in the IG tranches and up to 800bps in sub-investment grade tranches. Other sectors, such as CMBS, offer significantly wider spreads, evidence of the uncertainty and stress unfolding in the commercial property market.
- Distressed credit hedge funds performed well after the pandemic due to the amount of dry powder these strategies typically keep on hand and the abundance of opportunities created by market stress during that period. Strategies have kept up with high yield in the last 12-18 months and have seen their opportunity set gradually improve as interest rates remain elevated.

CLO VS CORPORATE BOND YIELDS (%)



Source: Bloomberg, BofA, Federal Reserve, MPI. As of 3/31/24

3 YEAR ROLLING RETURN



Source: CS, HFR, Bloomberg, Palmer Square, MPI

1 YEAR ROLLING RETURN



Source: Bloomberg, EurekaHedge, MPI



Equity

Equity environment

- U.S. equities (S&P 500 +10.6%) continued an impressive rally during the first quarter, once again outpacing international developed equities (MSCI EAFE +5.8%) and emerging markets (MSCI EM +2.4%). The domestic market has also delivered outperformance over the past year, fueled by the artificial intelligence boom. Telecom (+49.8%) and Technology (+46.0%) saw the biggest gains during the period.
- The U.S. dollar gained in value during Q1, likely buoyed by the higher for longer interest rate narrative. A reassessment of the Federal Reserve policy path for 2024 has improved the outlook for the dollar, as currencies which offer higher interest rates, and relatively attractive prospects for continued higher interest rates, tend to better hold their value. Losses from unhedged Japanese currency exposure has been

- extreme (-9.3% over the quarter, 25.2% over the past year, as indicated by the TOPIX Index).
- Style investing underperformed during Q1. Small cap lagged large cap by -5.1% (Russell 2000 +5.2% vs. Russell 1000 +10.3%). Value underperformed Growth by -2.4% (Russell 1000 Value +9.0% vs. Russell 1000 Growth +11.4%). Style premia has also suffered over the past full year. Small cap underperformed large cap by -10.2% while value stocks underperformed growth by -18.7%.
- Market-priced volatility (Cboe VIX Index) remained incredibly low during the quarter, ending at 13.0 in March. Historically, market volatility of this level has coincided with strong upward trending risk asset prices and investor enthusiasm.

	QTD TOTAL RETURN		1 YEAR TOT	AL RETURN
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	10.	6%	29.	9%
U.S. Small Cap (Russell 2000)	5.2	2%	19.	7%
U.S. Equity (Russell 3000)	10.	0%	29.	3%
U.S. Large Value (Russell 1000 Value)	9.0%		20.3%	
US Large Growth (Russell 1000 Growth)	11.4%		39.0%	
Global Equity (MSCI ACWI)	8.2%	9.6%	23.2%	25.4%
International Large (MSCI EAFE)	5.8%	10.5%	15.3%	22.4%
Eurozone (EURO STOXX 50)	10.3%	13.1%	20.1%	23.6%
U.K. (FTSE 100)	3.0%	4.0%	10.7%	9.1%
Japan (TOPIX)	10.0%	19.3%	24.0%	49.2%
Emerging Markets (MSCI Emerging Markets)	2.4%	4.4%	8.2%	10.7%

Source: Russell Investments, MSCI, STOXX, FTSE, JPX, as of 3/31/24

Domestic equity

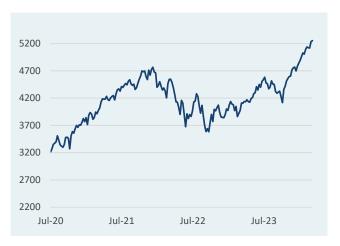
U.S. equities notched another quarter of outperformance over international developed and emerging market shares, with the S&P 500 finishing up +10.6%. Market momentum carried forward from the end of 2023, as large cap equities advanced off a boost to corporate earnings from developments in accelerated computing and artificial intelligence. At the same time, economic indicators reflected resilience across labor and economic activity, alleviating some fears around potential recession.

Large technology company performance has helped push the broader index higher, as the Magnificent Seven contributed around 37% of the S&P 500's total return in the first quarter, per Morningstar. A combination of Nvidia, Microsoft, Meta, and Amazon drove 47% of total returns. The Magnificent 7

stocks fueled nearly two-thirds of index performance in 2023. These figures exemplify the outsized impact large companies have had on broader domestic equity returns, both to the downside and upside.

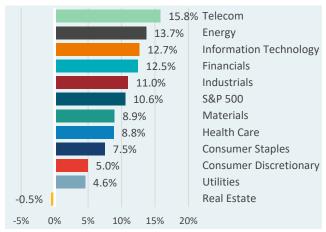
On the other hand, these strong price gains have moved valuations towards the richer side of the historical range, and the term "priced for perfection" has become more popular amongst the news lexicon. U.S. shares have also been relatively unbothered by changing expectations for the Federal Reserve rate hiking path. The higher for longer narrative has had a large negative impact on bond markets, but apparently little impact on risk assets, so far.

S&P 500 PRICE INDEX



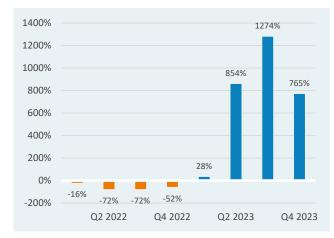
Source: Bloomberg, as of 3/31/24

Q1 2024 SECTOR PERFORMANCE



Source: Morningstar, as of 3/31/24

NVIDIA EPS GROWTH (YEAR-OVER-YEAR)



Source: Nvidia, as of 3/31/24. GAAP Diluted EPS



Domestic equity size & style

Small cap and value style investing underperformed during Q1. Small cap lagged large cap by -5.1% (Russell 2000 +5.2% vs. Russell 1000 +10.3%). Value underperformed Growth by -2.4% (Russell 1000 Value +9.0% vs. Russell 1000 Growth +11.4%). These style premia also suffered over the past full year. Small cap underperformed large cap by -10.2% while value stocks underperformed growth by -18.7%.

Mega cap companies continue to dominate large cap index performance. The "Magnificent 7" securities, including Amazon, Netflix, Google, Meta, Nvidia, Apple, and Tesla, drove the index into drawdown territory during 2022, contributed to a strong bounce back rally in 2023, then have pushed the index higher still in 2024. However, performance of this group

has been a bit mixed year-to-date, with Apple and Tesla lagging the overall index materially. Index concentration has created headwinds for the performance of active managers, on average, and dominant growth stocks have pushed the overall index towards a higher multiple while depressing dividend yields.

Variability in the behavior of style factors, often driven by idiosyncratic sector moves and broader macro themes, continues to provide evidence that style investing should typically be a longer-term endeavor. Short-term factor timing decisions should in most circumstances be pursued only in the rare occasion of obvious market mispricing and a foreseen catalyst for price correction.

VALUE VS. GROWTH 1-YR ROLLING



SMALL CAP VS LARGE CAP 1-YR ROLLING



1-YEAR SIZE & STYLE PERFORMANCE

	Value	Core	Growth
Large Cap	20.3%	29.9%	39.0%
Mid Cap	20.4%	22.3%	26.3%
Small Cap	18.8%	19.7%	20.3%

Source: FTSE, as of 3/31/24

Source: FTSE, as of 3/31/24



Source: FTSE, as of 3/31/24

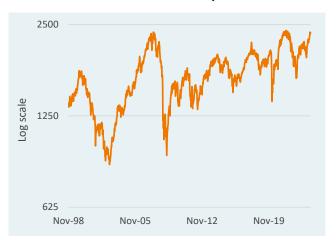
International developed equity

International developed shares notched a strong first quarter, although returns trailed domestic equities. The MSCI EAFE index returned +5.8% in unhedged U.S. dollar terms, materially lower than the hedged return of +10.5%. The dollar's advance was likely fueled by higher rate expectations for the Federal Reserve, along with expected policy easing decisions from the European Central Bank and Bank of Japan, both of which are positive for the U.S. dollar (i.e. led to losses for unhedged investors).

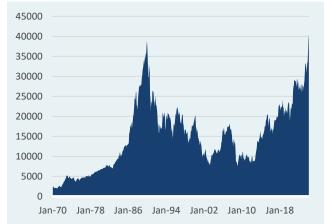
Resilient global economic growth has been a tailwind to performance amongst international developed shares. All major regional equities (Eurozone, Japan, and United Kingdom) saw positive returns over the period.

While performance has been better than expected, future growth catalysts remain uncertain. Falling Eurozone inflation boosted regional risk assets, as inflation fell from 3.1% to 2.4% in March. Easing inflation has taken some pressure off the ECB, resulting in rising expectations for rate cuts in June. In Japan, equites have carried forward positive momentum from 2023, evident by the Nikkei achieving a 34-year high in February. Easy monetary policy from the BOJ continues to provide a boost to local earnings, while poor inflation and wage growth metrics have provided little evidence for the BOJ to quickly move away from their low interest rate policy.

INTERNATIONAL DEVELOPED EQUITY



NIKKEI 225 INDEX



Source: Bloomberg, Nikkei, as of 3/31/24

ECB RATE EXPECTATIONS



Source: Bloomberg, as of 3/31/24



Source: MSCI, as of 3/31/24

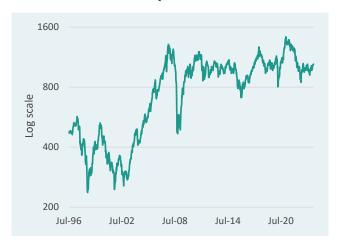
Emerging market equity

Emerging markets have delivered mild gains year-to-date, rising +2.4%, and are up +8.2% over the past year. Chinese equities have continued to act as a drag the index, down - 2.2% in 2024, and -17.1% over the past year.

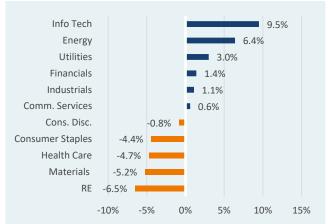
From a sector perspective, the momentum behind accelerated computing carried into emerging markets, as the information technology sector outperformed (+9.5%), driven by gains from South Korea & Taiwan. Peru, Turkey, and Columbia were the best performing countries in the first quarter, seeing gains of +15.5%, +14.1%, and +12.5% - broadly gaining off strength in oil and copper.

China remains a large question mark among emerging market country exposures, facing significant structural headwinds in the form of a declining population, imbalances in the real estate market, and a reversal in sentiment from the international community which contributed to a broad withdrawal of foreign direct investment, for example. Additionally, many U.S.-based institutional investors have centered on the possibility of top-down government restrictions on China investment that, if imposed, could result in losses to existing exposure as this could cause a way of selling activity. An invasion of Taiwan remains another risk, though we believe the chances of this are remote.

EMERGING MARKET EQUITY



MSCI EM Q1 2024 SECTOR RETURNS (USD)



Source: MSCI, J.P. Morgan, as of 3/31/24

ISHARES ETF MONTHLY FUND FLOWS (\$M USD)



Source: BlackRock, Bloomberg, as of 3/31/24



Source: MSCI, as of 3/31/24

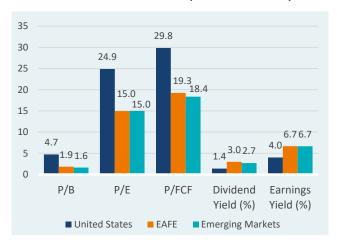
Equity valuations

Valuations drifted upward during the quarter, as the equity rally has been driven partially by higher price multiples. Larger multiples and a greater concentration of growth stocks in the index, which tend to have lower dividend payout ratios, have led the S&P 500 to offer a nearly all-time low dividend yield of 1.4%. In an environment where investors can receive more than a 5% yield from risk-free cash, this is testament to the rising attractiveness of fixed income relative to equities.

Domestic equities are priced at a 40% premium over international developed markets, and have shown little sensitivity so far to investors'

repricing of the interest rate path in 2024. Future stock market returns must come from either: corporate earnings growth, expansion of stock multiples (meaning stocks become more expensive), higher dividend yields (an increase in dividend payments), or higher inflation (assuming businesses pass this on by raising prices in line with inflation). In the current environment of already high stock multiples, a very low dividend yield, and high corporate profit margins, the likelihood of seeing another decade of performance like investors have received over the past ten years seems low.

MSCI VALUATION METRICS (3-MONTH AVG)



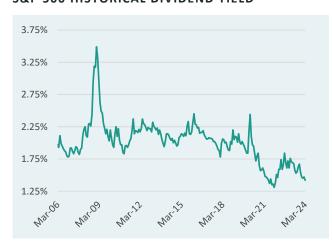
Source: Bloomberg, as of 3/31/24

FORWARD PRICE/EARNINGS RATIO



Source: MSCI, Bloomberg, as of 3/31/24

S&P 500 HISTORICAL DIVIDEND YIELD



Source: S&P, Bloomberg, as of 3/31/24



Market volatility

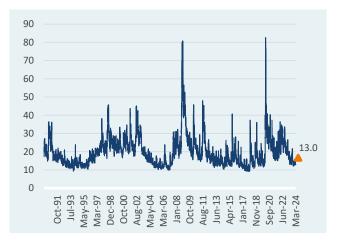
Market-priced volatility (Cboe VIX Index) remained incredibly low during the quarter, ending at 13.0 in March. Historically, market volatility of this level has coincided with strong upward trending risk markets and investor enthusiasm.

The realized past one-year volatility of global equity markets has moderated, with U.S. equity volatility at 13.6%—very close to current VIX implied volatility. The relative volatility of markets has moved back in line with historical behavior—U.S. equities showing the lowest volatility, followed closely by international developed equities, and with emerging market equities delivering greater risk.

However, many investors might be surprised to know that international developed equities have shown similar risk to U.S. equities over the long term, if currency movements are excluded. It is unhedged currency exposure that has historically caused the difference in risk.

Bond market implied volatility has moderated considerably from extreme levels of 2023. This is indicated by the "MOVE" Index—which calculates the implied volatility of U.S. Treasury securities. However, notable uncertainty remains around inflation, the Federal Reserve's interest rate path and the extent of rate cuts (if any) in 2024, and economic growth.

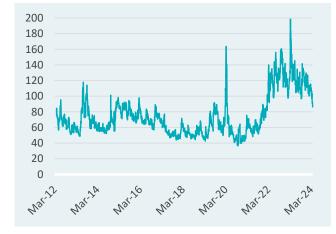
U.S. IMPLIED VOLATILITY (VIX)



REALIZED VOLATILITY



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



Source: S&P, MSCI, as of 3/31/24

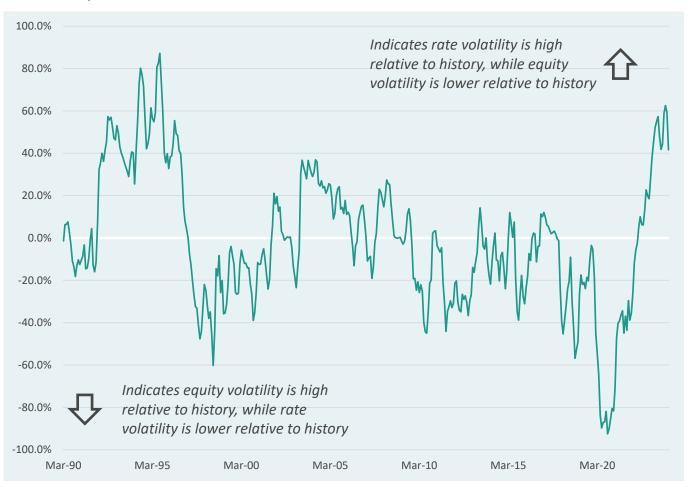
Source: Bloomberg, as of 3/31/24



Source: Choe, as of 3/31/24

Implied volatility: domestic rates vs. equity

RATES VS. EQUITIES VOLATILITY: HISTORICAL PERCENTILE SPREAD



This chart looks at the relationship between rate and equity volatility by comparing historical percentiles dating back to 1990. By taking a spread between the rate and equity percentile, we get a clear picture of environments when implied volatility is relatively higher for one asset class compared to the other.

Our chart shows that we have not seen an environment like this since 1995 (which is also viewed as the Fed's only "soft landing").

Source: ICE BofA, CBOE, as of 3/31/24



Long-term equity performance



Source: MPI, as of 3/31/24



Other assets



Currency

The U.S. dollar gained in value during the quarter, likely buoyed by the *higher for longer* interest rate narrative. A reassessment of the Federal Reserve policy path for 2024 has improved the outlook for the dollar, as currencies which offer higher interest rates, and relatively attractive prospects for continued higher interest rates, tend to better hold their value.

Investors without a currency hedging program in place lost -4.7% from their international developed equity exposure (MSCI EAFE) during the quarter and -7.1% over the past year. Losses from unhedged Japanese currency exposure have been extreme (-9.3% over the quarter, -25.2% over the past year, based on the TOPIX Index), while unhedged European equity exposure losses due to currency have been milder (-2.8% over the quarter, -2.5% over

the past year, based on the EURO Stoxx 50 Index).

This past year marks another period of uncompensated volatility and losses caused by unhedged currency market exposure. The benefits which a more thoughtful currency approach might deliver have been on display for a number of years. This approach involves reducing the uncompensated risk of unhedged foreign currency exposure, and instead of unhedged exposure to currency markets, making a passive investment in the currency market by investing in currencies with higher interest rates, currencies that are undervalued, and currencies that are 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 the unhedged currency exposure that many investors hold.

EFFECT OF CURRENCY (1-YEAR ROLLING)



U.S. DOLLAR MAJOR CURRENCY INDEX



Source: Bloomberg, as of 3/31/24

EMBEDDED CURRENCY VS CURRENCY FACTORS



Source: Bloomberg, MSCI, as of 3/31/24



Source: MSCI, as of 3/31/24

Appendix

Periodic table of returns

Small Cap Value

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD	5-Year	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	11.4	18.5	16.0
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	10.3	14.8	12.7
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	9.0	10.3	9.0
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	7.6	8.2	7.9
International 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	5.8	8.1	7.6
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	5.2	7.4	6.9
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	4.0	7.3	6.8
Hedge Funds of Funds	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	3.9	6.4	5.3
Small Cap Value	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	2.9	6.2	4.8
Emerging Markets Equity	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	2.4	5.0	3.6
Commodities	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	2.2	4.3	2.9
Cash	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	1.3	2.2	1.5
Real Estate	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	0.0	1.9	1.3
US Bonds	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	-0.8	0.4	-1.6
	Lar	ge Cap	Equity	У				Small	Cap Gr	owth				Con	nmodit	ies							
	Lar	ge Cap	Value					Intern	ationa	l Equit	У			Rea	l Estat	e							
	Lar	ge Cap	Grow	th				Emerg	ing Ma	rkets E	quity			Hed	lge Fur	nds of I	unds						
	Sm	all Cap	Equity	y				US Bon	ıds					60%	6 MSCI	ACWI/	40% BI	oombe	rg Glob	al Bond	I		

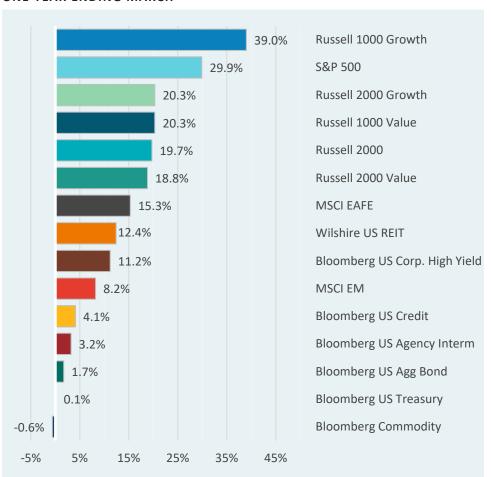
Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 12/31/23.

Cash

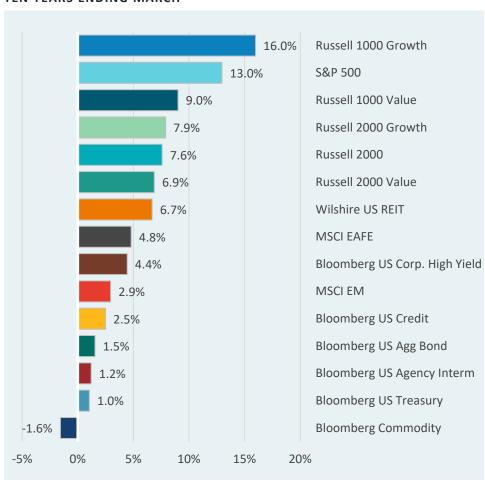


Major asset class returns

ONE YEAR ENDING MARCH



TEN YEARS ENDING MARCH



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

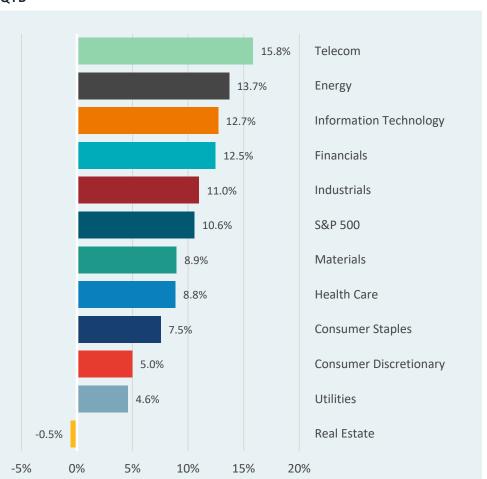
Source: Morningstar, as of 3/31/24

Source: Morningstar, as of 3/31/24

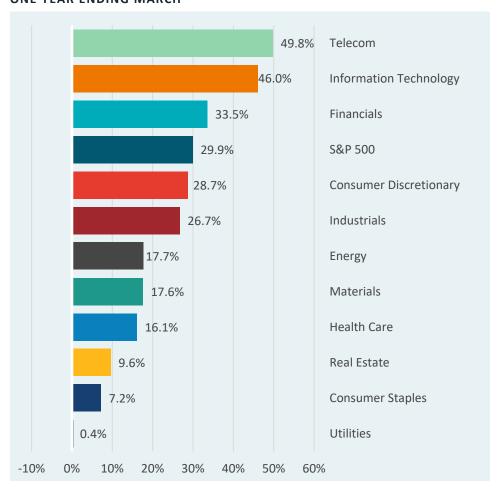


S&P 500 sector returns

QTD



ONE YEAR ENDING MARCH



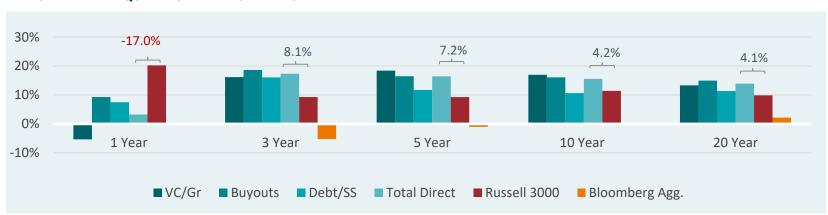
Source: Morningstar, as of 3/31/24

Source: Morningstar, as of 3/31/24



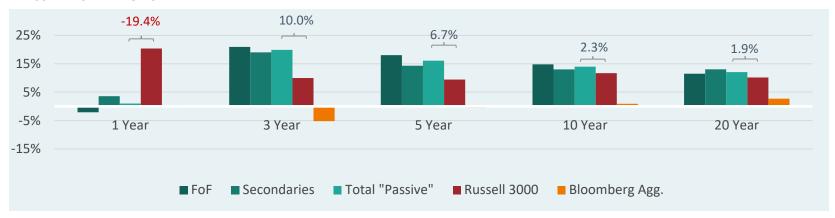
Private equity vs. traditional assets performance

DIRECT PRIVATE EQUITY FUND INVESTMENTS



Direct P.E Fund investments outperformed comparable public equites across all time periods, aside from the 1-year

"PASSIVE" STRATEGIES



"Passive" strategies outperformed comparable public equities across all time periods, aside from the 1-year

Sources: Refinitiv PME: U.S. Private Equity Funds sub asset classes as of September 30, 2023. Public Market Equivalent returns resulted from "Total Passive" and Total Direct's identical cash flows invested into and distributed from respective traditional asset comparable.



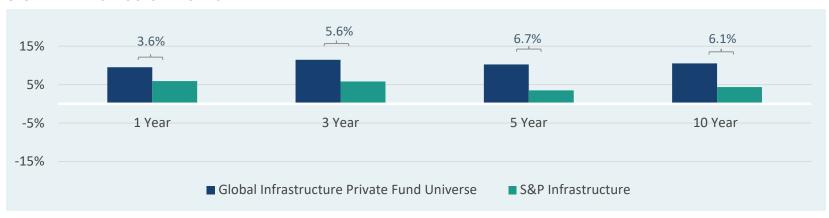
Private vs. liquid real assets performance

GLOBAL NATURAL RESOURCES FUNDS



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

GLOBAL INFRASTRUCTURE FUNDS



Infra. funds outperformed the S&P Infra. across all periods

Sources: Refinitiv 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, 2023. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real assets universes.



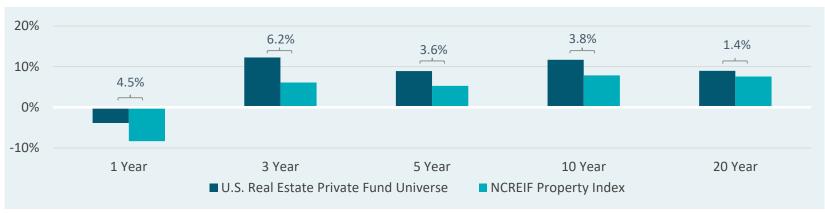
Private vs. liquid and core real estate performance

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



U.S. Private
R.E. funds
outperformed
the Wilshire
U.S. REIT Index
across most time
periods, aside
from the 1-year

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: Refinitiv PME: U.S. Real Estate universes as of September 30, 2023. 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	3.2	10.6	10.6	29.9	11.5	15.1	13.0	Bloomberg US TIPS	0.8	(0.1)	(0.1)	0.5	(0.5)	2.5	2.2
S&P 500 Equal Weighted	4.5	7.9	7.9	19.4	8.2	12.4	10.9	Bloomberg US Treasury Bills	0.5	1.3	1.3	5.3	2.6	2.0	1.4
DJ Industrial Average	2.2	6.1	6.1	22.2	8.7	11.3	11.8	Bloomberg US Agg Bond	0.9	(8.0)	(0.8)	1.7	(2.5)	0.4	1.5
Russell Top 200	2.9	10.8	10.8	32.4	12.0	16.1	13.7	Bloomberg US Universal	1.0	(0.5)	(0.5)	2.7	(2.1)	0.7	1.8
Russell 1000	3.2	10.3	10.3	29.9	10.5	14.8	12.7	Duration							
Russell 2000	3.6	5.2	5.2	19.7	(0.1)	8.1	7.6	Bloomberg US Treasury 1-3 Yr	0.4	0.3	0.3	2.9	0.0	1.1	1.1
Russell 3000	3.2	10.0	10.0	29.3	9.8	14.3	12.3	Bloomberg US Treasury Long	1.2	(3.3)	(3.3)	(6.1)	(8.0)	(2.8)	1.2
Russell Mid Cap	4.3	8.6	8.6	22.3	6.1	11.1	9.9	Bloomberg US Treasury	0.6	(1.0)	(1.0)	0.1	(2.7)	(0.1)	1.0
Style Index								Issuer							
Russell 1000 Growth	1.8	11.4	11.4	39.0	12.5	18.5	16.0	Bloomberg US MBS	1.1	(1.0)	(1.0)	1.4	(2.8)	(0.4)	1.1
Russell 1000 Value	5.0	9.0	9.0	20.3	8.1	10.3	9.0	Bloomberg US Corp. High Yield	1.2	1.5	1.5	11.2	2.2	4.2	4.4
Russell 2000 Growth	2.8	7.6	7.6	20.3	(2.7)	7.4	7.9	Bloomberg US Agency Interm	0.4	0.2	0.2	3.2	(0.6)	0.8	1.2
Russell 2000 Value	4.4	2.9	2.9	18.8	2.2	8.2	6.9	Bloomberg US Credit	1.2	(0.4)	(0.4)	4.1	(1.9)	1.4	2.5
INTERNATIONAL EQUITY								OTHER							
Broad Index								Index							
MSCI ACWI	3.1	8.2	8.2	23.2	7.0	10.9	8.7	Bloomberg Commodity	3.3	2.2	2.2	(0.6)	9.1	6.4	(1.6)
MSCI ACWI ex US	3.1	4.7	4.7	13.3	1.9	6.0	4.3	Wilshire US REIT	1.5	(0.0)	(0.0)	12.4	4.5	4.4	6.7
MSCI EAFE	3.3	5.8	5.8	15.3	4.8	7.3	4.8	CS Leveraged Loans	0.8	2.5	2.5	12.4	5.8	5.3	4.6
MSCI EM	2.5	2.4	2.4	8.2	(5.1)	2.2	2.9	S&P Global Infrastructure	4.6	1.3	1.3	4.1	5.5	4.9	5.2
MSCI EAFE Small Cap	3.7	2.4	2.4	10.4	(1.4)	4.9	4.7	Alerian MLP	4.9	14.7	14.7	37.3	29.2	10.4	2.9
Style Index								Regional Index							
MSCI EAFE Growth	2.3	7.0	7.0	13.3	2.8	7.8	5.9	JPM EMBI Global Div	2.1	2.0	2.0	11.3	(1.4)	0.7	3.0
MSCI EAFE Value	4.4	4.5	4.5	17.3	6.6	6.4	3.5	JPM GBI-EM Global Div	(0.0)	(2.1)	(2.1)	4.9	(1.6)	0.1	(0.3)
Regional Index								Hedge Funds							
MSCI UK	4.5	3.1	3.1	10.9	7.7	5.1	2.9	HFRI Composite	2.5	4.9	4.9	12.1	4.3	7.0	5.0
MSCI Japan	3.0	11.0	11.0	25.8	3.7	7.8	6.7	HFRI FOF Composite	1.3	3.9	3.9	9.4	2.8	5.0	3.6
MSCI Euro	4.1	8.4	8.4	17.4	6.9	9.0	4.7	Currency (Spot)							
MSCI EM Asia	3.0	3.4	3.4	6.3	(6.5)	2.8	4.5	Euro	(0.2)	(2.2)	(2.2)	(0.6)	(2.8)	(8.0)	(2.4)

Source: Morningstar, HFRI, as of 3/31/24

1.0

(4.0) (4.0)

22.6

10.5

3.7

1.7

Pound Sterling

(0.1)

(1.1)

(0.9)

(6.9)

(0.9)

(6.9)

2.2

(2.9)

(12.1) (10.0)



MSCI EM Latin American

(0.6)

(6.1)

(2.7)

(3.8)

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.

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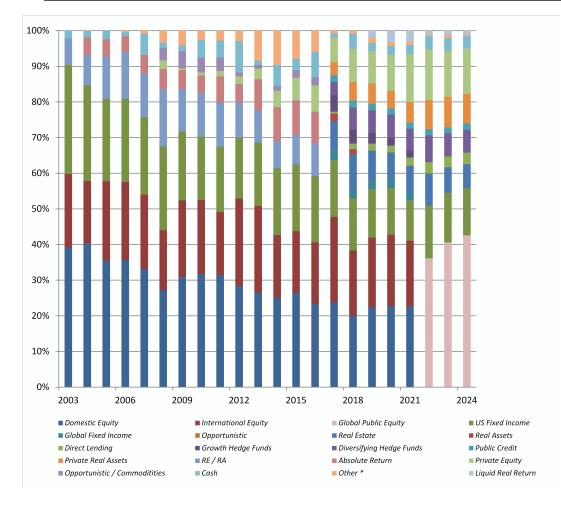




SCERS

Quarter ending March 31st, 2024

- The Total Plan returned +3.8% gross in the first quarter of 2024 and ranked in the third quartile among other public funds greater than \$1 billion. The Plan outperformed its policy index by 80 bps over this period. Longer-term, the three-year return of +5.6% ranks in the top quartile of the large public plan peer group. The five-year return of +8.6% also ranks just inside the top quartile of the large public plan peer group.
- First quarter results (net) were enhanced by the following factors:
 - 1. Within the Growth Asset category (+6.3%) which outperformed the total fund, Public Equity (+7.9%) was the main outperformer of the portfolio, with Large Cap (130/30) (+13.3%) and Large Cap Active (+13.2%) being the top performing sub-asset classes.
 - 2. Global/Unconstrained Equity, which is also within the Growth Asset Category, enhanced returns by gaining +10.4% over the quarter.
- First quarter results (net) were hindered by the following factors:
 - 1. Real Estate was once again the worst performing asset class, declining -2.0% over the quarter. Within Real Estate, Opportunistic Non-Core Real Estate lost -6.3%.
 - 2. Private Equity mildly detracted from overall portfolio performance, returning just +2.8% on the quarter.
 - 3. Fixed Income declined -0.8% this quarter, lagging the Fixed Income index, which retracted just -0.5%.

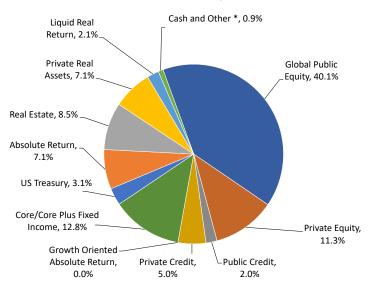


	2003	2004	2005	2006	2007	2008	2009	
US Equity	39.2	40.4	35.4	35.5	33.1	27.2	30.9	
International Equity	20.6	17.5	22.3	22.0	20.9	16.8	21.5	
US Fixed Income	30.6	26.9	23.1	23.3	21.7	23.5	19.3	
Real Estate / Real Assets	7.5	8.5	11.9	13.1	12.4	16.1	11.9	
Absolute Return	7.5	4.9	4.8	4.4	5.1	5.6	5.3	
Private Equity		4.5	4.0	4.4	0.1	2.5	0.5	
Opportunistic / Commodities		_	_	-	0.1	3.5	4.8	
Cash	2.1	1.8	2.4	1.2	5.8	1.4	1.7	
Other *	2.1	0.1	2.4	0.4	0.9	3.4	4.1	
Other -	_	0.1	-	0.4	0.9	3.4	4.1	
	2010	2011	2012	2013	2014	2015	2016	
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	42.6
US Fixed Income	16.0	14.6	13.6	13.2	11.4		13.9	13.3
Global Fixed Income				13.2	11.4	14.8	13.9	
	2.4	2.6	2.5	2.5	2.1	14.8	13.9	_
Public Credit	2.4	2.6 1.9	2.5 1.8					- 1.7
	1.8			2.5	2.1	-	-	1.7
Public Credit				2.5	2.1	-	-	- 1.7 - 6.7
Public Credit Real Estate / Real Assets	1.8	1.9	1.8	2.5 1.7	2.1 1.7	1.7	1.7	-
Public Credit Real Estate / Real Assets Real Estate	1.8 - 8.4	1.9 - 9.7	1.8	2.5 1.7	2.1 1.7	1.7	1.7 - 7.1	-
Public Credit Real Estate / Real Assets Real Estate Real Assets Private Real Assets	1.8 - 8.4 2.1 3.7	1.9 - 9.7 1.4	1.8 - 8.3 -	2.5 1.7 - 7.3	2.1 1.7 - 7.6	1.7 - 9.0	1.7	6.7
Public Credit Real Estate / Real Assets Real Estate Real Assets Private Real Assets	1.8 - 8.4 2.1	1.9 - 9.7 1.4	1.8 - 8.3 - 5.7	2.5 1.7 - 7.3 - 4.9	2.1 1.7 - 7.6 - 5.8	1.7 - 9.0 - 8.2	- 1.7 - 7.1 - 8.5	6.7 - 8.3
Public Credit Real Estate / Real Assets Real Estate Real Assets Private Real Assets Liquid Real Return Absolute Return	1.8 - 8.4 2.1 3.7	1.9 - 9.7 1.4	1.8 - 8.3 - 5.7	2.5 1.7 - 7.3 - 4.9	2.1 1.7 - 7.6 - 5.8	1.7 - 9.0 - 8.2	- 1.7 - 7.1 - 8.5	6.7 - 8.3
Public Credit Real Estate / Real Assets Real Estate Real Assets Private Real Assets Liquid Real Return Absolute Return Growth Hedge Funds	1.8 - 8.4 2.1 3.7 - 4.6	1.9 - 9.7 1.4 5.2 -	1.8 - 8.3 - 5.7 2.0	2.5 1.7 - 7.3 - 4.9 3.3	2.1 1.7 - 7.6 - 5.8 3.2	1.7 - 9.0 - 8.2 1.2	7.1 - 7.1 - 8.5 1.2	6.7 - 8.3 1.1
Public Credit Real Estate / Real Assets Real Estate Real Assets Private Real Assets Liquid Real Return Absolute Return Growth Hedge Funds Diversifying Hedge Funds	1.8 - 8.4 2.1 3.7 - 4.6	1.9 - 9.7 1.4 5.2 - - 3.9	1.8 - 8.3 - 5.7 2.0 - 3.0	2.5 1.7 - 7.3 - 4.9 3.3 - 2.3	2.1 1.7 - 7.6 - 5.8 3.2 - 2.0	1.7 - 9.0 - 8.2 1.2	1.7 - 7.1 - 8.5 1.2	6.7 - 8.3 1.1
Public Credit Real Estate / Real Assets Real Estate Real Assets Private Real Assets Liquid Real Return Absolute Return Growth Hedge Funds Diversifying Hedge Funds Private Equity	1.8 - 8.4 2.1 3.7 - 4.6 3.8	1.9 - 9.7 1.4 5.2 - - 3.9 6.2	1.8 - 8.3 - 5.7 2.0 - 3.0 6.4	2.5 1.7 - 7.3 - 4.9 3.3 - 2.3 6.4	2.1 1.7 - 7.6 - 5.8 3.2 - 2.0 6.0	1.7 - 9.0 - 8.2 1.2 0.1 7.5	1.7 - 7.1 - 8.5 1.2 0.1 6.3	6.7 - 8.3 1.1 0.1 6.4
Public Credit Real Estate / Real Assets Real Estate Real Assets Private Real Assets Liquid Real Return Absolute Return Growth Hedge Funds Diversifying Hedge Funds Private Equity Direct Lending	1.8 -8.4 2.1 3.7 - 4.6 3.8 6.9 0.5	1.9 - 9.7 1.4 5.2 - - 3.9 6.2 9.3	1.8 - 8.3 - 5.7 2.0 - 3.0 6.4 9.0	2.5 1.7 - 7.3 - 4.9 3.3 - 2.3 6.4 10.1	2.1 1.7 - 7.6 - 5.8 3.2 - 2.0 6.0 13.4	1.7 - 9.0 - 8.2 1.2 0.1 7.5 14.2	1.7 - 7.1 - 8.5 1.2 0.1 6.3 13.0	6.7 - 8.3 1.1 0.1 6.4 12.8
Public Credit Real Estate / Real Assets Real Estate Real Assets Private Real Assets Liquid Real Return Absolute Return Growth Hedge Funds Diversifying Hedge Funds Private Equity Direct Lending Opportunistic / Commodities	1.8 -8.4 2.1 3.7 - 4.6 3.8 6.9 0.5	1.9 9.7 1.4 5.2 - 3.9 6.2 9.3 1.5	1.8 - 8.3 - 5.7 2.0 - 3.0 6.4 9.0 2.0	2.5 1.7 - 7.3 - 4.9 3.3 - 2.3 6.4 10.1 1.9	2.1 1.7 - 7.6 - 5.8 3.2 - 2.0 6.0 13.4 2.3	1.7 - 9.0 - 8.2 1.2 0.1 7.5 14.2 3.2	1.7 - 7.1 - 8.5 1.2 0.1 6.3 13.0	6.7 - 8.3 1.1 0.1 6.4 12.8 3.2
Public Credit Real Estate / Real Assets Real Estate Real Assets Private Real Assets Liquid Real Return Absolute Return Growth Hedge Funds Diversifying Hedge Funds Private Equity Direct Lending	1.8 -8.4 2.1 3.7 - 4.6 3.8 6.9 0.5	1.9 - 9.7 1.4 5.2 - - 3.9 6.2 9.3	1.8 - 8.3 - 5.7 2.0 - 3.0 6.4 9.0	2.5 1.7 - 7.3 - 4.9 3.3 - 2.3 6.4 10.1	2.1 1.7 - 7.6 - 5.8 3.2 - 2.0 6.0 13.4	1.7 - 9.0 - 8.2 1.2 0.1 7.5 14.2 3.2	1.7 - 7.1 - 8.5 1.2 0.1 6.3 13.0	6.7 - 8.3 1.1 0.1 6.4 12.8 3.2

^{*} Allocations without overlay.

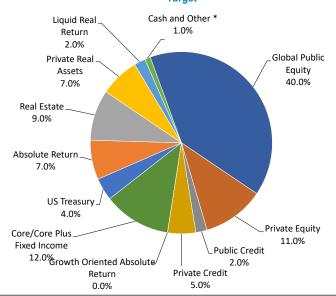
^{*} Other includes SSgA Overlay and closing accounts. Prior to Q2 2017 SSgA Real Assets is also included.

Current w/Overlay



ASSET ALLOCATION	MARKET VALUE W/OVERLAY	W/ OVERLAY	W/O OVERLAY
Global Public Equity	5,312,969,613	40.1%	42.6%
Private Equity	1,494,812,284	11.3%	12.8%
Public Credit	264,772,233	2.0%	1.7%
Private Credit	646,769,602	5.0%	3.2%
Growth Oriented Absolute Return	-137,879	0.0%	0.1%
Core/Core Plus Fixed Income	1,692,116,607	12.8%	10.2%
US Treasury	409,589,782	3.1%	3.1%
Absolute Return	944,692,983	7.1%	6.4%
Real Estate	1,130,603,619	8.5%	6.7%
Private Real Assets	957,458,923	7.1%	8.3%
Liquid Real Return	283,865,094	2.1%	1.1%
Cash and Other *	117,192,585	0.9%	3.9%
TOTAL	13,254,705,446	100.0%	100.0%

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ASSET ALLOCATION	ACTUAL	TARGET	DIFF
Global Public Equity	40.1%	40.0%	0.1%
Private Equity	11.3%	11.0%	0.3%
Public Credit	2.0%	2.0%	0.0%
Private Credit	5.0%	5.0%	0.0%
Growth Oriented Absolute Return	0.0%	0.0%	0.0%
Core/Core Plus Fixed Income	12.8%	12.0%	0.8%
US Treasury	3.1%	4.0%	-0.9%
Absolute Return	7.1%	7.0%	0.1%
Real Estate	8.5%	9.0%	-0.5%
Private Real Assets	7.1%	7.0%	0.1%
Liquid Real Return	2.1%	2.0%	0.1%
Cash and Other *	0.9%	1.0%	-0.1%

^{*} Other includes closing accounts (SSgA Overlay)

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Total Fund - Gross	13,254,705,446	100.0	3.8 (56)	7.7 (80)	10.6 (70)	5.6 (20)	8.6 (26)	7.6 (31)	8.4	Jul-86
Total Fund - Net			3.8	7.6	10.4	5.4	8.3	7.3	8.2	Jul-86
Policy Index			3.0 (84)	7.4 (83)	10.2 (80)	4.9 (38)	7.5 (61)	6.8 (56)	8.3	Jul-86
InvMetrics Public DB > \$1B Median			4.0	9.1	11.9	4.7	7.8	7.1	-	
Total Fund ex Overlay - Gross	13,204,926,250	99.6	3.9 (55)	7.8 (73)	10.7 (69)	5.8 (14)	8.5 (28)	7.6 (30)	8.3	Jul-86
Total Fund ex Overlay - Net			3.9	7.7	10.5	5.6	8.3	7.4	8.1	Jul-86
Policy Index			3.0 (84)	7.4 (83)	10.2 (80)	4.9 (38)	7.5 (61)	6.8 (56)	8.3	Jul-86
Growth Asset Category - Gross	8,006,990,683	60.4	6.3	12.3	17.6	7.2	11.5		11.3	Apr-17
Growth Asset Category - Net			6.3	12.1	17.3	6.9	11.2		11.0	Apr-17
Growth Custom			5.6	12.2	17.5	6.8	10.6	-	10.1	
Global Public Equity - Gross	5,646,139,728	42.6	8.0 (45)	15.6 (55)	22.5 (17)	5.9	10.8	9.1	9.6	Jul-11
Global Public Equity - Net			7.9	15.3	22.0	5.5	10.4	8.7	9.2	Jul-11
MSCI AC World IMI Index (Net)			7.7	15.6	22.5	6.3	10.6	8.4	8.6	
Domestic Equity - Gross	2,964,934,046	22.4	10.9 (7)	20.7 (18)	31.1 (16)	10.1 (32)	14.7 (28)	12.4 (30)	10.7	Jul-86
Domestic Equity - Net			10.8	20.5	30.8	9.8	14.4	12.1	10.5	Jul-86
Russell 3000 Index			10.0 (38)	19.3 (46)	29.3 (41)	9.8 (50)	14.3 (47)	12.3 (35)	10.6	Jul-86
InvMetrics All DB US Equity Median			9.8	19.3	29.1	9.7	14.3	12.1	-	
Large Cap - Gross	2,721,694,292	20.5	11.3	21.7	32.7	11.3	15.3	12.8	8.0	Apr-98
Large Cap - Net			11.3	21.5	32.4	11.0	15.1	12.6	7.8	Apr-98
Russell 1000 Index			10.3	19.6	29.9	10.5	14.8	12.7	8.3	
Large Cap - Index	1,473,130,811	11.1	10.3	19.6	29.8	10.5	14.8	12.7	12.4	Oct-08
Large Cap - Index			10.3	19.6	29.8	10.5	14.7	12.6	12.4	Oct-08
Russell 1000 Index			10.3	19.6	29.9	10.5	14.8	12.7	12.4	
AB - Gross	1,473,130,811	11.1	10.3 (64)	19.6 (38)	29.8 (53)	10.5 (65)	14.8 (59)	12.7 (64)	10.7	May-89
AB - Net			10.3	19.6	29.8	10.5	14.7	12.6	10.7	May-89
Russell 1000 Index			10.3 (60)	19.6 (38)	29.9 (47)	10.5 (72)	14.8 (63)	12.7 (63)	10.8	May-89
eV US Passive Large Cap Equity Median			10.4	19.4	29.8	11.0	15.0	12.9	-	
Large Cap - Enhanced - Gross	415,116,175	3.1	11.2	22.8	33.4	12.3	15.5	•	13.6	Aug-18
Large Cap - Enhanced - Net			11.1	22.6	33.1	12.0	15.2		13.3	Aug-18
Russell 1000 Index			10.3	19.6	29.9	10.5	14.8	-	13.3	
AQR US Enhanced Equity - Gross	415,116,175	3.1	11.2 (31)	22.8 (13)	33.4 (13)	12.3 (22)	15.5 (21)	-	13.6	Aug-18
AQR US Enhanced Equity - Net			11.1	22.6	33.1	12.0	15.2	-	13.3	Aug-18
Russell 1000 Index			10.3 (68)	19.6 (64)	29.9 (60)	10.5 (62)	14.8 (55)	-	13.3	Aug-18
eV US Enh Equity Median			10.7	20.0	30.3	10.9	14.8	12.8	-	-

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

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Large Cap (130/30) - Gross	415,934,932	3.1	13.3	23.5	33.6	12.7	16.4	13.5	13.3	Oct-08
Large Cap (130/30) - Net			13.3	23.2	33.1	12.2	15.8	12.8	12.7	Oct-08
Russell 1000 Index			10.3	19.6	29.9	10.5	14.8	12.7	12.4	
JP Morgan 130/30 - Gross	223,934,005	1.7	14.1 (16)	25.7 (42)	38.5 (13)	14.7 (50)	18.8 (28)	14.7 (31)	13.8	Aug-08
JP Morgan 130/30 - Net			14.1	25.3	37.9	14.1	18.1	14.0	13.1	Aug-08
Russell 1000 Index			10.3 (60)	19.6 (61)	29.9 (54)	10.5 (78)	14.8 (62)	12.7 (70)	11.6	Aug-08
eV Extended US Equity Median			11.9	21.9	30.9	14.7	16.1	13.7	-	
DE Shaw Broad Mkt Core Alpha Ext - Gross	192,000,927	1.4	12.4 (42)	21.1 (57)	28.4 (59)	10.5 (78)	13.8 (69)	-	14.4	Feb-19
DE Shaw Broad Mkt Core Alpha Ext - Net			12.4	20.8	28.0	10.2	13.4	-	14.0	Feb-19
Russell 1000 Index			10.3 (60)	19.6 (61)	29.9 (54)	10.5 (78)	14.8 (62)	-	15.4	Feb-19
eV Extended US Equity Median			11.9	21.9	30.9	14.7	16.1	13.7	-	
Large Cap Active - Gross	417,512,373	3.1	13.4	26.5	41.9	11.7	16.1	12.6	12.4	Oct-08
Large Cap Active - Net			13.2	25.9	40.9	10.9	15.2	11.8	11.7	Oct-08
Russell 1000			10.3	19.6	29.9	10.5	14.8	11.3	11.0	
Eagle Capital - Gross	417,492,109	3.1	13.4 (11)	26.5 (6)	41.9 (2)	11.7 (37)	16.1 (17)	13.6 (17)	15.0	Mar-12
Eagle Capital - Net			13.2	25.9	40.9	10.9	15.2	12.7	14.2	Mar-12
Russell 1000 Index			10.3 (53)	19.6 (51)	29.9 (45)	10.5 (57)	14.8 (46)	12.7 (42)	13.8	Mar-12
eV US Large Cap Core Equity Median			10.5	19.7	28.6	10.9	14.5	12.5	-	
Small Cap - Gross	243,239,754	1.8	6.2	10.4	16.0	-0.6	8.3	8.8	11.5	Jan-91
Small Cap - Net			6.1	10.0	15.4	-1.4	7.6	8.1	10.7	Jan-91
Russell 2000 Index			5.2	13.8	19.7	-0.1	8.1	7.6	10.2	
Small Cap - Growth - Gross	105,046,662	0.8	4.1	7.1	13.8	-7.8	6.4	9.5	10.9	Oct-08
Small Cap - Growth - Net			4.0	6.9	13.5	-8.4	5.7	8.9	10.3	Oct-08
Russell 2000 Growth Index			7.6	12.4	20.3	-2.7	7.4	7.9	9.9	
Weatherbie - Gross	105,046,662	8.0	4.1 (84)	7.1 (79)	13.8 (74)	-7.8 (90)	6.4 (95)	11.1 (34)	12.0	Jan-03
Weatherbie - Net			4.0	6.9	13.5	-8.4	5.7	10.4	11.2	Jan-03
Russell 2000 Growth Index			7.6 (48)	12.4 (48)	20.3 (42)	-2.7 (64)	7.4 (89)	7.9 (94)	10.2	Jan-03
eV US Small Cap Growth Equity Median			7.3	12.0	18.0	-0.2	10.2	10.4	-	

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Small Cap - Value - Gross	138,193,092	1.0	8.0	13.1	17.8	6.8	8.7	7.2	9.0	Oct-08
Small Cap - Value - Net			7.8	12.4	16.8	6.0	8.0	6.5	8.2	Oct-08
Russell 2000 Value Index			2.9	15.1	18.8	2.2	8.2	6.9	8.1	
Snyder Capital Management - Gross	138,193,092	1.0	8.0 (18)	13.1 (76)	17.8 (70)	6.8 (42)	-	-	8.9	Feb-21
Snyder Capital Management - Net			7.8	12.4	16.8	6.0	-	-	8.1	Feb-21
Russell 2000 Value Index - Net			2.9 (88)	15.1 (58)	18.8 (63)	2.2 (90)	-	-	6.7	Feb-21
eV US Small Cap Value Equity Median			5.2	16.2	21.0	6.3	11.0	8.6	-	
International Equity - Gross	2,274,124,219	17.2	4.0 (83)	9.3 (80)	12.7 (79)	1.4 (84)	6.6 (77)	5.3 (49)	6.4	Jan-88
International Equity - Net			3.9 (85)	8.9 (86)	12.1 (86)	0.9 (88)	6.0 (89)	4.8 (74)	6.0	Jan-88
MSCI AC World ex USA (Net)			4.7 (56)	10.6 (40)	13.3 (60)	1.9 (74)	6.0 (90)	4.3 (92)	5.7	Jan-88
InvMetrics All DB Global ex-US Equity Median			4.8	10.4	13.6	3.1	7.4	5.3	-	
International - Developed - Gross	1,669,305,282	12.6	4.9 (68)	11.0 (64)	14.5 (37)	4.2	8.0	6.2	5.2	Apr-98
International - Developed - Net			4.8 (71)	10.7 (67)	13.8 (63)	3.6	7.4	5.6	4.7	Apr-98
MSCI World ex U.S. (Net)			5.6 (53)	11.9 (55)	15.3 (5)	4.9	7.5	4.8	4.8	Apr-98
InvMetrics All DB Developed Market ex-US Equity Median			5.9	12.2	14.0	-	-	-	-	
Large Cap - Gross	1,451,867,342	11.0	5.2 (51)	11.1 (49)	14.9 (51)	5.1 (45)	8.3 (50)	6.3 (31)	5.7	Jan-05
Large Cap - Net			5.1 (52)	10.8 (50)	14.3 (54)	4.5 (57)	7.7 (63)	5.8 (48)	5.2	Jan-05
MSCI World ex U.S. (Net)			5.6 (43)	11.9 (41)	15.3 (46)	4.9 (48)	7.5 (67)	4.8 (82)	5.2	Jan-05
eV EAFE Large Cap Equity Median			5.2	10.8	15.0	4.8	8.2	5.7	-	
Lazard - Gross	367,203,583	2.8	7.6 (19)	12.1 (35)	16.5 (30)	3.4 (38)	7.1 (63)	5.9 (48)	8.2	Jul-12
Lazard - Net			7.5	11.7	15.9	3.0	6.7	5.5	7.9	Jul-12
MSCI World ex U.S. (Net)			5.6 (42)	11.9 (37)	15.3 (37)	4.9 (24)	7.5 (54)	4.8 (78)	7.0	Jul-12
eV All ACWI ex-US Equity Median			5.1	10.6	13.6	2.6	7.7	5.8	-	
Walter Scott & Partners Limited - Gross	532,913,085	4.0	3.6 (82)	6.7 (60)	10.3 (58)	4.0 (15)	8.5 (57)	-	9.6	Apr-17
Walter Scott & Partners Limited - Net			3.5	6.5	9.5	3.2	7.5	-	8.7	Apr-17
MSCI World ex U.S. Growth (Net)			6.9 (38)	10.4 (27)	13.7 (24)	2.8 (32)	7.9 (68)	-	7.7	Apr-17
eV EAFE Large Cap Growth Median			6.0	7.5	11.5	1.9	8.6	6.6	-	
LSV - Gross	551,750,674	4.2	5.2 (29)	15.1 (9)	18.7 (15)	7.6 (34)	9.1 (28)	6.0 (15)	5.6	Jan-05
LSV - Net			5.1	14.7	18.2	7.2	8.7	5.6	5.1	Jan-05
MSCI World ex U.S. Value (Net)			4.2 (45)	13.4 (25)	16.9 (32)	6.8 (46)	6.6 (71)	3.6 (88)	4.4	Jan-05
eV EAFE Large Cap Value Median			3.7	11.1	15.1	5.9	7.8	5.0	-	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Small Cap - Gross	217,437,940	1.6	2.6 (63)	10.1 (54)	11.5 (49)	-2.7 (80)	5.2 (69)	4.5 (79)	7.6	Oct-08
Small Cap - Net			2.4	9.5	10.9	-3.4	4.5	3.7	6.8	Oct-08
MSCI World ex U.S. Small Cap Index (Net)			2.6 (63)	9.5 (59)	10.0 (55)	-0.9 (64)	5.4 (67)	4.5 (79)	7.0	Oct-08
eV EAFE Small Cap Equity Median			4.1	10.5	11.0	1.0	6.8	6.1	-	
William Blair Dev Small Cap - Gross	103,348,739	0.8	-0.8 (91)	5.1 (85)	6.9 (84)	-4.4 (86)	5.5 (71)	4.4 (93)	7.7	Oct-08
William Blair Dev Small Cap - Net			-1.0	4.4	5.9	-5.3	4.5	3.4	6.7	Oct-08
MSCI World ex U.S. Small Cap Index (Net)			2.6 (54)	9.5 (61)	10.0 (65)	-0.9 (62)	5.4 (72)	4.5 (89)	7.0	Oct-08
eV ACWI ex-US Small Cap Equity Median			3.1	11.3	13.2	0.9	7.5	6.7	-	
Acadian Asset Management - Gross	114,089,201	0.9	5.9 (23)	15.0 (29)	-	-	-	-	14.4	Apr-23
Acadian Asset Management - Net			5.7 (28)	14.6 (30)	-	-	-	-	14.1	Apr-23
MSCI World ex U.S. Small Value (Net)			2.9 (52)	12.1 (43)	12.9 (52)	-	-	-	12.9	Apr-23
eV ACWI ex-US Small Cap Equity Median			3.1	11.3	13.2	0.9	7.5	6.7	-	
International - Emerging - Gross	604,814,865	4.6	1.6 (94)	4.9	8.0	-7.1	2.2	2.9	5.5	Feb-00
International - Emerging - Net			1.5	4.5	7.5	-7.4	1.9	2.5	5.1	Feb-00
MSCI Emerging Markets (Net)			2.4	7.2	8.2	-5.1	2.2	2.9	5.6	
Arga Emg - Gross	202,610,063	1.5	1.3 (78)	5.8 (72)	10.5 (49)	-	-	-	7.0	Feb-23
Arga Emg - Net			1.1	5.2	9.7	-	-	-	6.2	Feb-23
MSCI Emerging Markets (Net)			2.4 (59)	7.2 (57)	8.2 (64)	-	-	-	3.6	Feb-23
Baillie Gifford Emg All Cap - Gross	220,541,035	1.7	3.5 (43)	6.6 (62)	10.3 (50)	-7.8 (88)	2.8 (71)	-	7.6	Apr-16
Baillie Gifford Emg All Cap - Net			3.5	6.6	10.3	-7.8	2.8	-	7.6	Apr-16
MSCI Emerging Markets (Net)			2.4 (59)	7.2 (57)	8.2 (64)	-5.1 (65)	2.2 (82)	-	5.3	Apr-16
eV Emg Mkts Equity Median			3.0	7.8	10.3	-3.1	4.3	4.6	-	
Oaktree Emg - Gross	181,663,621	1.4	-0.4 (91)	1.0 (94)	2.1 (93)	-	-	-	-3.0	Feb-23
Oaktree Emg - Net			-0.6	0.4	1.2	-	-	-	-3.8	Feb-23
MSCI Emerging Markets (Net)			2.4 (59)	7.2 (57)	8.2 (64)	-	-	-	3.6	Feb-23
eV Emg Mkts Equity Median			3.0	7.8	10.3	-3.1	4.3	4.6	-	

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Global/Unconstrained Equity - Gross	407,081,463	3.1	10.4 (7)	16.8 (22)	22.5 (17)				4.6	Apr-22
Global/Unconstrained Equity - Net			10.4	16.8	22.5	-	-		4.6	Apr-22
MSCI AC World IMI Index (Net)			7.7 (56)	15.6 (54)	22.5 (17)	-	-	-	6.3	Apr-22
InvMetrics All DB Global Equity Median			7.8	15.8	19.9	6.9	-	-	-	
Artisan Partners Global Opp - Gross	150,970,173	1.1	10.9 (18)	18.5 (26)	25.5 (28)	-	-	-	17.5	Sep-22
Artisan Partners Global Opp - Net			10.9	18.5	25.5	-	-	-	17.5	Sep-22
MSCI AC World IMI Index (Net)			7.7 (48)	15.6 (43)	22.5 (41)	-	-	-	18.0	Sep-22
eV Global All Cap Equity Median			7.5	14.7	20.7	6.7	11.3	9.1	-	
Nikko Asset Management - Gross	146,280,000	1.1	14.0 (4)	17.7 (30)	24.3 (33)	-	-	-	17.1	Sep-22
Nikko Asset Management - Net			14.0	17.7	24.3	-	-	-	17.1	Sep-22
MSCI AC World IMI Index (Net)			7.7 (48)	15.6 (43)	22.5 (41)	-	-	-	18.0	Sep-22
eV Global All Cap Equity Median			7.5	14.7	20.7	6.7	11.3	9.1	-	
Third Point Offshore Fund - Gross	19,789,030	0.1	2.6 (92)	9.2 (85)	10.7 (89)	-2.2 (95)	6.5 (94)	5.5 (95)	7.9	May-12
Third Point Offshore Fund - Net			2.6	9.2	10.7	-2.2	6.5	5.5	7.9	May-12
MSCI AC World IMI Index (Net)			7.7 (48)	15.6 (43)	22.5 (41)	6.3 (55)	10.6 (58)	8.4 (63)	9.5	May-12
eV Global All Cap Equity Median			7.5	14.7	20.7	6.7	11.3	9.1	-	
Allspring Global Investments - Gross	90,042,260	0.7	6.7 (62)	-	-	-	-	•	19.3	Sep-23
Allspring Global Investments - Net			6.7	-	-	-	-	-	19.3	Sep-23
MSCI AC World IMI Index (Net)			7.7 (48)	-	-	-	-	-	14.7	Sep-23
eV Global All Cap Equity Median			7.5	14.7	20.7	6.7	11.3	9.1	-	
Private Equity - Gross***	1,693,186,010	12.8	2.8 (7)	4.5 (17)	6.1 (40)	12.6 (62)	16.9 (27)	16.0	7.1	Mar-08
Private Equity - Net***			2.8	4.5	6.1	12.6	16.9	16.0	7.2	Mar-08
Cambridge Associates All PE 1 Qtr Lag			0.0 (46)	1.2 (76)	3.1 (82)	9.7 (78)	13.8 (62)	13.0	11.3	Mar-08
Russell 3000 +3% 1Q Lag			12.8 (1)	19.5 (1)	29.0 (1)	11.6 (76)	18.2 (18)	14.5	12.7	Mar-08
InvMetrics All DB Private Equity Median			0.0	2.6	5.2	15.4	15.6	-	-	
Abbott VI - Gross	22,695,537	0.2	0.0	-0.1	1.4	4.3	10.4	13.1	6.4	Aug-08
Abbott VI - Net			0.0	-0.1	1.4	4.3	10.4	13.1	-	Aug-08
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	12.0	
Accel-KKR V - Gross	29,020,757	0.2	2.8	9.6	11.2	30.7	27.9	-	22.3	Feb-17
Accel-KKR V - Net			2.8	9.6	11.2	30.7	27.9	-	22.3	Feb-17
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	14.4	
Accel-KKR VI - Gross	26,952,762	0.2	0.0	0.0	0.0	-19.7	-	-	-19.2	Mar-21
Accel-KKR VI - Net			0.0	0.0	0.0	-19.7	-	-	-19.2	Mar-21
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	14.8	



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

	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	8,569,209	0.1	8.9	19.9	20.8	49.8	36.4	-	18.6	Mar-15
Accel-KKR Growth Partners II - Net			8.9	19.9	20.8	49.8	36.4	-	18.6	Mar-15
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	12.6	
Accel-KKR Growth Partners III - Gross	32,479,786	0.2	1.9	6.5	7.5	16.1	-	-	4.5	Aug-19
Accel-KKR Growth Partners III - Net			1.9	6.5	7.5	16.1	-	-	4.5	Aug-19
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	13.8	
Accel-KKR Growth Partners IV - Gross	11,167,176	0.1	0.9	1.8	2.3	-	-	-	-18.1	Jul-22
Accel-KKR Growth Partners IV - Net			0.9	1.8	2.3	-	-	-	-18.1	Jul-22
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	-1.6	
Atalaya Special Opp V - Gross	440,098	0.0	0.1	-0.9	-20.4	-4.2	1.4	4.0	3.4	Aug-13
Atalaya Special Opp V - Net			0.1	-0.9	-20.4	-4.2	1.4	4.0	3.4	Aug-13
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	14.1	
Atalaya Special Opp VI - Gross	1,157,158	0.0	8.1	-7.0	-7.2	-1.2	9.9	-	9.3	May-16
Atalaya Special Opp VI - Net			8.1	-7.0	-7.2	-1.2	9.9	-	9.3	May-16
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	14.8	
Canvas Ventures III - Gross	13,429,541	0.1	-7.4	-11.3	-12.2	0.0	-	-	-1.9	Dec-20
Canvas Ventures III - Net			-7.4	-11.3	-12.2	0.0	-	-	-1.9	Dec-20
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	16.9	
Cortec Group Fund VII - Gross	27,385,076	0.2	3.9	8.1	7.6	19.3	-	-	24.0	Jan-20
Cortec Group Fund VII - Net			3.9	8.1	7.6	19.3	-	-	24.0	Jan-20
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	14.1	
Cortec Group Fund VIII - Gross**	3,359,388	0.0	-7.6	-21.3	-	-	-	-	-21.3	Apr-23
Cortec Group Fund VIII - Net**			-7.6	-21.3	-	-	-	-	-21.3	Apr-23
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	3.1	
CRV Select Fund I - Gross	18,261,883	0.1	1.8	4.9	4.3	-	-	=	0.8	Jun-21
CRV Select Fund I - Net			1.8	4.9	4.3	-	-	-	0.8	Jun-21
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	10.3	
CRV Select Fund II - Gross	5,679,405	0.0	0.2	3.5	2.9	-	-	-	-7.8	Apr-22
CRV Select Fund II - Net			0.2	3.5	2.9	-	-	-	-7.8	Apr-22
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	-1.8	,
CRV XVIII LP - Gross	16,977,040	0.1	-2.1	-5.0	-5.0	1.1	-	-	1.1	Mar-21
CRV XVIII LP - Net			-2.1	-5.0	-5.0	1.1	-	-	1.1	Mar-21
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	14.8	

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: March 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	6,758,454	0.1	-2.5	-8.1	-13.9	-	-	-	-18.2	Jul-22
CRV XIX LP - Net			-2.5	-8.1	-13.9	-	-	-	-18.2	Jul-22
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	-1.6	
Davidson Kempner LT Dist Opp IV - Gross	18,669,797	0.1	-0.4	5.8	8.6	24.1	16.3	-	16.3	Apr-18
Davidson Kempner LT Dist Opp IV - Net			-0.4	5.8	8.6	24.1	16.3	-	16.3	Apr-18
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.0	
Davidson Kempner LT Dist Opp V - Gross	32,308,124	0.2	1.9	5.2	6.9	9.2	-	-	13.6	Jun-20
Davidson Kempner LT Dist Opp V - Net			1.9	5.2	6.9	9.2	-	-	13.6	Jun-20
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	14.4	
Dyal Capital Partners II - Gross	36,251,438	0.3	-4.8	2.4	11.2	23.0	18.6	-	4.2	Jan-15
Dyal Capital Partners II - Net			-4.8	2.4	11.2	23.0	18.6	-	4.2	Jan-15
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.0	
Dyal Capital Partners III - Gross	32,669,878	0.2	4.8	13.6	26.9	20.2	25.5	-	24.2	Jan-17
Dyal Capital Partners III - Net			4.8	13.6	26.9	20.2	25.5	-	24.2	Jan-17
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.9	
Garrison Investment Group - Gross	1,384,851	0.0	-1.1	-7.1	-7.4	48.0	22.9	9.9	9.6	Jun-12
Garrison Investment Group - Net			-1.1	-7.1	-7.4	48.0	22.9	9.9	9.6	Jun-12
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	14.7	
Golden Capital Co Invest - Gross	25,653,707	0.2	4.8	16.5	16.3	-	-	-	8.3	Nov-22
Golden Capital Co Invest - Net			4.8	16.5	16.3	-	-	-	8.3	Nov-22
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	1.6	
Gridiron Capital Fund IV - Gross	54,623,623	0.4	3.2	9.2	9.8	31.2	-	-	29.3	Jun-20
Gridiron Capital Fund IV - Net			3.2	9.2	9.8	31.2	-	-	29.3	Jun-20
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	14.4	
Gridiron Capital Fund V - Gross	15,848,711	0.1	1.7	39.7	16.5	-	-	-	14.0	Feb-23
Gridiron Capital Fund V - Net			1.7	39.7	16.5	-	-	-	14.0	Feb-23
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	3.5	
Harbourvest VIII - Gross	1,430,740	0.0	-19.3	-50.7	-50.6	-17.1	-4.8	4.0	5.0	Jan-08
Harbourvest VIII - Net	. ,		-19.3	-50.7	-50.6	-17.1	-4.8	4.0	-	Jan-08
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	11.0	
H.I.G. Bayside Loan III - Gross	3,480,672	0.0	2.0	-11.5	-12.9	-3.7	-4.4	3.3	2.0	Feb-13
H.I.G. Bayside Loan III - Net	.,,		2.0	-11.5	-12.9	-3.7	-4.4	3.3	2.0	Feb-13
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	15.0	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
H.I.G. Capital V - Gross	7,181,894	0.1	5.9	-11.7	-11.7	13.5	15.0	14.5	12.2	Aug-13
H.I.G. Capital V - Net			5.9	-11.7	-11.7	13.5	15.0	14.5	12.2	Aug-13
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	14.1	
H.I.G. Europe Capital II - Gross	10,894,300	0.1	4.5	6.0	9.7	5.7	12.3	-14.6	-14.4	Feb-14
H.I.G. Europe Capital II - Net			4.5	6.0	9.7	5.7	12.3	-14.6	-14.4	Feb-14
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	13.5	
Khosla IV - Gross	13,811,000	0.1	14.9	4.4	3.7	0.0	18.3	20.1	17.7	Aug-11
Khosla IV - Net			14.9	4.4	3.7	0.0	18.3	20.1	17.7	Aug-11
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	14.0	
Khosla V - Gross	36,585,310	0.3	0.8	-1.2	2.2	23.6	21.4	-	15.7	Dec-14
Khosla V - Net			0.8	-1.2	2.2	23.6	21.4	-	15.7	Dec-14
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	12.7	
Khosla VI - Gross	76,048,770	0.6	28.4	27.7	25.0	30.7	19.9	-	16.0	Sep-18
Khosla VI - Net			28.4	27.7	25.0	30.7	19.9	-	16.0	Sep-18
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.5	
Khosla VII - Gross	18,360,212	0.1	6.1	13.5	15.0	4.0	-	-	3.8	Feb-21
Khosla VII - Net			6.1	13.5	15.0	4.0	-	-	3.8	Feb-21
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	14.4	
Linden Capital III - Gross	20,196,285	0.2	9.2	-2.5	-3.8	0.2	17.6	-	16.7	Jul-16
Linden Capital III - Net			9.2	-2.5	-3.8	0.2	17.6	-	16.7	Jul-16
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	14.1	
Linden Capital Partners IV - Gross	42,155,700	0.3	14.2	24.9	28.1	26.5	9.5	-	18.2	Oct-18
Linden Capital Partners IV - Net			14.2	24.9	28.1	26.5	9.5	-	18.2	Oct-18
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	12.8	
Linden Capital Partners V - Gross	17,900,733	0.1	3.2	11.7	16.8	-	-	-	7.8	Aug-22
Linden Capital Partners V - Net			3.2	11.7	16.8	-	-	-	7.8	Aug-22
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	-1.7	J
Marlin Equity IV - Gross	8,653,868	0.1	-8.0	-14.2	-12.6	-1.4	3.3	4.3	3.5	Dec-13
Marlin Equity IV - Net	,,		-8.0	-14.2	-12.6	-1.4	3.3	4.3	3.5	Dec-13
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	14.1	
Marlin Equity V - Gross	31,337,746	0.2	0.5	6.2	9.7	17.8	21.2	-	18.3	Mar-18
Marlin Equity V - Net	3.,331,110	V. <u>-</u>	0.5	6.2	9.7	17.8	21.2	_	18.3	Mar-18
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	_	13.7	mai 10



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Marlin Heritage - Gross	3,951,875	0.0	-5.8	-20.9	-23.9	-14.8	2.1	-	11.8	Aug-14
Marlin Heritage - Net			-5.8	-20.9	-23.9	-14.8	2.1	-	11.8	Aug-14
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.1	
Marlin Heritage II - Gross	10,335,094	0.1	-0.4	-10.9	-12.3	6.7	10.3	-	4.6	Nov-17
Marlin Heritage II - Net			-0.4	-10.9	-12.3	6.7	10.3	-	4.6	Nov-17
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.7	
Marlin Heritage III - Gross	7,080,643	0.1	8.3	2.1	164.6	-	-	-	-47.4	Jan-23
Marlin Heritage III - Net			8.3	2.1	164.6	-	-	-	-47.4	Jan-23
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	3.2	
Marlin Heritage Europe - Gross	19,138,116	0.1	5.1	5.0	7.5	20.1	24.9	-	21.0	Sep-17
Marlin Heritage Europe - Net			5.1	5.0	7.5	20.1	24.9	-	21.0	Sep-17
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	14.0	
New Enterprise 14 - Gross	39,016,030	0.3	-0.2	10.4	7.7	5.2	11.0	14.7	12.8	Jun-12
New Enterprise 14 - Net			-0.2	10.4	7.7	5.2	11.0	14.7	12.8	Jun-12
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	14.7	
New Enterprise 15 - Gross	27,665,419	0.2	0.7	1.3	3.4	-10.9	2.0	-	8.0	May-15
New Enterprise 15 - Net			0.7	1.3	3.4	-10.9	2.0	-	8.0	May-15
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.2	
New Enterprise 16 - Gross	34,774,813	0.3	-2.7	0.7	0.3	-1.0	6.5	-	5.7	Jun-17
New Enterprise 16 - Net			-2.7	0.7	0.3	-1.0	6.5	-	5.7	Jun-17
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	14.1	
New Enterprise 17 - Gross	21,801,892	0.2	3.2	0.8	2.2	6.0	-	-	8.3	Aug-19
New Enterprise 17 - Net			3.2	0.8	2.2	6.0	-	-	8.3	Aug-19
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	13.8	•
Oaktree Power Opp Fund VI - Gross	26,660,636	0.2	2.4	16.9	18.5	-	-	-	6.1	Jun-22
Oaktree Power Opp Fund VI - Net			2.4	16.9	18.5	-	-	-	6.1	Jun-22
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	-2.0	
OrbiMed Private Investments VIII - Gross	10,024,433	0.1	7.9	18.2	18.8	10.8	-	-	4.7	Jan-21
OrbiMed Private Investments VIII - Net			7.9	18.2	18.8	10.8	-	-	4.7	Jan-21
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	14.0	
OrbiMed Private Investments IX - Gross	5,099,429	0.0	-6.6	9.7	-4.3	-	-	-	-23.3	Dec-22
OrbiMed Private Investments IX - Net	,		-6.6	9.7	-4.3	-	-	-	-23.3	Dec-22
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	1.7	



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	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
RCP Multi-Fund Feeder - Gross	79,793,447	0.6	0.0	3.8	4.3	18.2	13.5	-	10.4	Dec-18
RCP Multi-Fund Feeder - Net			0.0	3.8	4.3	18.2	13.5	-	10.4	Dec-18
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.3	
RRJ Capital Master Fund II - Gross	4,665,682	0.0	32.9	39.1	21.8	0.7	3.4	7.2	9.0	Jun-13
RRJ Capital Master Fund II - Net			32.9	39.1	21.8	0.7	3.4	7.2	9.0	Jun-13
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	14.5	
RRJ Capital Master Fund III - Gross	7,538,785	0.1	-11.7	-25.5	-21.7	-15.4	-10.4	-	-11.2	Jan-16
RRJ Capital Master Fund III - Net			-11.7	-25.5	-21.7	-15.4	-10.4	-	-11.2	Jan-16
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	14.4	
Shamrock Capital II - Gross	13,304,463	0.1	2.3	7.6	10.7	10.2	-	-	-68.0	Aug-20
Shamrock Capital II - Net			2.3	7.6	10.7	10.2	-	-	-68.0	Aug-20
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	18.0	
Shamrock Capital III - Gross	165,635	0.0	-109.7	-100.0	-100.0	-	-	-	-100.0	Jan-23
Shamrock Capital III - Net			-109.7	-100.0	-100.0	-	-	-	-100.0	Jan-23
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	3.2	
Shamrock Capital Growth Fund V - Gross	12,523,888	0.1	1.9	5.3	4.4	-	-	-	-25.6	Aug-21
Shamrock Capital Growth Fund V - Net			1.9	5.3	4.4	-	-	-	-25.6	Aug-21
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	7.1	
Sixth Street Opp Partners V - Gross	17,194,443	0.1	0.7	6.2	7.6	-	-	-	-2.9	Jul-22
Sixth Street Opp Partners V - Net			0.7	6.2	7.6	-	-	-	-2.9	Jul-22
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	-1.6	
Spectrum Equity VII - Gross	34,752,108	0.3	3.9	1.3	7.6	-4.3	22.6	-	17.3	Jan-15
Spectrum Equity VII - Net			3.9	1.3	7.6	-4.3	22.6	-	17.3	Jan-15
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.0	
Spectrum Equity Fund VIII - Gross	28,197,836	0.2	20.8	24.9	30.5	33.9	25.4	-	-9.2	Jul-18
Spectrum Equity Fund VIII - Net			20.8	24.9	30.5	33.9	25.4	-	-9.2	Jul-18
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.0	
Spectrum Equity Fund IX - Gross	21,284,170	0.2	-0.4	0.9	-0.3	-7.5	-	-	-8.5	Oct-20
Spectrum Equity Fund IX - Net			-0.4	0.9	-0.3	-7.5	-	-	-8.5	Oct-20
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	16.1	
Spectrum Equity Fund X - Gross	2,720,945	0.0								
Spectrum Equity Fund X - Net										
Cambridge Associates All PE 1 Qtr Lag			0.0	-	-	-	-	-	0.0	



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	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Strategic Value Spl Fund V - Gross	22,096,422	0.2	5.0	14.7	19.5	-	-	-	10.9	Sep-21
Strategic Value Spl Fund V - Net			5.0	14.7	19.5	-	-	-	10.9	Sep-21
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	7.3	
Summit EUR Growth Equity II - Gross	51,773,054	0.4	8.0	24.7	47.6	52.0	45.3	-	68.0	Feb-18
Summit EUR Growth Equity II - Net			8.0	24.7	47.6	52.0	45.3	-	68.0	Feb-18
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.5	
Summit EUR Growth Equity III - Gross	20,137,961	0.2	7.4	24.7	42.3	-3.4	-	-	-3.2	Feb-21
Summit EUR Growth Equity III - Net			7.4	24.7	42.3	-3.4	-	-	-3.2	Feb-21
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	14.4	
Summit Ventures III - Gross	3,434,559	0.0	-4.8	-6.3	11.9	5.7	13.0	15.3	12.3	Jul-12
Summit Ventures III - Net			-4.8	-6.3	11.9	5.7	13.0	15.3	12.3	Jul-12
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	14.5	
Summit Ventures IV - Gross	58,348,643	0.4	13.5	9.8	9.2	39.6	29.1	-	33.3	Jun-16
Summit Ventures IV - Net			13.5	9.8	9.2	39.6	29.1	-	33.3	Jun-16
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	15.0	
Summit Ventures V - Gross	12,850,183	0.1	5.7	9.5	8.2	-	-	-	-0.6	Jun-21
Summit Ventures V - Net			5.7	9.5	8.2	-	-	-	-0.6	Jun-21
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	10.3	
Thoma Bravo XI - Gross	25,063,694	0.2	10.3	17.7	31.6	5.7	25.5	-	21.9	Jul-14
Thoma Bravo XI - Net			10.3	17.7	31.6	5.7	25.5	-	21.9	Jul-14
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.1	
Thoma Bravo XII - Gross	36,648,630	0.3	9.3	16.6	19.0	14.4	19.5	-	12.3	Jun-16
Thoma Bravo XII - Net			9.3	16.6	19.0	14.4	19.5	-	12.3	Jun-16
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	15.0	
Thoma Bravo XIII - Gross	66,469,422	0.5	4.3	14.8	18.4	10.7	25.6	-	25.1	Mar-19
Thoma Bravo XIII - Net			4.3	14.8	18.4	10.7	25.6	-	25.1	Mar-19
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.2	
Threshold Ventures III - Gross	21,668,289	0.2	-5.0	-19.4	-26.2	16.5	-	-	6.1	Nov-19
Threshold Ventures III - Net	, , , , ,		-5.0	-19.4	-26.2	16.5	-	-	6.1	Nov-19
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	13.7	
Threshold Ventures IV - Gross	4,375,650	0.0	1.4	-7.2	-13.2	-	-	-	-73.7	Jul-22
Threshold Ventures IV - Net	.,,		1.4	-7.2	-13.2	-	-	-	-73.7	Jul-22
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	_	-1.6	J#. ==



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
TPG Opp Partners III - Gross	5,985,895	0.0	-4.0	-12.8	-12.8	-0.1	2.0	-7.9	-7.9	Apr-14
TPG Opp Partners III - Net			-4.0	-12.8	-12.8	-0.1	2.0	-7.9	-7.9	Apr-14
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	13.0	
Trinity Ventures XI - Gross	41,994,735	0.3	-7.5	-4.5	-7.5	-1.6	5.0	9.8	5.8	May-13
Trinity Ventures XI - Net			-7.5	-4.5	-7.5	-1.6	5.0	9.8	5.8	May-13
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	14.5	
Trinity Ventures XII - Gross	36,351,699	0.3	-32.0	-22.5	-32.0	-1.6	9.1	-	12.2	May-16
Trinity Ventures XII - Net			-32.0	-22.5	-32.0	-1.6	9.1	-	12.2	May-16
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	14.8	
TSG7 A LP - Gross	16,609,237	0.1	11.8	-8.4	-2.6	14.7	16.7	-	-182.6	Apr-16
TSG7 A LP - Net			11.8	-8.4	-2.6	14.7	16.7	-	-182.6	Apr-16
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.9	
TSG7 B LP - Gross	3,632,835	0.0	3.1	-4.5	-5.0	10.4	10.3	-	-4.2	Feb-16
TSG7 B LP - Net			3.1	-4.5	-5.0	10.4	10.3	-	-4.2	Feb-16
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.5	
TSG8 LP - Gross	36,118,157	0.3	-4.1	-9.5	-8.5	3.6	-62.5	-	-61.2	Feb-19
TSG8 LP - Net			-4.1	-9.5	-8.5	3.6	-62.5	-	-61.2	Feb-19
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.0	
TSG9 LP - Gross	6,859,825	0.1	-2.0	-4.6	-37.9	-	-	-	-33.5	Feb-23
TSG9 LP - Net			-2.0	-4.6	-37.9	-	-	-	-33.5	Feb-23
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	-	-	-	3.5	
TSSP Opportunities Partners IV - Gross	26,295,330	0.2	2.0	8.4	12.6	8.0	11.9	-	11.5	Feb-19
TSSP Opportunities Partners IV - Net			2.0	8.4	12.6	8.0	11.9	-	11.5	Feb-19
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	13.0	
Waterland V - Gross	705,035	0.0	0.0	17.1	11.5	18.4	18.6	39.8	22.8	Sep-11
Waterland V - Net			0.0	17.1	11.5	18.4	18.6	39.8	22.8	Sep-11
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	14.2	
Waterland VI - Gross	12,483,599	0.1	0.0	8.8	13.6	13.5	21.2	-	8.0	Aug-15
Waterland VI - Net	,		0.0	8.8	13.6	13.5	21.2	-	8.0	Aug-15
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	-	12.8	0
Wayzata Opportunities III - Gross	3,679,896	0.0	22.6	8.2	12.3	19.5	8.0	2.7	0.2	Mar-13
Wayzata Opportunities III - Net	2,212,000		22.6	8.2	12.3	19.5	8.0	2.7	0.2	Mar-13
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	13.8	13.0	15.0	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Wynnchurch Capital Partners V - Gross	17,849,514	0.1	3.3	3.4	5.2	22.3	-	-	-2.7	May-20
Wynnchurch Capital Partners V - Net			3.3	3.4	5.2	22.3	-	-	-2.7	May-20
Cambridge Associates All PE 1 Qtr Lag			0.0	1.2	3.1	9.7	-	-	14.0	
Public Credit - Gross	229,961,646	1.7	2.8	8.7	12.0	3.2	5.1	4.5	4.6	Dec-13
Public Credit - Net			2.8	8.7	12.0	3.2	5.1	4.5	4.6	Dec-13
Brigade Custom			2.0	9.2	11.8	4.1	4.7	4.5	4.6	
Brigade Capital - Gross	229,961,646	1.7	2.8 (8)	8.7 (53)	12.0 (15)	3.2 (22)	5.1 (13)	4.5 (28)	4.6	Dec-13
Brigade Capital - Net			2.8 (8)	8.7 (53)	12.0 (15)	3.2 (22)	5.1 (13)	4.5 (28)	4.6	Dec-13
Brigade Custom			2.0 (24)	9.2 (31)	11.8 (18)	4.1 (9)	4.7 (22)	4.5 (27)	4.6	Dec-13
eV US High Yield Fixed Inc Median			1.5	8.8	10.4	2.3	4.0	4.1	-	
Private Credit - Gross	430,467,530	3.2	1.8	6.6	10.4	7.7	9.1	8.2	7.7	Nov-11
Private Credit - Net			1.8	6.6	10.4	7.7	9.1	8.2	7.7	Nov-11
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	7.7	6.5	6.8	
Ares Capital Europe Fund V - Gross	30,183,296	0.2	3.5	9.0	14.4	-	-	-	12.6	Aug-21
Ares Capital Europe Fund V - Net			3.5	9.0	14.4	-	-	-	12.6	Aug-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	-	-	-	7.5	
Athyrium Opp II - Gross	6,789,691	0.1	14.4	28.3	42.6	10.3	12.2	-	9.6	Jul-15
Athyrium Opp II - Net			14.4	28.3	42.6	10.3	12.2	-	9.6	Jul-15
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	7.7	-	6.7	
Athyrium Opp III - Gross	7,365,180	0.1	-0.3	4.1	12.0	-4.6	1.6	-	-0.1	Jun-17
Athyrium Opp III - Net			-0.3	4.1	12.0	-4.6	1.6	-	-0.1	Jun-17
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	7.7	-	6.8	
Benefit St Pr Sr Secure Opp - Gross	21,423,068	0.2	1.6	5.8	9.6	7.4	6.9	-	6.1	Feb-18
Benefit St Pr Sr Secure Opp - Net			1.6	5.8	9.6	7.4	6.9	-	6.1	Feb-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	7.7	-	6.9	
Benefit St Pr Sr Secure Opp II - Gross	41,129,796	0.3	2.1	9.1	12.5	6.0	-	-	9.1	Jan-20
Benefit St Pr Sr Secure Opp II - Net			2.1	9.1	12.5	6.0	-	-	9.1	Jan-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	-	-	7.1	
Brookfield Infra Debt Fund III - Gross	18,845,771	0.1	1.5	5.2	5.6	-	-	-	5.6	Apr-23
Brookfield Infra Debt Fund III - Net	,		1.5	5.2	5.6	-	-	-	5.6	Apr-23
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	-	-	-	15.3	



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	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
IFM US Infrastructure DB FD LP - Gross	36,516,393	0.3	1.7	5.0	9.3	7.8	-	-	7.8	Apr-21
IFM US Infrastructure DB FD LP - Net			1.7	5.0	9.3	7.8	-	-	7.8	Apr-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	-	-	7.8	
MCP Private Capital IV - Gross	35,954,454	0.3	7.5	18.1	23.9	10.4	-	-	7.1	May-20
MCP Private Capital IV - Net			7.5	18.1	23.9	10.4	-	-	7.1	May-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	-	-	7.0	
OrbiMed Royalty & Credit Opp III - Gross	15,165,033	0.1	-0.3	3.9	7.1	-2.3	-	-	14.8	Oct-19
OrbiMed Royalty & Credit Opp III - Net			-0.3	3.9	7.1	-2.3	-	-	14.8	Oct-19
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	-	-	7.1	
OrbiMed Royalty & Credit Opp IV - Gross	10,130,673	0.1	2.3	8.6	14.0	-	-	-	10.6	Oct-22
OrbiMed Royalty & Credit Opp IV - Net			2.3	8.6	14.0	-	-	-	10.6	Oct-22
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	-	-	-	13.3	
Shamrock Capital Debt Fund I - Gross	10,072,236	0.1	2.5	6.2	6.8	-	-	-	-36.9	Aug-21
Shamrock Capital Debt Fund I - Net			2.5	6.2	6.8	-	-	-	-36.9	Aug-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	-	-	-	7.5	
Silver Point Specialty Credit Fund II - Gross	33,185,119	0.3	2.6	8.4	11.9	8.3	-	-	13.0	Aug-20
Silver Point Specialty Credit Fund II - Net			2.6	8.4	11.9	8.3	-	-	13.0	Aug-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	-	-	10.4	
Silver Point Specialty Credit Fund III - Gross	13,501,030	0.1	12.0	5.9	2.0	-	-	-	2.0	Apr-23
Silver Point Specialty Credit Fund III - Net			12.0	5.9	2.0	-	-	-	2.0	Apr-23
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	-	-	-	15.3	
Summit Credit - Gross	81,995	0.0	169.2	91.5	97.5	38.9	24.3	15.3	13.4	Nov-11
Summit Credit - Net			169.2	91.5	97.5	38.9	24.3	15.3	13.4	Nov-11
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	7.7	6.5	6.8	
Summit Credit II - Gross	7,364,214	0.1	-28.9	-35.7	-31.6	-8.4	-4.3	-	0.3	Dec-14
Summit Credit II - Net			-28.9	-35.7	-31.6	-8.4	-4.3	-	0.3	Dec-14
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	7.7	-	6.5	
Summit Credit III - Gross	11,240,733	0.1	-3.9	-7.8	-3.6	7.7	11.7	-	10.9	Nov-18
Summit Credit III - Net			-3.9	-7.8	-3.6	7.7	11.7	-	10.9	Nov-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	7.7	-	6.8	
Summit Credit IV - Gross	15,500,955	0.1	3.2	9.3	13.7	-	-	-	10.9	Dec-21
Summit Credit IV - Net	, ,		3.2	9.3	13.7	_	-	-	10.9	Dec-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	-	-	-	7.6	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
TCP Direct Lending VIII - Gross	116,017,893	0.9	1.5	7.9	10.4	8.5	8.6	-	7.6	Mar-18
TCP Direct Lending VIII - Net			1.5	7.9	10.4	8.5	8.6	-	7.6	Mar-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.4	11.3	15.3	7.8	7.7	-	6.9	
Growth Oriented Absolute Return - Gross	7,235,770	0.1	-1.5	0.1	0.5	-1.2	3.8	3.4	4.4	Sep-04
Growth Oriented Absolute Return - Net			-1.5	0.1	0.5	-1.2	3.8	3.4	4.4	Sep-04
HFRI FoF Composite Index + 1%			4.4	8.8	10.8	3.9	6.1	5.4	6.0	
Grosvenor SCARF Growth - Gross	7,235,770	0.1	-1.5 (72)	0.1 (85)	0.5 (87)	-0.8 (91)	1.9 (94)	2.3 (95)	4.1	Dec-11
Grosvenor SCARF Growth - Net			-1.5	0.1	0.5	-0.8	1.9	2.3	4.1	Dec-11
HFRI FoF Composite Index + 1%			4.4 (28)	8.8 (34)	10.8 (50)	3.9 (53)	6.1 (44)	5.4 (33)	5.3	Dec-11
eV Alt Fund of Funds - Multi-Strategy Median			1.0	7.6	10.6	4.2	5.0	5.0	-	
Diversifying Asset Category - Gross	2,859,327,293	21.6	0.7	3.8	3.6	0.1	2.3		2.3	Apr-17
Diversifying Asset Category - Net			0.7	3.7	3.5	0.0	2.1		2.2	Apr-17
Diversifying Custom			0.2	3.5	3.2	-0.6	1.6	-	2.0	
Fixed Income - Gross	1,757,372,886	13.3	-0.7	2.5	1.6	-2.0	0.9	2.1	2.3	Jul-11
Fixed Income - Net	1,757,372,886	13.3	-0.8	2.3	1.4	-2.2	0.7	1.9	2.2	Jul-11
Fixed Income Custom			-0.5	3.0	2.4	-2.0	0.6	1.5	-	
Core/Core Plus Fixed Income - Gross	1,347,848,183	10.2	-0.7	2.8	2.1	-1.9	1.2	2.3	2.4	Jul-11
Core/Core Plus Fixed Income - Net			-0.7	2.6	1.9	-2.0	1.1	2.1	2.3	Jul-11
Blmbg. U.S. Aggregate Index			-0.8	2.6	1.7	-2.5	0.4	1.5	1.9	
Prudential - Gross	340,886,752	2.6	0.4 (8)	5.0 (3)	5.9 (1)	-1.4 (17)	1.5 (14)	-	2.7	Aug-14
Prudential - Net			0.3	4.8	5.7	-1.6	1.3	-	2.5	Aug-14
Blmbg. U.S. Aggregate Index			-0.8 (95)	2.6 (87)	1.7 (87)	-2.5 (89)	0.4 (95)	-	1.4	Aug-14
eV US Core Fixed Inc Median			-0.4	3.2	2.5	-1.9	1.0	2.0	-	
TCW MetWest Fixed - Gross	332,864,328	2.5	-0.9 (98)	2.8 (83)	1.8 (85)	-2.1 (62)	1.2 (36)	2.2 (35)	4.8	Jan-02
TCW MetWest Fixed - Net			-1.0	2.6	1.5	-2.3	1.0	2.0	4.6	Jan-02
Blmbg. U.S. Aggregate Index			-0.8 (95)	2.6 (87)	1.7 (87)	-2.5 (89)	0.4 (95)	1.5 (97)	3.4	Jan-02
eV US Core Fixed Inc Median			-0.4	3.2	2.5	-1.9	1.0	2.0	-	
Brandywine US FI - Gross	327,351,692	2.5	-1.6 (99)	1.0 (99)	-1.0 (99)	-	-	-	-0.7	Jun-22
Brandywine US FI - Net			-1.7	0.8	-1.3	-	-	-	-0.9	Jun-22
Blmbg. U.S. Aggregate Index			-0.8 (94)	2.6 (96)	1.7 (97)	-	-	-	0.0	Jun-22
eV US Core Plus Fixed Inc Median			-0.2	3.7	3.2	-2.0	1.1	2.1	-	

See Policy Index and Benchmark History



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Reams Core Plus FI - Gross	346,745,411	2.6	-0.6 (90)	2.3 (98)	1.9 (93)	-	-	=	1.7	Jun-22
Reams Core Plus FI - Net			-0.7	2.2	1.7	-	-	-	1.5	Jun-22
Blmbg. U.S. Aggregate Index			-0.8 (94)	2.6 (96)	1.7 (97)	-	-	-	0.0	Jun-22
eV US Core Plus Fixed Inc Median			-0.1	3.9	3.5	-1.7	1.5	2.5	-	
U.S. Treasury - Gross	409,524,703	3.1	-0.9	1.5	0.1	-2.6	0.0		0.8	Mar-18
U.S. Treasury - Net			-0.9	1.5	0.0	-2.7	0.0		0.8	Mar-18
Blmbg. U.S. Treasury Index			-1.0	1.4	0.1	-2.7	-0.1	-	0.8	
Neuberger Berman - Gross	409,524,703	3.1	-0.9 (71)	1.5 (89)	0.1 (83)	-2.6 (73)	0.0 (83)	1.4 (55)	5.5	Jul-88
Neuberger Berman - Net			-0.9	1.5	0.0	-2.7	0.0	1.4	5.4	Jul-88
Blmbg. U.S. Government Index			-0.9 (80)	1.5 (89)	0.1 (83)	-2.7 (74)	0.0 (84)	1.0 (88)	5.0	Jul-88
eV US Government Fixed Inc Median			-0.5	2.2	1.5	-2.1	0.5	1.5	-	
Absolute Return - Gross	845,144,359	6.4	3.6	6.7	7.9	4.6	4.9	2.8	3.1	Dec-11
Absolute Return - Net			3.6	6.7	7.9	4.6	4.9	2.8	3.1	Dec-11
HFRI FoF Conservative Index			2.5	6.0	7.1	4.0	5.0	4.7	4.7	
Aristeia Partners LP - Gross	53,395,219	0.4	1.0 (1)	4.5 (15)	5.9 (23)	4.5 (18)	-	-	5.4	Jan-21
Aristeia Partners LP - Net			1.0	4.5	5.9	4.5	-	-	5.4	Jan-21
HFRI FoF Conservative Index			2.5 (1)	6.0 (4)	7.1 (10)	4.0 (21)	-	-	4.8	Jan-21
eV Alt Relative Value - Multi-Market Arbitrage Median			-1.3	1.1	2.1	1.9	0.5	1.6	-	
BlackRock Event Driven Equity Fund - Gross	57,009,492	0.4	0.7 (67)	6.0 (67)	5.3 (77)	2.4 (75)	-	-	3.5	Mar-20
BlackRock Event Driven Equity Fund - Net			0.7	6.0	5.3	2.4	-	-	3.5	Mar-20
HFRI FoF Conservative Index			2.5 (41)	6.0 (67)	7.1 (58)	4.0 (56)	-	-	5.5	Mar-20
eV Alt All Event Driven Median			1.4	8.1	9.5	4.7	5.8	8.0	-	
Davidson Kempner Instl Partners LP - Gross	63,595,163	0.5	3.2 (59)	7.1 (65)	8.2 (73)	3.9 (53)	-	-	5.3	May-19
Davidson Kempner Instl Partners LP - Net			3.2	7.1	8.2	3.9	-	-	5.3	May-19
HFRI FoF Conservative Index			2.5 (73)	6.0 (74)	7.1 (79)	4.0 (53)	-	-	4.9	May-19
eV Alt All Multi-Strategy Median			4.0	8.3	10.2	4.6	6.3	3.4	-	
Elliott Associates - Gross	83,832,702	0.6	0.0 (75)	4.4 (70)	5.4 (76)	7.7 (5)	8.8 (39)	7.4 (59)	7.9	May-12
Elliott Associates - Net			0.0	4.4	5.4	7.7	8.8	7.4	7.9	May-12
HFRI FoF Conservative Index			2.5 (41)	6.0 (67)	7.1 (58)	4.0 (56)	5.0 (72)	4.7 (100)	4.8	Jan-11
eV Alt All Event Driven Median			1.4	8.1	9.5	4.7	5.8	8.0	-	

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

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Graham Global Inv II - Gross	51,600,869	0.4	17.1 (1)	3.7 (42)	11.0 (36)	10.6 (13)	10.3 (10)	-	5.8	Mar-17
Graham Global Inv II - Net			17.1	3.7	11.0	10.6	10.3	-	5.8	Mar-17
HFRI FoF Conservative Index			2.5 (55)	6.0 (39)	7.1 (54)	4.0 (62)	5.0 (75)	-	4.5	Mar-17
eV Alt All Managed Futures Median			3.4	2.6	8.5	6.2	6.6	1.2	-	
Grosvenor SCARF Diversifying - Gross	250,526,792	1.9	5.8 (15)	9.8 (29)	12.0 (47)	5.7 (26)	6.3 (43)	2.6 (94)	3.2	Dec-11
Grosvenor SCARF Diversifying - Net			5.8	9.8	12.0	5.7	6.3	2.6	3.2	Dec-11
HFRI FoF Conservative Index			2.5 (46)	6.0 (62)	7.1 (71)	4.0 (52)	5.0 (49)	4.7 (62)	4.7	Dec-11
eV Alt Fund of Funds - Multi-Strategy Median			1.0	7.6	10.6	4.2	5.0	5.0	-	
Junto Capital Partners - Gross	51,228,705	0.4	2.5 (71)	-	-	-	-	-	2.5	Jan-24
Junto Capital Partners - Net			2.5	-	-	-	-	-	2.5	Jan-24
HFRI FoF Conservative Index			2.5 (70)	6.0 (68)	7.1 (73)	4.0 (49)	5.0 (71)	4.7 (69)	4.8	Jan-11
Laurion Capital - Gross	62,474,145	0.5	0.5 (91)	5.1 (100)	4.2 (100)	-0.3 (100)	9.4 (23)	7.7 (-)	7.6	Mar-14
Laurion Capital - Net			0.5	5.1	4.2	-0.3	9.4	7.7	7.6	Mar-14
HFRI FoF Conservative Index			2.5 (73)	6.0 (100)	7.1 (100)	4.0 (70)	5.0 (100)	4.7 (-)	4.7	Mar-14
MW Global Opportunities Fund - Gross	62,867,795	0.5	5.9 (59)	9.5 (57)	11.1 (64)	6.6 (47)	7.0 (74)	-	6.9	Jan-19
MW Global Opportunities Fund - Net			5.9	9.5	11.1	6.6	7.0	-	6.9	Jan-19
HFRI FoF Conservative Index			2.5 (80)	6.0 (72)	7.1 (73)	4.0 (65)	5.0 (85)	-	5.4	Jan-19
eV Alt Fundamental - Long/Short Equity Median			7.3	11.9	15.3	6.1	10.7	8.5	-	
PSquared Event Driven Opp Fund - Gross	55,534,042	0.4	-0.2 (76)	5.7 (68)	3.2 (94)	3.2 (65)	-	-	3.0	Aug-20
PSquared Event Driven Opp Fund - Net			-0.2	5.7	3.2	3.2	-	-	3.0	Aug-20
HFRI FoF Conservative Index			2.5 (41)	6.0 (67)	7.1 (58)	4.0 (56)	5.0 (72)	4.7 (100)	4.8	Jan-11
eV Alt All Event Driven Median			1.4	8.1	9.5	4.7	5.8	8.0	-	
Sculptor Domestic II - Gross	1,223,787	0.0	0.0 (83)	0.0 (92)	0.0 (91)	-2.0 (87)	4.4 (69)	4.7 (41)	6.0	Jan-12
Sculptor Domestic II - Net			0.0	0.0	0.0	-2.0	4.4	4.7	6.0	Jan-12
HFRI FoF Conservative Index			2.5 (73)	6.0 (74)	7.1 (79)	4.0 (53)	5.0 (64)	4.7 (41)	4.7	Jan-12
eV Alt All Multi-Strategy Median			4.0	8.3	10.2	4.6	6.3	3.4	-	
Tudor BVI Global Fund - Gross	51,855,650	0.4	0.3	3.7	3.5	-	-	-	3.0	Jan-23
Tudor BVI Global Fund - Net			0.3	3.7	3.5	-	-	-	3.0	Jan-23
HFRI FOF Conservative Index			2.5	6.0	7.1	-	-	-	6.4	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Dedicated Cash Allocation - Gross	256,810,049	1.9	1.3	4.1	5.4	2.7			2.0	Jul-19
Dedicated Cash Allocation - Net			1.3	4.1	5.4	2.7		•	2.0	Jul-19
Secured Overnight Financing Rate			1.4	4.1	5.4	2.7	-	-	2.1	
Real Return Asset Category - Gross	2,134,359,612	16.1	0.1	-2.0	-2.0	7.2	6.2		7.6	Apr-17
Real Return Asset Category - Net			0.1	-2.0	-2.1	7.0	6.0		7.5	Apr-17
Real Return Custom			-1.5	-2.8	-3.7	7.0	5.4	-	5.7	
Real Estate - Gross	884,149,483	6.7	-2.0 (50)	-8.9 (42)	-10.6 (18)	3.6	4.9	8.0	8.9	Jul-11
Real Estate - Net			-2.0	-8.9	-10.7	3.5	4.7	7.5	8.3	Jul-11
Real Estate Custom			-3.3 (67)	-8.9 (42)	-11.5 (29)	4.1	3.9	6.7	7.6	Jul-11
InvMetrics All DB Real Estate Private Median			-2.0	-10.1	-13.7	-	-	-	-	
Core RE - Limited Partnership - Gross	597,700,027	4.5	-1.5	-8.1	-11.3	4.5	5.5	8.5	5.2	Oct-08
Core RE - Limited Partnership - Net			-1.5	-8.2	-11.4	4.3	5.3	8.1	4.7	Oct-08
NFI-ODCE			-2.4	-8.8	-11.3	3.4	3.5	6.8	4.9	
Brookfield Premier RE Partners - Gross	100,899,693	0.8	-5.5	-10.2	-14.6	2.6	3.7	-	4.1	Oct-18
Brookfield Premier RE Partners - Net			-5.5	-10.2	-14.6	2.6	3.7	-	4.1	Oct-18
NFI-ODCE			-2.4	-8.8	-11.3	3.4	3.5	-	3.7	
Clarion Lion Properties - Gross	104,881,332	0.8	-2.9	-8.1	-13.6	2.8	3.6	-	4.0	Oct-18
Clarion Lion Properties - Net			-2.9	-8.5	-14.2	2.0	2.8	-	3.2	Oct-18
NFI-ODCE			-2.4	-8.8	-11.3	3.4	3.5	-	3.7	
Metlife Core Property - Gross	72,856,369	0.5	-1.4	-8.8	-12.8	4.8	4.8	7.8	8.3	Jan-14
Metlife Core Property - Net	,,		-1.4	-8.8	-12.9	4.5	4.4	7.4	7.8	Jan-14
NFI-ODCE			-2.4	-8.8	-11.3	3.4	3.5	6.8	6.9	
Principal US Property - Gross	54,448,695	0.4	-2.0	-8.0	-9.8	2.9	3.2	-	5.4	Nov-15
Principal US Property - Net	0.,0,000	• • • • • • • • • • • • • • • • • • • •	-2.0	-8.0	-9.8	2.9	3.2	_	5.4	Nov-15
NFI-ODCE			-2.4	-8.8	-11.3	3.4	3.5	-	5.4	
Prologis Targeted Euro Logistics - Gross	60,197,237	0.5	1.1	-1.1	-1.8	-0.4	5.6	-	8.3	Nov-15
Prologis Targeted Euro Logistics - Net	33, 131, 231	0.0	1.1	-1.1	-1.8	-0.4	5.6	_	8.3	Nov-15
NFI-ODCE			-2.4	-8.8	-11.3	3.4	3.5	_	5.4	1101 10
Prologis Targeted US Logistics - Gross	72,962,488	0.6	1.9	-7.4	-10.5	12.2	13.2	_	14.6	Aug-15
Prologis Targeted US Logistics - Oross Prologis Targeted US Logistics - Net	12,002,400	0.0	1.9	-7. 4 -7.4	-10.5	12.2	13.2	_	14.6	Aug-15
NFI-ODCE			-2.4	-8.8	-10.3	3.4	3.5	_	5.7	Aug-10
Townsend Real Estate - Gross*	131,454,213	1.0	0.0	-0.0 -9.5	-11.3 -11.1	4.4	5.0	-	6.7	Apr-16
Townsend Real Estate - Gross Townsend Real Estate - Net*	131,434,213	1.0	0.0	-9.5 -9.5	-11.1 -11.1	4.4	5.0	-	6.7	Apr-16
NFI-ODCE			-2.4	-9.5 -8.8	-11.1	3.4	3.5	-	5.1	Api-16

See Policy Index and Benchmark History

*Value as of 12/31/2023.



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Non-Core RE - Opportunistic - Gross	165,950,614	1.3	-6.3	-17.4	-15.9	-1.3	1.0	11.7	11.6	Mar-14
Non-Core RE - Opportunistic - Net			-6.3	-17.4	-15.9	-1.3	1.0	11.3	11.2	Mar-14
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	7.3	7.6	
Carlyle China Realty - Gross	4,770,585	0.0	-25.3	-40.3	-43.3	-18.3	-9.4	-	-9.5	Jul-17
Carlyle China Realty - Net			-25.3	-40.3	-43.3	-18.3	-9.4	-	-9.5	Jul-17
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	-	5.3	
Carlyle China Rome Logistics - Gross	21,250,083	0.2	-25.2	-40.0	-42.8	-17.9	-10.4	-	-9.1	Jul-17
Carlyle China Rome Logistics - Net			-25.2	-40.0	-42.8	-17.9	-10.4	-	-9.1	Jul-17
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	-	5.3	
CIM Opportunity VIII - Gross	21,288,916	0.2	-7.0	-13.5	-17.3	-12.4	-10.9	-	-3.4	Mar-15
CIM Opportunity VIII - Net			-7.0	-13.5	-17.3	-12.4	-10.9	-	-3.9	Mar-15
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	-	7.1	
Kohlberg Kravis Roberts - Gross	1,007,684	0.0	-26.6	-26.8	-25.7	-10.6	-15.0	-3.4	-3.3	Mar-14
Kohlberg Kravis Roberts - Net			-26.6	-26.8	-25.7	-10.6	-15.0	-3.5	-3.4	Mar-14
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	7.3	7.6	
Lasalle China Logistics Venture LP - Gross	7,778,844	0.1	-8.7	-15.9	-16.2	-	-	-	-25.1	Oct-21
Lasalle China Logistics Venture LP - Net			-8.7	-15.9	-16.2	-	-	-	-25.1	Oct-21
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	-	-	-	3.4	
NREP Nordic Strat II - Gross	15,477,908	0.1	-2.7	-16.9	-8.7	12.0	14.3	-	15.2	Jul-16
NREP Nordic Strat II - Net			-2.7	-16.9	-8.7	12.0	14.3	-	15.2	Jul-16
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	-	5.7	
NREP Nordic Strat III - Gross	35,026,657	0.3	1.7	-12.0	-5.1	3.6	6.8	-	4.7	Aug-18
NREP Nordic Strat III - Net			1.7	-12.0	-5.1	3.6	6.8	-	4.7	Aug-18
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	-	4.9	
NREP Nordic Strat IV - Gross	22,095,311	0.2	1.3	-15.3	-11.3	-1.2	-	-	7.4	Aug-20
NREP Nordic Strat IV - Net			1.3	-15.3	-11.3	-1.2	-	-	7.4	Aug-20
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	-	-	4.1	
NREP Nordic Strat V - Gross	13,838,071	0.1	-2.9	-5.3	1.6	-	-	-	-17.2	Nov-22
NREP Nordic Strat V - Net			-2.9	-5.3	1.6	-	-	-	-17.2	Nov-22
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	-	-	-	-11.4	
Sculptor Real Estate Fund III - Gross	3,841,061	0.0	3.2	2.0	13.9	38.0	26.3	-	16.6	Oct-14
Sculptor Real Estate Fund III - Net			3.2	2.0	13.9	38.0	26.3	-	14.3	Oct-14
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	-	7.1	

See Policy Index and Benchmark History

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^{*}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
Sculptor Real Estate Fund IV - Gross	19,575,494	0.1	2.1	8.0	10.0	11.9	-	-	6.3	Jul-20
Sculptor Real Estate Fund IV - Net			2.1	8.0	10.0	11.9	-	-	6.3	Jul-20
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	-	-	4.1	
Non-Core RE - Value Added - Gross	120,498,842	0.9	1.7	-0.9	2.4	4.5	7.1	8.8	0.9	Oct-08
Non-Core RE - Value Added - Net			1.7	-0.9	2.4	4.5	7.1	8.4	0.0	Oct-08
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	7.6	6.7	
Asana Partners Fund II - Gross	34,769,394	0.3	1.3	-1.5	0.3	14.2	-	-	-177.6	May-19
Asana Partners Fund II - Net			1.3	-1.5	0.3	14.2	-	-	-177.6	May-19
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	-	-	4.4	
Asana Partners Fund III - Gross	15,929,469	0.1	1.4	-7.5	-9.7	-	-	-	-13.3	May-22
Asana Partners Fund III - Net			1.4	-7.5	-9.7	-	-	-	-13.3	May-22
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	-	-	-	-2.8	
ECE Euro Prime Shopping II - Gross	34,483,784	0.3	4.9	1.2	11.4	0.9	1.6	-	7.6	Aug-15
ECE Euro Prime Shopping II - Net			4.9	1.2	11.4	0.9	1.6	-	7.1	Aug-15
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	-	6.8	
European RE Debt II - Gross*	295,329	0.0	5.7	1.6	15.7	-21.9	-31.0	-14.7	-14.4	Dec-13
European RE Debt II - Net*			5.7	1.6	15.7	-21.9	-31.0	-14.7	-14.4	Dec-13
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	7.6	8.0	
Hammes II - Gross	3,306,785	0.0	3.8	9.5	10.9	13.5	118.4	-	67.7	Aug-15
Hammes II - Net			3.8	9.5	10.9	13.5	118.4	-	65.9	Aug-15
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	-	6.8	
Hammes III - Gross	19,890,064	0.2	1.2	3.0	4.1	9.6	6.6	-	-2.0	Nov-18
Hammes III - Net			1.2	3.0	4.1	9.6	6.6	-	-2.0	Nov-18
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	5.0	4.3	-	4.7	
Hammes IV - Gross	712,239	0.0	-17.3	-49.2	-49.2	-	-	-	-39.8	Dec-22
Hammes IV - Net			-17.3	-49.2	-49.2	-	-	-	-39.8	Dec-22
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	-	-	-	-12.1	
Seven Seas Japan Opp Fund - Gross	11,111,778	0.1	-3.9	-4.2	-9.9	-	-	-	-0.9	Apr-22
Seven Seas Japan Opp Fund - Net			-3.9	-4.2	-9.9	-	-	-	-0.9	Apr-22
NFI-ODCE net +1% 1Q Lag			-4.8	-9.0	-11.8	-	-	-	-2.6	

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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
Private Real Assets - Gross	1,098,240,034	8.3	1.9	4.4	6.2	14.0	9.2	14.1	6.9	Feb-13
Private Real Assets - Net			1.9	4.4	6.2	14.0	9.2	14.1	6.9	Feb-13
Private Real Assets Custom			0.2	3.2	4.8	11.8	7.7	7.1	7.1	
ACM II - Gross	13,922,461	0.1	-6.2	-9.0	-10.2	-12.2	-11.6	-	-9.5	Oct-16
ACM II - Net			-6.2	-9.0	-10.2	-12.2	-11.6	-	-9.5	Oct-16
NCREIF Farmland 1 Qtr Lag			2.3	2.8	5.0	7.5	6.0	-	6.3	
ARA Partners Fund III LP - Gross	4,197,722	0.0	-14.2	-	-	-	-	-	-14.2	Oct-23
ARA Partners Fund III LP - Net			-14.2	-	-	-	-	-	-14.2	Oct-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	-	-	-	-	-	0.8	
ArcLight Energy VI - Gross	12,511,275	0.1	-2.5	-8.0	-15.7	9.1	-1.9	-	2.8	Sep-15
ArcLight Energy VI - Net			-2.5	-8.0	-15.7	9.1	-1.9	-	2.8	Sep-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	-	11.4	
Brookfield Infra III - Gross	41,862,172	0.3	3.2	9.8	14.0	13.7	13.2	-	12.4	Jun-16
Brookfield Infra III - Net			3.2	9.8	14.0	13.7	13.2	-	12.4	Jun-16
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	-	11.0	
Brookfield Infra IV - Gross	40,797,090	0.3	3.4	9.9	12.7	14.3	-	-	10.9	Oct-19
Brookfield Infra IV - Net			3.4	9.9	12.7	14.3	-	-	10.9	Oct-19
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	-	-	9.4	
Brookfield Super Core Infra - Gross	104,932,636	0.8	1.8	5.8	8.6	-	-	-	6.5	Aug-22
Brookfield Super Core Infra - Net			1.8	5.8	8.6	-	-	-	6.5	Aug-22
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	-	-	-	5.4	ū
Carlyle Power II - Gross	38,700,773	0.3	0.2	4.6	5.2	12.2	12.2	-	6.9	Nov-15
Carlyle Power II - Net			0.2	4.6	5.2	12.2	12.2	-	6.9	Nov-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	-	10.8	
Digital Colony Partners II - Gross	35,407,920	0.3	2.8	6.8	7.8	-	-	-	7.1	Jun-21
Digital Colony Partners II - Net			2.8	6.8	7.8	-	-	-	7.1	Jun-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	-	-	-	9.3	
EnCap Energy IX - Gross	6,082,059	0.0	-11.2	9.7	13.3	44.2	10.3	11.0	4.3	Feb-13
EnCap Energy IX - Net			-11.2	9.7	13.3	44.2	10.3	11.0	4.3	Feb-13
Cambridge Associates Private Energy 1 Qtr Lag			0.0	4.9	4.5	18.9	6.2	2.8	3.6	
EnCap Energy X - Gross	22,686,413	0.2	-0.7	14.4	16.3	41.9	18.7	-	10.0	May-15
EnCap Energy X - Net	,,		-0.7	14.4	16.3	41.9	18.7	-	10.0	May-15
Cambridge Associates Private Energy 1 Qtr Lag			0.0	4.9	4.5	18.9	6.2	-	3.6	,

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	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inceptio Date
EnCap Flatrock Midstream III - Gross	10,822,348	0.1	0.1	0.9	-5.6	13.1	6.9	-	7.2	Aug-1
EnCap Flatrock Midstream III - Net			0.1	0.9	-5.6	13.1	6.9	-	7.2	Aug-1
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	-	10.4	
EnCap Flatrock Midstream IV - Gross	13,300,311	0.1	1.5	4.3	5.4	8.2	9.4	-	3.9	Mar-1
EnCap Flatrock Midstream IV - Net			1.5	4.3	5.4	8.2	9.4	-	3.9	Mar-1
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	-	10.0	
EQT Infrastructure Fund IV - Gross	40,957,766	0.3	4.0	6.9	10.7	11.1	-	-	3.4	Jul-1
QT Infrastructure Fund IV - Net			4.0	6.9	10.7	11.1	-	-	3.4	Jul-1
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	-	-	9.5	
First Reserve - Gross	8,848,469	0.1	-5.8	-21.3	-24.8	-12.6	-6.4	-	-4.5	Jan-1
First Reserve - Net			-5.8	-21.3	-24.8	-12.6	-6.4	-	-4.5	Jan-1
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	-	10.5	
Harrison St Social Infra Fd - Gross	109,099,824	0.8	0.4	3.5	3.9	-	-	-	6.0	Aug-2
Harrison St Social Infra Fd - Net	, ,		0.4	3.5	3.9	-	-	-	6.0	Aug-
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	-	-	_	9.4	J
FM Global Infrastructure US LP - Gross	167,659,701	1.3	2.7	5.7	8.4	11.3	10.2	-	11.3	May-
FM Global Infrastructure US LP - Net	,,,,,,		2.7	5.7	8.4	11.3	10.2	-	11.3	May-
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	-	11.0	,
SQ Global Infrastructure Fund II - Gross	56,643,775	0.4	2.9	6.4	25.0	11.0	12.8	-	12.2	Nov-
SQ Global Infrastructure Fund II - Net	, ,		2.9	6.4	25.0	11.0	12.8	_	12.2	Nov-
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	_	9.8	
SQ Global Infrastructure Fund III - Gross	22,044,246	0.2	7.1	11.5	13.5	-	-	-	18.3	Jan-
SQ Global Infrastructure Fund III - Net	,- , ,		7.1	11.5	13.5	_	_	_	18.3	Jan-
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	-	-	_	8.3	
KKR Asia Pacific Infrastructure Investors II - Gross	7,299,783	0.1								
KKR Asia Pacific Infrastructure Investors II - Net	,,									
Cambridge Associates Private Infrastructure 1 Qtr Lag			_	-	-	-	-	_	0.0	
Meridiam Infra N America III - Gross	42,593,613	0.3	11.9	8.8	11.9	45.0	-4.5	_	-51.6	Oct-
Meridiam Infra N America III - Net	.=,555,616	0.0	11.9	8.8	11.9	45.0	-4.5	_	-51.6	Oct-
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	_	10.1	- 000
Meridiam Infra N America IV - Gross	9,551,247	0.1	-4.8	-	-	-	-	-	-4.8	Aug-
Meridiam Infra N America IV - Net	0,001,241	0.1	-4.8	_	_	_	_	_	-4.8	Aug-
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	_	_	_	_	_	2.4	/ lug-

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

	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	10,515,917	0.1	10.1	6.1	16.5	-	-	-	-44.9	Aug-21
Meridiam Sa Infra Euro IV - Net			10.1	6.1	16.5	-	-	-	-44.9	Aug-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	-	-	-	9.4	
NGP Royalty Partners - Gross	23,051,385	0.2	-0.9	15.1	10.1	49.2	-	-	34.1	Sep-20
NGP Royalty Partners - Net			-0.9	15.1	10.1	49.2	-	-	34.1	Sep-20
Cambridge Associates Private Energy 1 Qtr Lag			0.0	4.9	4.5	18.9	-	-	19.3	
NGP Royalty Partners II - Gross	44,171,995	0.3	-0.2	2.9	-6.5	-	-	-	-10.2	Jan-23
NGP Royalty Partners II - Net			-0.2	2.9	-6.5	-	-	-	-10.2	Jan-23
Cambridge Associates Private Energy 1 Qtr Lag			0.0	4.9	4.5	-	-	-	6.0	
Paine Schwartz Food Chain V - Gross	35,567,496	0.3	0.2	-0.2	1.7	22.8	-	-	9.7	Feb-20
Paine Schwartz Food Chain V - Net			0.2	-0.2	1.7	22.8	-	-	9.7	Feb-20
NCREIF Farmland 1 Qtr Lag			2.3	2.8	5.0	7.5	-	-	6.7	
Pantheon Ventures - Gross	37,261,251	0.3	3.4	-0.3	1.0	6.7	5.6	-	14.0	Aug-14
Pantheon Ventures - Net			3.4	-0.3	1.0	6.7	5.6	-	14.0	Aug-14
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	-	10.4	
Quantum Energy VI - Gross	17,956,893	0.1	-7.3	-11.6	-12.2	11.9	8.9	-	17.0	Dec-14
Quantum Energy VI - Net			-7.3	-11.6	-12.2	11.9	8.9	-	17.0	Dec-14
Cambridge Associates Private Energy 1 Qtr Lag			0.0	4.9	4.5	18.9	6.2	-	1.8	
Quantum Energy VII - Gross	39,867,368	0.3	6.8	4.5	4.3	22.4	16.5	-	12.1	Sep-17
Quantum Energy VII - Net			6.8	4.5	4.3	22.4	16.5	-	12.1	Sep-17
Cambridge Associates Private Energy 1 Qtr Lag			0.0	4.9	4.5	18.9	6.2	-	5.5	
Ridgewood Water & Strategy Infra II - Gross	20,435,881	0.2	0.0	1.1	-192.3	-	-	-	-111.3	Jan-23
Ridgewood Water & Strategy Infra II - Net			0.0	1.1	-192.3	-	-	-	-111.3	Jan-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	-	-	-	7.3	
Tailwater Energy Fund III - Gross	22,497,284	0.2	8.0	3.1	1.4	13.3	3.2	-	3.2	Oct-18
Tailwater Energy Fund III - Net			8.0	3.1	1.4	13.3	3.2	-	3.2	Oct-18
Cambridge Associates Private Energy 1 Qtr Lag			0.0	4.9	4.5	18.9	6.2	-	4.7	
Tailwater Energy IV - Gross	30,882,268	0.2	10.2	10.8	10.2	32.3	-	-	8.0	Nov-19
Tailwater Energy IV - Net	. ,		10.2	10.8	10.2	32.3	-	-	8.0	Nov-19
Cambridge Associates Private Energy 1 Qtr Lag			0.0	4.9	4.5	18.9	-	-	7.1	
Wastewater Opportunity - Gross	6,110,693	0.0	-27.0	-28.4	-28.8	-0.6	-0.9	-	-12.0	Jan-16
Wastewater Opportunity - Net	2,,200		-27.0	-28.4	-28.8	-0.6	-0.9	-	-12.0	Jan-16
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	2.4	4.9	8.8	9.7	-	10.8	200

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

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Liquid Real Return - Gross	151,970,095	1.1	0.2	2.7	3.4	3.5			4.1	Jul-19
Liquid Real Return - Net			0.2	1.0	1.6	2.7			3.5	Jul-19
SSgA Real Asset			0.7	4.4	3.4	3.7	-	-	4.0	
SSgA Passive Real Return Proxy - Gross	151,894,599	1.1	0.3	2.3	1.3	3.8	4.4	2.7	2.4	Feb-08
SSgA Passive Real Return Proxy - Net			0.3	2.2	1.2	3.6	4.1	2.5	2.2	Feb-08
SSgA Real Asset			0.7	4.4	3.4	3.7	4.2	2.5	-	
Brookfield Liquid Real Return	75,496	0.0								
Cash - Gross	204,248,661	1.5	1.5	4.4	5.8	3.2	2.6	2.1	3.1	Aug-92
Cash - Net			1.5	4.4	5.8	3.2	2.6	2.1		Aug-92
Secured Overnight Financing Rate			1.4	4.1	5.4	2.7	2.1	1.4	2.5	
Cash Account - Gross	204,248,661	1.5	1.5	4.4	5.8	3.3	2.8	2.2	3.2	Jul-92
Cash Account - Net			1.5	4.4	5.8	3.3	2.8	2.2	-	Jul-92
Secured Overnight Financing Rate			1.4	4.1	5.4	2.7	2.1	1.4	2.5	

AB	\$1,473,130,811	11.1
AQR US Enhanced Equity	\$415,116,175	3.1
JP Morgan 130/30	\$223,934,005	1.7
DE Shaw Broad Mkt Core Alpha Ext	\$192,000,927	1.4
Eagle Capital	\$417,492,109	3.1
Huber Capital	\$20,264	0.0
Weatherbie	\$105,046,662	0.8
Snyder Capital Management	\$138,193,092	1.0
Lazard	\$367,203,583	2.8
Walter Scott & Partners Limited	\$532,913,085	4.0
LSV	\$551,750,674	4.2
William Blair Dev Small Cap	\$103,348,739	0.8
Acadian Asset Management	\$114,089,201	0.9
Arga Emg	\$202,610,063	1.5
Baillie Gifford Emg All Cap	\$220,541,035	1.7
Oaktree Emg	\$181,663,621	1.4
CBRE Clarion	\$4,072	0.0
Allspring Global Investments	\$90,042,260	0.7
Artisan Partners Global Opp	\$150,970,173	1.1
Nikko Asset Management	\$146,280,000	1.1
Third Point Offshore Fund	\$19,789,030	0.1
Abbott VI	\$22,695,537	0.2
Accel-KKR V	\$29,020,757	0.2
Accel-KKR VI	\$26,952,762	0.2
Accel-KKR Growth Partners II	\$8,569,209	0.1
Accel-KKR Growth Partners III	\$32,479,786	0.2
Accel-KKR Growth Partners IV	\$11,167,176	0.1
Atalaya Special Opp VI	\$1,157,158	0.0
Atalaya Special Opp V	\$440,098	0.0
Canvas Ventures III	\$13,429,541	0.1
Cortec Group Fund VII	\$27,385,076	0.2
Cortec Group Fund VIII	\$3,359,388	0.0
CRV Select Fund I	\$18,261,883	0.1
CRV Select Fund II	\$5,679,405	0.0



CRV XVIII LP	\$16,977,040	0.1
CRV XIX LP	\$6,758,454	0.1
Davidson Kempner LT Dist Opp IV	\$18,669,797	0.1
Davidson Kempner LT Dist Opp V	\$32,308,124	0.2
Dyal Capital Partners II	\$36,251,438	0.3
Dyal Capital Partners III	\$32,669,878	0.2
Garrison Investment Group	\$1,384,851	0.0
Golden Capital Co Invest	\$25,653,707	0.2
Gridiron Capital Fund IV	\$54,623,623	0.4
Gridiron Capital Fund V	\$15,848,711	0.1
Harbourvest VIII	\$1,430,740	0.0
H.I.G. Bayside Loan III	\$3,480,672	0.0
H.I.G. Capital V	\$7,181,894	0.1
H.I.G. Europe Capital II	\$10,894,300	0.1
Junto Capital Partners	\$51,228,705	0.4
Khosla IV	\$13,811,000	0.1
Khosla V	\$36,585,310	0.3
Khosla VI	\$76,048,770	0.6
Khosla VII	\$18,360,212	0.1
Linden Capital III	\$20,196,285	0.2
Linden Capital Partners IV	\$42,155,700	0.3
Linden Capital Partners V	\$17,900,733	0.1
Marlin Equity IV	\$8,653,868	0.1
Marlin Equity V	\$31,337,746	0.2
Marlin Heritage	\$3,951,875	0.0
Marlin Heritage II	\$10,335,094	0.1
Marlin Heritage III	\$7,080,643	0.1
Marlin Heritage Europe	\$19,138,116	0.1
New Enterprise 14	\$39,016,030	0.3
New Enterprise 15	\$27,665,419	0.2
New Enterprise 16	\$34,774,813	0.3
New Enterprise 17	\$21,801,892	0.2
Oaktree Power Opp Fund VI	\$26,660,636	0.2
OrbiMed Private Investments VIII	\$10,024,433	0.1
Orbimed Private Investments IX	\$5,099,429	0.0



RCP Multi-Fund Feeder	\$79,793,447	0.6
RRJ Capital Master Fund II	\$4,665,682	0.0
RRJ Capital Master Fund III	\$7,538,785	0.1
Shamrock Capital II	\$13,304,463	0.1
Shamrock Capital III	\$165,635	0.0
Shamrock Capital Growth Fund V	\$12,523,888	0.1
Sixth Street Opp Partners V	\$17,194,443	0.1
Spectrum Equity VII	\$34,752,108	0.3
Spectrum Equity Fund VIII	\$28,197,836	0.2
Spectrum Equity Fund IX	\$21,284,170	0.2
Spectrum Equity Fund X	\$2,720,945	0.0
Strategic Value Spl Fund V	\$22,096,422	0.2
Summit EUR Growth Equity II	\$51,773,054	0.4
Summit EUR Growth Equity III	\$20,137,961	0.2
Summit Ventures III	\$3,434,559	0.0
Summit Ventures IV	\$58,348,643	0.4
Summit Ventures V	\$12,850,183	0.1
Thoma Bravo XI	\$25,063,694	0.2
Thoma Bravo XII	\$36,648,630	0.3
Thoma Bravo XIII	\$66,469,422	0.5
Threshold Ventures III	\$21,668,289	0.2
Threshold Ventures IV	\$4,375,650	0.0
TPG Opp Partners III	\$5,985,895	0.0
Trinity Ventures XI	\$41,994,735	0.3
Trinity Ventures XII	\$36,351,699	0.3
TSG7 A LP	\$16,609,237	0.1
TSG7 B LP	\$3,632,835	0.0
TSG8 LP	\$36,118,157	0.3
TSG9 LP	\$6,859,825	0.1
TSSP Opportunities Partners IV	\$26,295,330	0.2
Waterland V	\$705,035	0.0
Waterland VI	\$12,483,599	0.1
Wayzata Opportunities III	\$3,679,896	0.0
Wynnchurch Capital Partners V	\$17,849,514	0.1
Brigade Capital	\$229,961,646	1.7



Ares Capital Europe Fund V	\$30,183,296	0.2
Athyrium Opp II	\$6,789,691	0.1
Athyrium Opp III	\$7,365,180	0.1
Benefit St Pr Sr Secure Opp	\$21,423,068	0.2
Benefit St Pr Sr Secure Opp II	\$41,129,796	0.3
Brookfield Infra Debt Fund III	\$18,845,771	0.1
IFM US Infrastructure DB FD LP	\$36,516,393	0.3
OrbiMed Royalty & Credit Opp III	\$15,165,033	0.1
Orbimed Royalty & Credit Opp IV	\$10,130,673	0.1
Shamrock Capital Debt Fund I	\$10,072,236	0.1
Silver Point Specialty Credit Fund II	\$33,185,119	0.3
Silver Point Specialty Credit Fund III	\$13,501,030	0.1
Summit Credit	\$81,995	0.0
Summit Credit II	\$7,364,214	0.1
Summit Credit III	\$11,240,733	0.1
Summit Credit IV	\$15,500,955	0.1
TCP Direct Lending VIII	\$116,017,893	0.9
Grosvenor SCARF Growth	\$7,235,770	0.1
Prudential	\$340,886,752	2.6
TCW MetWest Fixed	\$332,864,328	2.5
Brandywine US FI	\$327,351,692	2.5
Reams Core Plus FI	\$346,745,411	2.6
Neuberger Berman	\$409,524,703	3.1
Aristeia Partners LP	\$53,395,219	0.4
BlackRock Event Driven Equity Fund	\$57,009,492	0.4
Davidson Kempner Instl Partners LP	\$63,595,163	0.5
Elliott Associates	\$83,832,702	0.6
Graham Global Inv II	\$51,600,869	0.4
Grosvenor SCARF Diversifying	\$250,526,792	1.9
Laurion Capital	\$62,474,145	0.5
MW Global Opportunities Fund	\$62,867,795	0.5
PSquared Event Driven Opp Fund	\$55,534,042	0.4
Sculptor Domestic II	\$1,223,787	0.0
Tudor BVI Global Fund	\$51,855,650	0.4
Dedicated Cash Allocation	\$256,810,049	1.9



Brookfield Premier RE Partners	\$100,899,693	0.8
Clarion Lion Properties	\$104,881,332	0.8
Metlife Core Property	\$72,856,369	0.5
Principal US Property	\$54,448,695	0.4
Prologis Targeted Euro Logistics	\$60,197,237	0.5
Prologis Targeted US Logistics	\$72,962,488	0.6
Townsend Real Estate	\$131,454,213	1.0
Carlyle China Realty	\$4,770,585	0.0
Carlyle China Rome Logistics	\$21,250,083	0.2
CIM Opportunity VIII	\$21,288,916	0.2
Kohlberg Kravis Roberts	\$1,007,684	0.0
Lasalle China Logistics Venture LP	\$7,778,844	0.1
NREP Nordic Strat II	\$15,477,908	0.1
NREP Nordic Strat III	\$35,026,657	0.3
NREP Nordic Strat IV	\$22,095,311	0.2
NREP Nordic Strat V	\$13,838,071	0.1
Sculptor Real Estate Fund III	\$3,841,061	0.0
Sculptor Real Estate Fund IV	\$19,575,494	0.1
Asana Partners Fund II	\$34,769,394	0.3
Asana Partners Fund III	\$15,929,469	0.1
ECE Euro Prime Shopping II	\$34,483,784	0.3
European RE Debt II	\$295,329	0.0
Hammes II	\$3,306,785	0.0
Hammes III	\$19,890,064	0.2
Hammes IV	\$712,239	0.0
Seven Seas Japan Opp Fund	\$11,111,778	0.1
ACM II	\$13,922,461	0.1
ARA Partners Fund III LP	\$4,197,722	0.0
ArcLight Energy VI	\$12,511,275	0.1
Brookfield Infra III	\$41,862,172	0.3
Brookfield Infra IV	\$40,797,090	0.3
Brookfield Super Core Infra	\$104,932,636	0.8
Carlyle Power II	\$38,700,773	0.3
Digital Colony Partners II	\$35,407,920	0.3
EnCap Energy IX	\$6,082,059	0.0

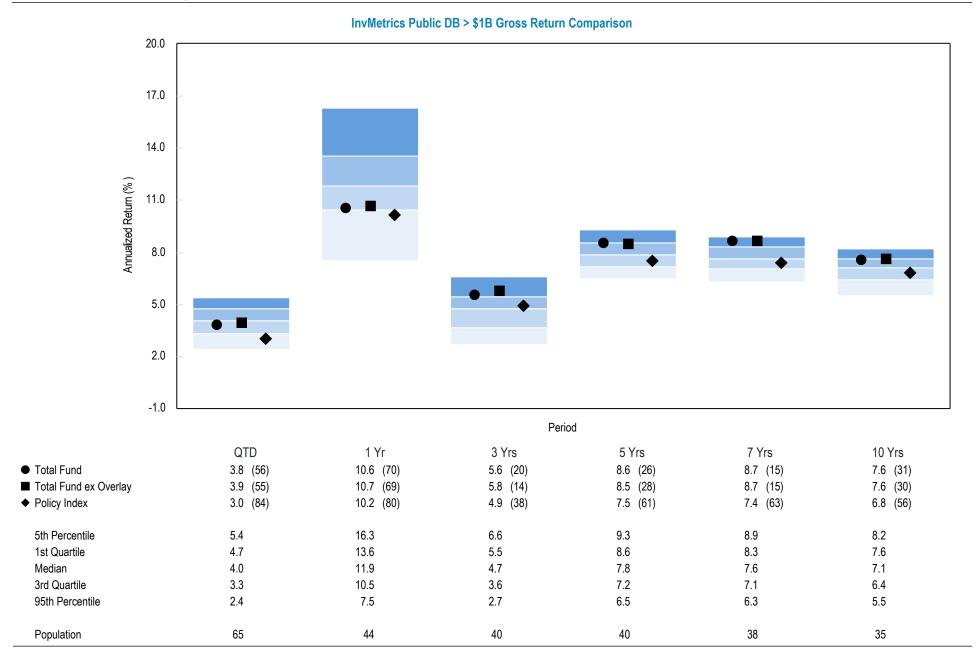


EnCap Energy X	\$22,686,413	0.2
EnCap Flatrock Midstream III	\$10,822,348	0.1
EnCap Flatrock Midstream IV	\$13,300,311	0.1
EQT Infrastructure Fund IV	\$40,957,766	0.3
First Reserve	\$8,848,469	0.1
Harrison St Social Infra Fd	\$109,099,824	0.8
IFM Global Infrastructure US LP	\$167,659,701	1.3
ISQ Global Infrastructure Fund II	\$56,643,775	0.4
ISQ Global Infrastructure Fund III	\$22,044,246	0.2
KKR Asia Pacific Infrastructure Investors II	\$7,299,783	0.1
Meridiam Infra N America III	\$42,593,613	0.3
Meridiam Infra N America IV	\$9,551,247	0.1
Meridiam Sa Infra Euro IV	\$10,515,917	0.1
NGP Royalty Partners	\$23,051,385	0.2
NGP Royalty Partners II	\$44,171,995	0.3
Paine Schwartz Food Chain V	\$35,567,496	0.3
Pantheon Ventures	\$37,261,251	0.3
Quantum Energy VI	\$17,956,893	0.1
Quantum Energy VII	\$39,867,368	0.3
Ridgewood Water & Strategy Infra II	\$20,435,881	0.2
Tailwater Energy IV	\$30,882,268	0.2
Tailwater Energy Fund III	\$22,497,284	0.2
Wastewater Opportunity	\$6,110,693	0.0
Brookfield Liquid Real Return	\$75,496	0.0
SSgA Barclays 1-10 Yrs TIPS Index	\$45,476,984	0.3
SSgA Real Asset	\$106,417,615	0.8
Cash Account	\$204,248,661	1.5
Transition Account	\$146	0.0
SSgA Overlay	\$49,779,196	0.4
Total Fund	\$13,254,705,446	100.0



		3 \	/ears		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	5.6 (20)	8.0 (13)	0.4 (13)	0.2 (25)	2.6 (41)
Policy Index	4.9 (38)	7.9 (13)	0.3 (25)	-	0.0
Total Fund ex Overlay	5.8 (14)	7.5 (7)	0.4 (11)	0.3 (23)	2.8 (42)
Policy Index	4.9 (38)	7.9 (13)	0.3 (25)	-	0.0

		5 Years	;		
	Anlzd	Anlzd	Sharpe	Information	Tracking
	Return	Standard Deviation	Ratio	Ratio	Error
Total Fund	8.6 (26)	8.5 (5)	0.8 (3)	0.4 (18)	2.8 (22)
Policy Index	7.5 (61)	8.3 (4)	0.7 (16)	-	0.0
Total Fund ex Overlay	8.5 (28)	8.2 (3)	0.8 (3)	0.3 (21)	2.9 (26)
Policy Index	7.5 (61)	8.3 (4)	0.7 (16)	-	0.0





InvMetrics Public DB > \$1B Gross Return Comparison 26.0 20.0 14.0 8.0 Annualized Return (%) 2.0 -4.0 -10.0 -16.0 -22.0 Period 2023 2022 2021 2020 2019 10.4 (71) -8.9 (33) 17.1 (33) 12.6 (41) 17.3 (51) ■ Total Fund ex Overlay 10.2 (72) -8.5 (28) 17.6 (25) 11.5 (58) 16.6 (65) -8.3 (26) 10.8 (61) 14.4 (63) 10.8 (66) 14.5 (92) 21.2 14.6 -4.0 16.3 21.3 12.9 -8.2 17.6 13.8 18.7 11.2 -10.8 15.8 12.1 17.3 9.9 16.2 -13.0 9.7 13.7 7.6 -16.4 11.4 7.0 13.9

129

144

108



Total Fund

◆ Policy Index

5th Percentile

1st Quartile

3rd Quartile

Population

95th Percentile

86

95

Median

InvMetrics Public DB > \$1B Gross Return Comparison 20.0 16.0 12.0 8.0 Annualized Return (%) 4.0 0.0 -4.0 -8.0 -12.0 Period 2018 2017 2016 2015 2014 Total Fund -0.8 (9) 16.8 (27) 8.0 (53) -0.9 (82) 5.5 (67) ■ Total Fund ex Overlay -0.4 (6) 16.7 (30) 7.5 (73) 0.3 (47) 5.3 (72) ◆ Policy Index -1.3 (11) 14.2 (78) 8.4 (36) 0.4 (45) 6.4 (51) 5th Percentile 0.2 18.0 10.0 2.5 8.4 1st Quartile -2.3 16.8 8.7 1.1 7.4 -3.2 Median 16.0 8.1 0.2 6.5 -4.4 3rd Quartile -0.8 5.2 14.4 7.4 95th Percentile -7.1 12.8 5.8 -2.1 4.3 Population 88 97 102 98 93



Total Plan Policy Index	As of: 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)	7/1/22	771713	1/1/1/	10.0%	10.0%	10.0%	5.0%	5.0%	5.0%
Bloomberg Aggregate	12.0%	10.0%	10.0%	10.0%	15.0%	20.0%	20.0%	25.0%	25.0%
Bloomberg US Treasury	4.0%	5.0%	5.0%	5.0%	10.070	20.070	20.070	20.070	20.070
ICE BofA ML High Yield II	1.0%	1.0%	1.0%	1.0%	1.0%				
Bloomberg Commodity			2.0%	2.0%	11070		5.0%		
Cambridge Associates Private Energy 1 Qtr Lag	2.1%	2.5%	2.5%	2.070			0.070		
Cambridge Associates Private Infrastructure 1 Qtr Lag	4.2%	3.2%	3.2%						
FTSE BIG									
FTSE WGBI ex US Unhedged	0.0%	2.4%	2.4%	2.4%	2.4%				
CPI-U +5% (PRA)				7.0%	15.0%	15.0%			
Credit Suisse Leveraged Loans	1.0%	1.0%	1.0%	1.0%	1.0%				
Credit Suisse Leveraged Loans +2% 1 Qtr Lag	5.0%	4.0%	4.0%	4.0%					
JPM GBI EM Diversified	0.0%	0.6%	0.6%	0.6%	0.6%				
HFRI FoF Composite Index + 1%	0.0%	3.0%	3.0%						
HFRI FoF Conservative Index	7.0%	7.0%	7.0%						
MSCI ACWI ex US (Net)	16.0%	20.0%	20.0%	20.0%	22.5%	22.5%	20.0%		
MSCI ACWI IMI (Net)	4.0%								
MSCI EAFE								15.0%	15.0%
MSCI Emerging Markets								5.0%	5.0%
NAREIT							3.0%	3.0%	
NFI-ODCE	5.9%	4.6%	4.6%						
NFI-ODCE net +1% 1Q Lag	3.2%	2.5%	2.5%						
NCREIF				7.0%			12.0%	12.0%	15.0%
NCREIF Farmland 1 Qtr Lag	0.7%	0.7%	0.7%						
NCREIF Timberland Index Lagged		0.7%	0.7%						
Russell 1000								30.0%	30.0%
Russell 1000 +3% 1QL (PE)					10.0%	10.0%			
Russell 2000								5.0%	5.0%
Russell 3000	20.0%	20.0%	21.0%	21.0%	22.5%	22.5%	30.0%		
S&P 500 +2% 1QL (PE)							5.0%		
Cambridge Associates All PE 1 Qtr Lag	11.0%	9.0%	9.0%	9.0%					
Bloomberg Roll Select Commodity Total Return	0.2%	0.2%							
Bloomberg U.S. Floating Rate Note < 5 Yr	0.2%	0.2%							
S&P Global LargeMidCap Commodity and Resources	0.2%	0.2%							
S&P Global Infrastructure Index - Net of Tax on Dividend	0.5%	0.5%							
Bloomberg U.S. Government Inflation-Linked 1-10 Yrs	0.6%	0.6%							
FTSE EPRA Nareit Developed Liquid Index	0.3%	0.3%							
ICE LIBOR Spot/Next Overnight USD	1.0%	1.0%							
	100.0%	100.0%	100.0%	90.0%	90.0%	90.0%	95.0%	95.0%	95.0%



Policy Index and Benchmark History

Growth Benchmark	As of:				Public Credit Benchmark
	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
ICE BofA ML High Yield II	1.73%	1.73%	1.70%	1.70%	Credit Suisse Leveraged Loans
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%		Private Credit Benchmark
MSCI ACWI ex US (Net)	27.58%	34.48%	33.90%	33.90%	
MSCI ACWI IMI (Net)	6.89%				Credit Suisse Leveraged Loan + 2% 1 Qtr Lag
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%	Growth Oriented Absolute Return Benchma
Global Public Equity Benchmark	As of:				91-day UST Bill +5%
• •	4/1/22	7/1/11			HFRI FoF Composite Index + 1%
MSCI ACWI		100.0%			
MSCI ACWI IMI (Net)	100.0%				
(***)	100.0%	100.0%			Diversifying Benchmark
Domestic Equity Benchmark	As of:				91 Day T-Bill +5%
Domestic Equity Bencimark	1/1/08	9/1/04	1/1/00	7/1/86	Bloomberg US Aggregate
Russell 1000	17 1700	85.71%	87.5%	171700	Bloomberg US Treasury
Russell 2000		14.29%	12.5%		FTSE WGBI ex US Unhedged
Russell 3000	100.0%	14.23 /0	12.3 /0	100.0%	HFRI FoF Conservative Index
Nussell 3000	100.0%	100.0%	100.0%	100.0%	JPM GBI EM Diversified
Laws Can Asilias Barahanad	A C				
Large Cap Active Benchmark	As of:	0/4/00			Diversifying Absolute Return Benchmark
D #40001/1	2/1/19	9/1/08			
Russell 1000 Value	400.00/	100.0%			91-day UST Bill +5%
Russell 1000	100.0%	400.004			HFRI FoF Conservative Index
	100.0%	100.0%			
International Equity Benchmark	As of:				Real Return Benchmark
	1/1/08	1/1/00	7/1/86		
MSCI ACWI ex US (Net)	100.0%				Real Estate Benchmark
MSCI EAFE		75.0%	100.0%		Private Real Assets Benchmark
MSCI Emerging Markets		25.0%			Bloomberg Commodity
	100.0%	100.0%	100.0%		Liquid Real Return Custom Benchmark
Private Equity Benchmark	As of:				
	4/1/17	1/1/12	1/1/08		Real Estate Benchmark
Russell 1000 +3% 1QL		100.0%			NODELE
S&P 500 +2% 1QL			100.0%		NCREIF
Cambridge Associates All PE 1 Qtr Lag	100.0%				NFI-ODCE
	100.0%	100.0%	100.0%		NFI-ODCE net +1% 1Q Lag

CE BofA ML High Yield 50.0% Credit Suisse Leveraged Loans 50.0% 100.0%	Public Credit Benchmark	As of: 4/1/17		
Credit Suisse Leveraged Loans	ICE RofA MI. High Viold II	., .,		
Private Credit Benchmark	<u> </u>	*****		
Al1/17 Credit Suisse Leveraged Loan + 2% 1 Qtr Lag	Ordan Guisso Ecroragea Eduns			
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag 100.0% Growth Oriented Absolute Return Benchmark As of:	Private Credit Benchmark	As of:		
100.0% 100.0%	Cradit Cuissa I sugaraged I say 1 20/ 1 Otal as			
1/11/7 1	Credit Suisse Leveraged Loan + 2% Qtr Lag			
1/11/7 1	Custiff Oriented Absolute Deturn Benchmark	An of		
91-day UST Bill +5% 100.0%	Growth Oriented Absolute Return Benchmark	, t	4/4/47	
HFRI FoF Composite Index + 1% 100.0	91-day UST Bill +5%	1/1/17		
Diversifying Benchmark	•	100.0%		
1		100.0%	100.0%	
1	Diversifying Benchmark	As of:		
Bloomberg US Aggregate 52.17% 40.00% 40.00% Bloomberg US Treasury 17.39% 20.00% 20.00% FTSE WGBI ex US Unhedged 9.60% 9.60% 9.60% HFRI FoF Conservative Index 30.43% 28.00% JPM GBI EM Diversified 2.40% 2.40% 2.40% 2.40% 100.0% 100			7/1/17	4/1/17
Bloomberg US Treasury 17.39% 20.00% 20.00% FTSE WGBI ex US Unhedged 9.60% 9.60% 9.60% HFRI FoF Conservative Index 30.43% 28.00% JPM GBI EM Diversified 2.40% 2.40% 2.40% 100.0%	91 Day T-Bill +5%			28.00%
FTSE WGBI ex US Unhedged 9.60% 9.60% HFRI FoF Conservative Index 30.43% 28.00% JPM GBI EM Diversified 2.40% 2.40% 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% Heal Per Conservative Index 100.0% Heal Return Benchmark 4s of: 4/1/122 4/1/19 4/1/17 Real Return Benchmark As of: 4/1/122 4/1/19 4/1/17 Ali/17 Real Estate Benchmark 50.00% 43.75% 43.75% Private Real Assets Benchmark 38.89% 43.75% 43.75% 43.75% Bloomberg Commodity 11.11% 12.50% 12.50% Liquid Real Return Custom Benchmark 11.11% 12.50% Real Estate Benchmark As of: 4/1/22 7/1/17 7/1/2011 NCREIF 100.0% NFI-ODCE 60.0% 65.0% NFI-ODCE net +1% 1Q Lag 40.0% 35.0%	Bloomberg US Aggregate	52.17%	40.00%	40.00%
HFRI FoF Conservative Index 30.43% 28.00% 2.40% 2.40% 2.40% 2.40% 100.0% 10	Bloomberg US Treasury	17.39%	20.00%	20.00%
HFRI FoF Conservative Index 30.43% 28.00% 2.40% 2.40% 2.40% 2.40% 100.0% 10	FTSE WGBI ex US Unhedged		9.60%	9.60%
100.0% 1	•	30.43%	28.00%	
Diversifying Absolute Return Benchmark	JPM GBI EM Diversified		2.40%	2.40%
100.0% 1		100.0%	100.0%	100.0%
100.0% 1	Diversifying Absolute Return Benchmark	As of:		
91-day UST Bill +5% 100.0% HFRI FoF Conservative Index 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% Real Estate Benchmark As of: 4/1/22 7/1/17 71/2011 NCREIF 100.0% NFI-ODCE 60.0% 65.0% NFI-ODCE net +1% 1Q Lag 40.0% 35.0%	20101011 Jing / Doolato Notarii 201101111an		4/1/17	
HFRI FoF Conservative Index	91-day UST Bill ±5%	171111		
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% 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% Real Estate Benchmark As of: VERAL Estate Benchmark 4/1/22 7/1/17 7/1/2011 NCREIF 100.0% NFI-ODCE 60.0% 65.0% NFI-ODCE net +1% 1Q Lag 40.0% 35.0%	•	100.0%	100.076	
Keal Estate Benchmark 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% 12.50% Liquid Real Return Custom Benchmark 11.11% 12.50% Real Estate Benchmark As of: 4/1/22 7/1/17 7/1/2011 NCREIF 100.0% NFI-ODCE 60.0% 65.0% NFI-ODCE net +1% 1Q Lag 40.0% 35.0%	THE INTERIOR CONSCIVENIAL PROPERTY OF THE INDEX		100.0%	
Keal Estate Benchmark 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% 12.50% Liquid Real Return Custom Benchmark 11.11% 12.50% Real Estate Benchmark As of: 4/1/22 7/1/17 7/1/2011 NCREIF 100.0% NFI-ODCE 60.0% 65.0% NFI-ODCE net +1% 1Q Lag 40.0% 35.0%	D 10 4 D 1 1			
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% Real Estate Benchmark As of: MCREIF 100.0% NFI-ODCE 60.0% 65.0% NFI-ODCE net +1% 1Q Lag 40.0% 35.0%	keai keturn benchmark		4/4/40	A1A147
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NFI-ODCE net +1% 1Q Lag 40.0% 35.0%				100.0%
•				
100.0% 100.0% 100.0%	NFI-ODCE net +1% 1Q Lag			
		100.0%	100.0%	100.0%



Policy Index and Benchmark History

RE-Value Added Benchmark	As of:				Lazard Benchmark	As of: 4/1/22	7/1/12	
	7/1/16	10/1/08			MSCI ACWI ex USA	4/ 1/22	100.0%	
NCREIF +2% 1Q Lag	100.00/	100.0%			MSCI World ex US (Net)	100.0%	100.078	
NFI-ODCE net +1% 1Q Lag	100.0% 100.0%	100.0%			INISOLI WOULD EX US (INEL)	100.0%	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%			Orealt Guisse Leveraged Loans	100.0%		
NCREIF Farmland 1 Qtr Lag	10.0%	10.0%				100.0 /0		
NCREIF Timberland Index Lagged		10.0%			Brookfield Real Return Custom	As of:		
	100.0%	100.0%	100.0%		Brookileiu Real Return Custom	12/1/2019		
Liquid Real Return Custom Benchmark	As of:				FTSE Global Core Infrastructure 50/50 Index	30.0%		
Elquid Real Recall Subtem Deficilitation	7/1/19				FTSE EPRA Nareit Developed Index	20.0%		
Bloomberg Roll Select Commodity Total Return	10.0%				ICE BofA 7% Constrained REIT Preferred Securities Inc	de 10.0%		
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%							
FTSE EPRA Nareit Developed Liquid Index	15.0%				SSgA Real Asset Benchmark	As of:		
	100.0%				•	3/2/2018	10/1/15	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%		
NPI-ODOE flet +176 TQ Lag	710-7-200 Market V	400.00/			DJ US Select REIT	101070		30.0%
	100.0%	100.0%			FTSE EPRA/NAREIT Developed Liquid	15.0%	10.0%	00.070
AllianceBernstein Benchmark	As of:				MSCI World Natural Resources	10.070	20.0%	25.0%
	1/1/01	1/1/9	8	5/1/89	S&P Global Large Mid Cap Commodity Resources	10.0%	20.070	20.070
Russell 1000	100.0%				S&P Global Infrastructure	25.0%	20.0%	
Russell 3000		100.0	%		S&P GS Commodities	25.070	20.070	25.0%
Wilshire 2500				100.0%	S&P MLP		10.0%	23.070
	100.0%	100.0		100.0%	SQF IVILE	100.0%	10.0%	100.0%
Eagle Capital Benchmark	As of:							
Lagie Capital Delicililar	POPINI DUBIA	0/4/0	10		Cash Benchmark	As of:		
Russell 1000 Value	2/1/19	9/1/0 100.09				4/1/22	7/1/92	
	100.00/		70		91 Day T-Bills		100.0%	
Russell 1000	100.0%		07		Secured Overnight Financing Rate	100.0%		
	100.0%	100.0	%					



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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