

Board of Retirement Regular Meeting

Sacramento County Employees' Retirement System

Agen	da	Item	19
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MEETING DATE: December 6, 2023

SUBJECT: Quarterly Investment Performance Report—

Third Quarter 2023

		Deliberation	Receive
SUBMITTED FOR:	Consent	and Action	X and File

RECOMMENDATION

Receive and file the SCERS Total Fund Investment Performance Review report, prepared by Verus, for the guarter ending September 30, 2023.

PURPOSE

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

SCERS TOTAL FUND RETURNS

This item summarizes SCERS' Total Fund investment returns as presented in Verus' Investment Performance Review for the period ending September 30, 2023. Please note that returns for SCERS' private equity, private credit, non-core real estate, and real assets portfolios are lagged one quarter.

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SCERS TOTAL FUND PERFORMANCE SUMMARY Quarter Reporting Periods Ending September 30, 2023

SCERS ASSET CLASS	Quarter	Year-to-Date	1-Year	3-Year	5-Year	Since Inception	Since Inception Date
SCERS TOTAL FUND Return w/Overlay	-1.8%	4.4%	8.6%	7.0%	6.9%	8.2%	Jun-86
Policy Index	-1.5%	4.9%	9.2%	6.2%	5.8%	8.2%	
InvestorForce Public DB > \$1B	-1.9%	4.3%	10.2%	5.8%	5.5%	-	
SCERS TOTAL FUND Return w/o Overlay	-1.6%	4.6%	8.3%	7.3%	6.8%	8.1%	Jun-86
Policy Index	-1.5%	4.9%	9.2%	6.2%	5.8%	8.2%	
GROWTH ASSET CATEGORY	-2.0%	7.7%	14.8%	9.4%	8.4%	9.9%	Mar-17
Custom Benchmark	-1.7%	8.7%	16.4%	8.9%	7.6%	8.9%	
DIVERSIFYING ASSET CATEGORY	-1.5%	1.1%	2.3%	-1.2%	1.7%	1.7%	Mar-17
Custom Benchmark	-1.6%	0.3%	1.9%	-2.2%	1.2%	1.3%	
REAL RETURN ASSET CATEGORY	-0.7%	-1.0%	-2.3%	10.5%	7.3%	8.4%	Mar-17
Custom Benchmark	-0.8%	-1.7%	-2.6%	10.1%	6.1%	6.5%	

SCERS' Total Fund return was down -1.8% for the quarter, gross of fees, underperforming the Policy Index return of -1.5% and outperforming the median public fund return of -1.9%. Year-to-date through September 30, SCERS' portfolio was up 4.4% compared to the Policy Index return of 4.9% and the median public fund return of 4.3%. Over the 3- and 5-Year periods, SCERS' Total Fund performance is 7.0% and 6.9%, respectively, outperforming the Policy Index and median public fund benchmarks.

The third quarter of 2023 was a negative quarter for markets, as both public equity and fixed income declined during the quarter. Public equity and fixed income declined as markets started to incorporate the potential of "higher for longer" interest rates as central banks continue to deal with both persistent inflation and resilient economic growth across a number of major economies. During the third quarter, and into the fourth quarter, market participants continued to debate the resilient economic growth versus increasing signs of a slowdown¹ and potential for future recession. Despite continued concerns around increased interest rate levels and potential for recession, the U.S. posted strong GDP growth in the third quarter. GDP growth registered 4.9% annualized in the third quarter, significantly above consensus forecasts, and supporting the case for higher for longer interest rates. Inflation also remained elevated and above Federal Reserve bank targets during the quarter, with the Consumer Price Index (CPI) up 3.7% year-on-year in September, while Core CPI rose 4.1% from a year earlier. Inflation in the Eurozone was also elevated during the third quarter, with September inflation registering 4.3% year-over-year.

SCERS' Growth asset category was the largest contributor to the quarterly decline, as Global Public Equity was down over 3% in the quarter. Fixed income was similarly down over 3% in the quarter. There were bright spots within asset classes during the quarter, which helped to mitigate the decline. Absolute Return was up over 2% in the quarter and private markets², where performance is lagged a quarter, reflected positive gains achieved in the second quarter of the year.

¹The Conference Board's Leading Economic Index declined in September, marking 18 months of consecutive declines since April 2022. https://www.conference-board.org/topics/us-leading-indicators/press/us-lei-oct-2023
² SCERS' Private Equity, Private Credit, and Private Real Assets portfolios reflect performance on a quarterly lagged basis and had positive performance in the quarter.

Growth Asset Category

SCERS GROWTH Performance Summary for the periods ending 9/30/23	Quarter	Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS GROWTH ASSET CATEGORY	-2.0%	7.7%	14.8%	9.9%	Mar-17
Custom Benchmark	-1.7%	8.7%	16.4%	8.9%	
Global Public Equity	-3.5%	10.1%	21.7%	8.4%	Jun-11
MSCI ACWI IMI	-3.3%	9.8%	20.8%	7.6%	
Private Equity (lagged 1 quarter)	0.6%	1.6%	1.2%	7.0%	Feb-08
Cambridge All PE	1.4%	4.3%	2.6%	11.4%	
Public Credit	2.1%	8.2%	7.4%	4.2%	Nov-13
Custom Benchmark	1.9%	7.9%	11.4%	4.1%	
Private Credit (lagged 1 quarter)	2.1%	7.7%	9.2%	7.7%	Mar-17
Credit Suisse Leveraged Loan + 2%	3.6%	10.4%	12.3%	6.5%	
Growth Absolute Return	0.4%	1.4%	1.2%	4.6%	Aug-04
HFRI FoF Composite +1%	0.8%	3.6%	5.7%	5.7%	

The Growth asset category declined -2.0% in the quarter and underperformed the category benchmark return of -1.7%. Year-to-date and 1-year performance is strongly positive but also trailed the category benchmark. The quarterly decline was led by Global Public Equity, which declined -3.5% in the quarter, slightly below the benchmark return of -3.3%. Public credit and Growth Absolute Return were positive in the quarter, delivering uncorrelated returns against negative returns in public equity and fixed income. Private Equity and Public Credit were also positive, but performance is lagged by one quarter, so positive results reflected gains during the second quarter of the year. For the year-to-date and 1-year periods, all asset classes generated positive results, led by Public Equity, which is up over 20% for the past year.

Global Public Equities declined over -3% in the third quarter, reversing trends from the first half of the year, as sharply rising interest rates contributed to a reversal large cap stocks that had pushed the market higher during the first six months of the year. Despite negative performance in the third quarter, public equities have held onto strong gains year-to-date, led by U.S. large caps, with the Russell 1000 index up 13.0% through the end of Q3. From a style perspective, with large cap technology leading the market³, growth has outperformed value by 23% year-to-date. Large cap stocks have outperformed small cap stocks, with the Russell 1000 index outperforming the Russell 2000 small cap index by 10.5% during 2023. While overall levels of returns are greater in the U.S. compared to international equity markets, similar market cap dynamics have contributed to market performance during the year, with international developed large cap stocks outperforming small cap stocks by 5% year-to-date. Within international equity markets, Emerging Markets have delivered relatively poor performance, as China⁴ continues to be a particular area of weakness. The MSCI Emerging Markets index is up 2.2% year-to-date, significantly trailing U.S. and developed international equity markets.

³ Russell 1000 Technology sector is up 43% year-to-date through September 30, 2023.

⁴ MSCI China Index performance is -7.3% year-to-date through September 30, 2023.

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Diversifying Asset Category

SCERS DIVERSIFYING Performance Summary for the periods ending 9/30/23	Quarter	Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS DIVERSIFYING ASSET CATEGORY	-1.5%	1.1%	2.3%	1.7%	Mar-17
Custom Benchmark	-1.6%	0.3%	1.9%	1.3%	
Fixed Income	-3.7%	-0.8%	0.7%	1.9%	Jun-11
Custom Benchmark	-2.6%	-0.3%	1.5%	-	
Core/Core Plus Fixed Income	-3.9%	-0.7%	1.2%	2.0%	Jun-11
Bloomberg Barclays U.S. Aggregate TR	-3.2%	-1.2%	0.6%	1.5%	
U.S. Treasury	-3.0%	-1.2%	-0.8%	0.1%	Feb-18
Bloomberg Barclays US Treasury TR	-3.1%	-1.5%	-0.8%	0.0%	
Diversifying Absolute Return	2.3%	4.4%	4.7%	2.8%	Nov-11
HFRI FoF Conservative Index	1.5%	3.5%	5.0%	4.6%	
Dedicated Cash	1.4%	3.8%	4.8%	1.6%	Jul-19
Secured Overnight Financing Rate (SOFR)	1.3%	3.8%	4.7%	1.7%	

SCERS' Diversifying Asset Category was down for the quarter, -1.5%, and slightly outperformed the benchmark return of -1.6%. Fixed Income, both Core/Core Plus and U.S Treasuries declined over -3% in the quarter, leading to negative total returns year-to-date. Interest rates significantly increased during the quarter, with the U.S. 10-Year Treasury rate increasing from 3.84% to 4.57% over the three months ending September 30th. Despite being down from prior year levels, inflation remained elevated during the quarter and above Federal Reserve target levels, which contributed to markets pricing in persistently higher interest rates. SCERS' Core/Core Plus Fixed Income portfolio declined -3.9% during the quarter and underperformed the Bloomberg Barclays U.S. Treasury index benchmark, which declined -3.2%. Core/Core Plus Fixed Income outperformed year-to-date and for the trailing 1-year period.

Absolute Return and Cash both delivered positive results during the quarter and year-to-date. SCERS' Absolute Return portfolio, focused on diversifying strategies with low correlation to equity and bond markets, continues to benefit from dispersion and volatility across markets and outperformed its benchmark during the quarter and year-to-date. SCERS' Dedicated Cash allocation has benefited from increased short-term interest rates and is generating positive returns, after many years of near zero cash rates. SCERS' cash allocation is up 3.8% year-to-date and 4.8% for the trailing 1-year, in line with the benchmark SOFR rate.

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Real Return Asset Category

SCERS REAL RETURN Performance Summary	Quarter	Year-to-Date	1-Year	Since Inception	Since Inception Date
SCERS REAL RETURN ASSET CATEGORY					
SCERS Real Return w/ SSgA Proxy	-0.7%	-1.0%	-2.3%	8.4%	Mar-17
Custom Benchmark	-0.8%	-1.7%	-2.6%	6.5%	Mar-17
SCERS Real Estate	-2.9%	-6.9%	-11.6%	9.9%	Jun-11
Custom Benchmark	-2.2%	-8.0%	-11.3%	8.6%	
Core Real Estate (as of 9/30/23)					
Commingled Funds	-1.7%	-8.5%	-13.5%	5.9%	Sep-08
NFI-ODCE	-1.9%	-7.6%	-12.1%	5.6%	Sep-08
Non-Core Real Estate (as of 6/30/23)					
Opportunistic	-9.3%	-6.4%	-11.0%	13.4%	Feb-14
Value Add	-1.2%	5.4%	3.0%	0.9%	Sep-08
NFI-ODCE net +1%	-2.2%	-8.2%	-9.7%	8.8%	Feb-14
				7.5%	Sep-08
SCERS Real Assets (as of 6/30/23)	1.3%	4.5%	6.5%	6.9%	Jan-13
Custom Benchmark	1.3%	6.7%	7.3%	7.2%	
SCERS Liquid Real Return (as of 9/30/23)	-1.7%	1.6%	7.4%	3.6%	Jun-19
SSgA Real Assets	-2.2%	-1.7%	4.2%	2.9%	

SCERS' Real Return asset category was negative for the quarter, down -0.7%, slightly outperforming the -0.8% benchmark return. SCERS' Real Assets portfolio, where returns are lagged one quarter, contributed positively to returns during the quarter, up 1.3%, in line with benchmark performance. SCERS' Liquid Real Return portfolio declined during the quarter, down -1.7%, as negative contributions from listed infrastructure and real estate offset positive contributions from commodities and floating rate notes. SCERS' Real Assets and Liquid Real Return have been positive contributors over the past year, benefitting from increases in energy prices and inflation related assets such as natural resource and infrastructure related listed securities.

SCERS' Real Estate portfolio declined -2.9% during the quarter and underperformed the benchmark return of -2.2%. Year-to-date and for the past year, SCERS' Real Estate portfolio is down -6.9% and -11.6%, respectively, which is better than the asset class benchmark YTD and slightly trails for the 1-year period. Real estate markets continue to struggle from interest rates at multi-decade highs. Additionally, transaction levels have declined as property owners have been reluctant to sell at depressed valuations, which has limited price discovery and extended the market downturn. The office segment continues to be challenged due to high vacancy rates, with some market participants expecting the decline in commercial real estate to last well into 2024 and price declines to be comparable to the great financial crises (GFC)⁵. SCERS' Non-Core, Value-Added portfolio has been a relative bright spot within real estate, up 5.4% and 3.0%, for the year-to-date and 1-year periods, respectively.

⁵ https://finance.yahoo.com/news/morgan-stanley-says-commercial-real-202952701.html

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 September 30, 2023					
Asset Class	Policy Index Benchmark				
Growth Asset Category	Blended Weighted Average of Asset Class Benchmarks				
Global Equity Private Equity	MSCI ACWI IMI 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 ending September 30, 2023

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



Board President

Retirement Board Order

Sacramento County Employees' Retirement System

Before the Board of Retirement December 6, 2023

AGENDA ITEM: Quarterly Investment Performance Report—Third Quarter 2023
THE BOARD OF RETIREMENT hereby accepts the recommendation of staff to receive and file the performance report for the quarter ended September 30, 2023.
I HEREBY CERTIFY that the above order was passed and adopted on December 6, 2023 by the following vote of the Board of Retirement, to wit:
AYES:
NOES:
ABSENT:
ABSTAIN:
ALTERNATES: (Present but not voting)
James Diepenbrock Eric Stern

Chief Executive Officer and

Board Secretary







PERIOD ENDING: SEPTEMBER 30, 2023

Investment Performance Review for

Sacramento County Employees' Retirement System



Verus business update

Since our last Investment Landscape webinar:

- Verus retained four new clients across the U.S. expanding our coverage in the Pacific, Midwest, Southwest, and Southeast
- Shelly Heier, CFA, CAIA President, was named one of Pensions & Investments' 2023 Influential Women in Institutional Investing
- Eileen Neill, CFA Managing Director | Senior Consultant, was
 nominated as one of Chief Investment Officer's 2023 Knowledge Brokers
- Sneha Pendyala Public Markets Research Analyst recently passed CFA level III. Christian Reed – Private Markets Performance Analyst and Jonah Coffee – Performance Analyst passed CFA level II
- Recent research, found at <u>verusinvestments.com/research</u>:
 - 2023 Private Equity Outlook
 - Hedge funds in 2023: How has the environment changed?
 - The rising rate environment's impact on real estate cap rates
 - Yield curve inversion: recession signal, but why?
 - Credit, distress, default & the long term



Shelly Heier, CFA, CAIAPresident



Eileen Neill, CFA
Managing Director |
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Recent Verus research

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

Topics of interest

CREDIT, DISTRESS, DEFAULT & THE LONG TERM

As the environment for credit changes and the risks of defaults increase, investors would be well advised to assess their fixed income positioning. This includes considering other opportunities across the credit spectrum beyond traditional core vehicles.

THE RISING RATE ENVIRONMENT'S IMPACT ON REAL ESTATE CAP RATES

The quickly rising interest rate environment has changed the landscape for commercial real estate so much that investors are questioning how the appraised values of their private real estate assets might change in the future. Our latest whitepaper illuminates this question.

YIELD CURVE INVERSION: RECESSION SIGNAL, BUT WHY?

Predicting future market conditions is an incredibly difficult task. One signal that has been a historically accurate predictor preceding a U.S. recession is the yield curve inversion. We examine what drives curve inversion, allowing investors a framework regarding the implications of this type of event.

HEDGE FUNDS IN 2023: HOW HAS THE ENVIRONMENT CHANGED?

For those clients who are comfortable embracing the complexity of hedge funds, we continue to believe that these strategies can play an important role. Furthermore, the justifications for these strategies may be strengthening as we enter a much different market regime.

Annual research

2023 PRIVATE EQUITY OUTLOOK

In the 2023 Private Equity Outlook, we focus on the impact of a "higher rate for longer" scenario on the asset class. We also examine how the rising-rate environment has affected private markets so far.

3rd quarter summary

THE ECONOMIC CLIMATE

- Real GDP increased at a 2.9% pace from a year ago in Q3 (4.9% QoQ annualized rate). The large uptick was driven by consumption, which continues to show resiliency. A combination of pandemic related excess savings and a strong decade of household wealth expansion is likely providing a cushion against an economic slowdown. p. 10
- The unemployment rate increased slightly during the quarter from 3.6% to 3.8%, though this appears to be due to more workers rejoining the labor force and seeking employment (a positive rather than negative development). The total size of the U.S. workforce grew by 580,000 in Q3. p. 12

PORTFOLIO IMPACTS

- The U.S. consumer has shown resiliency, with ongoing moderate spending activity. However, personal savings rates are nearly the lowest on record. We believe depressed savings activity without a commensurate surge in spending, and very poor sentiment, suggests high inflation is squeezing household budgets. p. 13
- The Cboe VIX implied volatility index remained belowaverage for most of the third quarter, before rising to 17.5 to end September. Market risk has been falling fairly consistently throughout the year, which may be at least partly attributed to the perception that certain risks, such as regional bank contagion and near-term recession, have eased. p. 34

THE INVESTMENT CLIMATE

- The 10-year U.S. Treasury yield increased during the quarter to 4.58%—a level not seen since 2007—likely supported by *higher for longer* interest rate expectations.
 This led to a flattening of the yield curve. p. 21
- U.S. headline inflation ticked up from 3.1% to 3.7% year-over-year. Core CPI (ex-food & energy) continued to fall from 4.9% to 4.1%. Shelter costs jumped unexpectedly in September showing the largest rise since May, and along with rising energy prices have generated concerns of renewed inflation. A material weakening of the job market and U.S. economy will likely be needed to bring inflation down to a 2% level. p. 9

ASSET ALLOCATION ISSUES

- Nearly all asset classes produced materially negative performance during the quarter, including global equities (-3.4%), U.S. core fixed income (-3.2%) and U.S. Treasuries (-3.1%). Highly correlated markets created difficulties for investors, as diversification produced limited value. p. 48
- U.S. investors continue to face a difficult environment for style factor investing. Over the past year, mega cap growth stocks have propelled the U.S. market higher, leading to dramatic outperformance of growth stocks and large cap stocks. However, value investing has delivered exceptional results in international developed markets, outperforming growth stocks by 11.5%. p. 29

Nearly all asset classes produced materially negative performance during the quarter

A material weakening of the job market and/or U.S. economy will likely be needed to bring inflation down to a 2% level



What drove the market in Q3?

"Fed Signals Higher-for-Longer Rates with Hikes Almost Finished"

10-YEAR U.S. TREASURY YIELDS							
Apr	May	June	July	Aug	Sep		
3.42%	3.64%	3.84%	3.96%	4.11%	4.57%		

Article Source: Bloomberg, September 20th, 2023

"U.S. Inflation Rises in August as Petrol Prices Jump"

WTI CRUDE OIL PRICES (PER BARREL)								
Apr	May	June	July	Aug	Sep			
\$76.78	\$68.09	\$70.64	\$81.80	\$83.63	\$90.79			

Article Source: Financial Times, September 13th, 2023

"U.S. Growth Trimmed on Inventories; Retains Underlying Momentum"

FEDERAL RE	FEDERAL RESERVE BANK OF ATLANTA Q3 2023 GDPNOW FORECAST									
July 28 th	Aug 15 th	Aug 31st	Sept 15 th	Sept 29 th	Oct 10 th					
3.5%	5.0%	5.6%	4.9%	4.9%	5.1%					

Article Source: Reuters, August 30th, 2023

"S&P 500 Q2 2023 Earnings Beat Wall Street Expectations"

S&P 500 YEAR-OVER-YEAR EARNINGS GROWTH (DECLINE)								
Q1 22	Q1 22							
9.0%	6.0%	2.4%	(4.9%)	(6.6%)	(4.1%)			

Article Source: Axios, August 18th, 2023

U.S. TREASURY YIELDS (YEAR-TO-DATE)



Source: Bloomberg, as of 9/30/23

HEADLINE VS. CORE CPI (MONTH-OVER-MONTH)



Source: BLS, as of 9/30/23

S&P 500 YEAR-OVER-YEAR EARNINGS GROWTH (DECLINE)



Source: FactSet, as of 9/30/23



Economic environment



U.S. economics summary

- Real GDP increased at a 2.9% pace from a year ago in the third quarter (4.9% quarter-over-quarter annualized rate). The large uptick was driven by consumption, which continues to show resiliency. While many investors have expected high inflation and weaker wage growth to impact spending, a combination of pandemic related excess savings and a strong decade of household wealth expansion is likely providing a cushion against an economic slowdown.
- U.S. headline inflation ticked up during the quarter, from 3.1% to 3.7% year-over-year in September.
 Core CPI (ex-food & energy) continued to fall from 4.9% to 4.1%.
 Shelter costs jumped unexpectedly in September, which along with rising energy prices have generated fresh concerns of renewed inflation.
- The U.S. consumer has shown resiliency, with continued moderate spending levels. However, personal

- savings rates are nearly the lowest on record. We believe depressed savings activity, along with mild household spending and very poor sentiment, suggests high inflation is squeezing household budgets.
- The unemployment rate increased slightly during the quarter from 3.6% to 3.8%, though this appears to be due to more workers rejoining the labor force and seeking employment (a positive rather than negative development). The total size of the U.S. workforce grew by 580,000 in Q3.
- Consumer sentiment readings were mixed during Q3 but remain poor.
 According to the Conference Board survey, the future outlook for income, business, and labor conditions fell very sharply and are now at levels that historically have signaled recession within a year.

	Most Recent	12 Months Prior	
Real GDP (YoY)	2.9% 9/30/23	1.7% 9/30/22	
Inflation (CPI YoY, Core)	4.1% 9/30/23	8.2 % 9/30/22	
Expected Inflation (5yr-5yr forward)	2.4% 9/30/23	2.1% 9/30/22	
Fed Funds Target Range	5.25–5.50% 9/30/23	3.00–3.25% 9/30/22	
10-Year Rate	4.58% 9/30/23	3.83% 9/30/22	
U-3 Unemployment	3.8% 9/30/23	3.5% 9/30/22	
U-6 Unemployment	7.0% 9/30/23	6.7% 9/30/22	



Inflation

U.S. headline inflation ticked up during the quarter, from 3.1% to 3.7% year-over-year in September. Core CPI (ex-food & energy) continued to fall from 4.9% to 4.1%. Shelter costs jumped unexpectedly in September showing the largest rise since May, which along with rising energy prices have generated concerns of renewed inflation. Oil in particular saw material gains over the quarter (+24.3% for Brent, +28.5% for WTI), largely driven by supply dynamics.

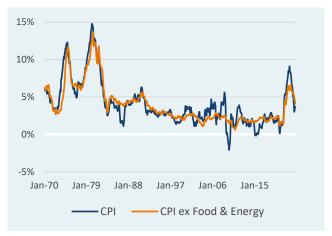
The attack of Hamas on Israel in early October led to upward movement in oil prices on the risk of escalation into a broader conflict involving Iran. Nearly one-fifth of global oil

supply is shipped through the Strait of Hormuz, on Iran's border, which means that a larger conflict would likely have major implications for inflation, and interest rates, and therefore the domestic economy.

Shorter-term inflation trends illustrate that the rate of inflation is still materially higher than the Federal Reserve's 2% target. Inflation appears to be stabilizing at a 3-4% range, and may not reach the Fed's 2% target without a material weakening of the job market and/or the U.S. economy.

The recent jump in energy prices has reignited inflation concerns

U.S. CPI (YOY)



3-MONTH ANNUALIZED INFLATION RATE



Source: FRED, Verus, as of 9/30/23

MONTHLY PRICE MOVEMENT



Source: BLS, as of 9/30/23



Source: BLS, as of 9/30/23

GDP growth

Real GDP increased at a 2.9% pace from a year ago in the third quarter (4.9% quarter-over-quarter annualized rate). The large uptick was driven by consumption, which continues to show resiliency. While many investors have expected high inflation and weaker wage growth to impact spending, a combination of pandemic related excess savings and a strong decade of household wealth expansion is likely providing a cushion against an economic slowdown. Outside of consumption, all major categories, besides net exports, positively contributed to GDP growth.

A strong economy continues to support the higher for longer

interest rate narrative. This has also contributed to markets reacting negatively to positive economic news, as strong growth increases the likelihood of Federal Reserve hawkishness.

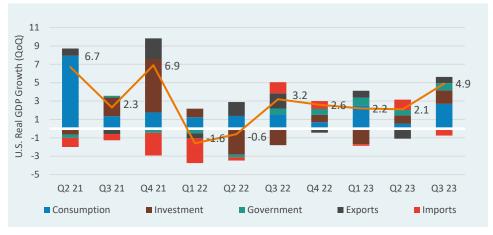
Despite healthy overall GDP growth, weakness is beginning to appear in the economy. Savings rates remain on the lower end of historical trends at 3.9%, while transitions into delinquency across credit card, auto, and mortgage lending has all moved higher. As savings and debt-driven consumption begins to recede, expectations are for weaker consumption in the fourth quarter.

The U.S. economy continues to show resilience despite aggressive monetary tightening & low consumer confidence

U.S. REAL GROSS DOMESTIC PRODUCT



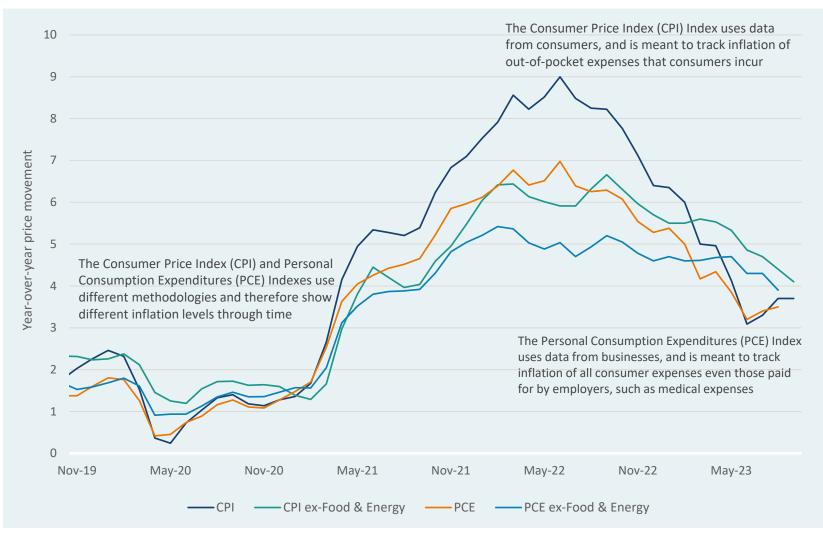
U.S. REAL GDP COMPONENTS (QOQ)



Source: FRED, as of 9/30/23 Source: FRED, as of 9/30/23



How are inflation conditions evolving?



U.S. inflation appears to be stabilizing at a 3-4% level, materially above the Fed's 2% target

The recent jump in energy prices has reignited inflation concerns

Source: FRED, Verus, PCE data as of 8/31/23, CPI data as of 9/30/23



Labor market

The unemployment rate increased slightly during the quarter from 3.6% to 3.8%, though this appears to be due to more workers rejoining the labor force and seeking employment (a positive rather than negative development). The total size of the U.S. workforce grew by 580,000 in Q3.

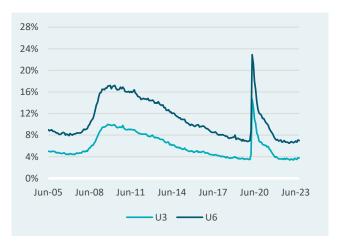
Rebalancing within the labor market continued, though there remains a mismatch between the number of workers available and the available jobs. The labor participation rate has improved across all age groups, while wage growth slowly receded—at 4.2% year-over-year in September—compared to ~3% pre-pandemic. Deceleration of wage growth is of course

not a welcome development for American workers, but should help to moderate inflation pressures, all else equal.

A short supply of workers relative to demand for staffing has placed more bargaining power with workers. Recent contract negotiations between employers and labor unions have been widely publicized and contentious at times. The United Auto Workers (UAW) strike against General Motors, Ford, and Stellantis serves as a recent example, affecting more than 400,000 workers. With households feeling the damaging effects of inflation on wages and budgets, and a large ongoing mismatch in the labor market regarding supply and demand, these disputes are likely to persist.

A short supply of workers relative to demand for staffing has placed more bargaining power with workers

U.S. UNEMPLOYMENT



LABOR FORCE PARTICIPATION RATE BY AGE



WORKERS AVAILABLE VS. AVAILABLE JOBS



Source: FRED, as of 9/30/23 Source: BLS, Verus, as of 8/31/23

Source: FRED, as of 9/30/23



The consumer

The U.S. consumer has shown resiliency, with real (inflation-adjusted) personal consumption expenditures moving along at a moderate pace—coming in at 2.3% year-over-year in August. However, much of this resilience appears to have been possible through the spending down of household savings accumulated during the pandemic. Recent estimates seem to suggest that this *excess savings* has now been mostly (or all) spent, which could lead to a downturn in spending in future months.

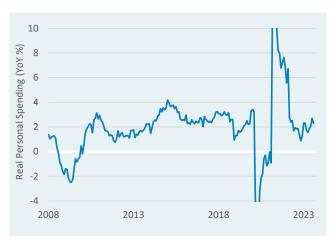
Personal savings rates have deteriorated further—now at 3.9%—nearly half the pre-pandemic savings level and one of the lowest levels on record. We believe depressed savings activity without a commensurate surge in spending, and very

poor sentiment, suggests high inflation is squeezing household budgets.

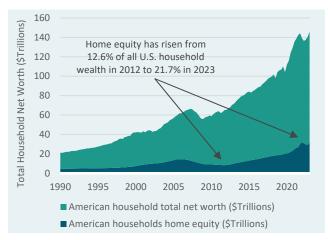
As mentioned last quarter, tighter household budgets should be contrasted with the fact that Americans have experienced a vast boom in wealth and prosperity over the past decade, fueled by a substantial bull market in stocks and in residential real estate, among other assets. This wealth may serve as somewhat of a unique buffer against economic weakness. A large portion of this wealth was created by the housing boom during the pandemic, which suggests more economic sensitivity than usual to downward house and asset price moves.

Higher home prices have played a major role in America's booming wealth over the past decade

REAL PERSONAL SPENDING

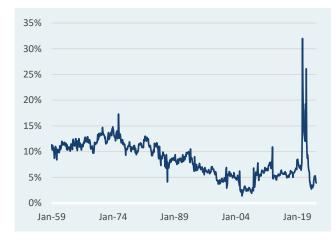


AVERAGE HOUSEHOLD NET WORTH



Source: FRED, Verus, as of 6/30/23

PERSONAL SAVINGS RATE



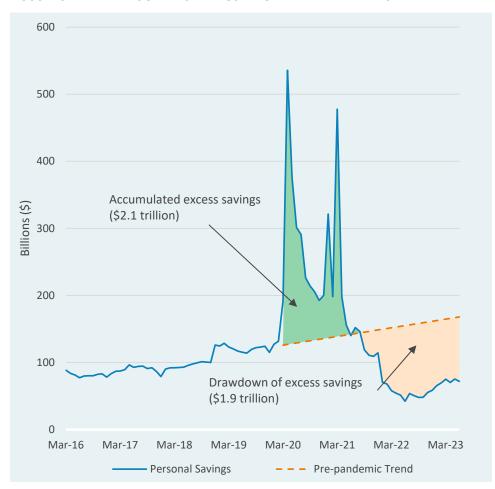
Source: BEA, as of 8/31/23



Source: FRED, as of 8/31/23

The consumer - excess savings wearing off

ACCUMULATED PERSONAL SAVINGS ABOVE PRE-PANDEMIC TREND



The resilience of U.S. consumer spending has been driven at least partly by *excess household savings*, which accumulated during the pandemic as Americans were limited in their ability to spend (on vacations and dining, for example). While these excess savings have recently helped to fuel a stronger economy, savings drawdown rates across the past three, six, or even twelve months suggest that these excess savings were fully depleted by the end of Q3.

Above-average inflation continues to be a drag on the domestic consumer, which can be seen in economic data. Second quarter metrics from the New York Fed's Household Debt and Credit report show an uptick in credit delinquencies, which is likely to show an even higher rate at the Q3 2023 release on November 7th if the trend persists. Although delinquency rates have moved higher, these are at average levels relative to history.

Going forward, many expect consumer conditions to worsen, especially under a *higher for longer* interest rate environment. This would likely act as a headwind to future economic growth, and negatively impact markets in a variety of ways, ranging from corporate earnings to mortgage transactions.

Source: BEA and San Francisco Federal Reserve, as of 8/16/23



Sentiment

Consumer sentiment readings were mixed in the third quarter but by most measures remain pessimistic.

The University of Michigan Consumer Sentiment survey improved, reporting that expectations around personal finances have weakened, though this was offset by better business conditions. Americans feel uncertain about the future of the economy.

Consumer confidence as indicated by the Conference Board weakened. According to the Conference Board survey, current labor market and business conditions improved moderately,

while the future outlook for income, business, and labor conditions fell very sharply. Consumer expectations are depressed and at levels that historically have signaled recession within one year.

The NFIB Small Business Optimism index was stable during the quarter, but further indicated a dire outlook for business conditions. Sales growth has reportedly slowed, profit margins are being squeezed, inflation continues to be a major concern, and qualified employees are difficult to find. A majority of businesses plan to raise prices, though fewer businesses expect sales revenues to keep up with inflation.

Sentiment was mixed during the quarter but remains poor by most measures

CONSUMER SENTIMENT



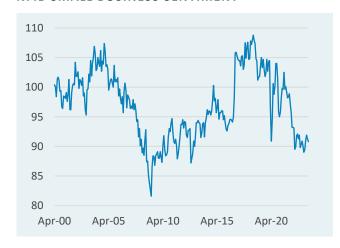
Source: University of Michigan, as of 9/30/23

CONFERENCE BOARD CONSUMER CONFIDENCE



Source: Conference Board, as of 9/30/23

NFIB SMALL BUSINESS SENTIMENT



Source: NFIB, as of 9/30/23



Housing

Housing market conditions have deteriorated even further since last quarter. In late September mortgage rates climbed to a new 23-year high of 7.3%. Existing home sales have fallen -15.3% over the past year, as of August, while affordability remains the worst on record.

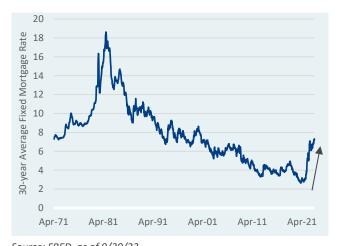
Despite higher mortgage rates and extremely poor affordability, home values have held up. This appears to be due to depressed housing inventories resulting from many years of underinvestment in new home construction following the 2000s U.S. housing bubble, an upward trend in U.S. homeownership, and an unwillingness of potential home sellers to sacrifice their existing low mortgage interest rates. Overall,

very low supply seems to be balancing low demand and, for now, providing an ongoing support to elevated prices.

Despite higher interest rates, existing homeowners in this environment are, on average, well-capitalized. Many homeowners refinanced at ultra-low mortgage interest rates in recent years or purchased their homes with a low rate. Mortgage delinquency levels of single-family homeowners were materially below-average at 1.7%, as of Q2. However, borrowers with variable-rate loans, which is a small portion of borrowers overall, may face difficulties in covering much larger monthly mortgage payments.

Home sales have slowed to a crawl as affordability is poor, and potential sellers don't want to lose their low interest rates

30-YEAR MORTGAGE RATE



Source: FRED, as of 9/30/23

HOME SALES: NEW & EXISTING (MILLIONS)



Source: FRED, as of 8/31/23

HOUSING AFFORDABILITY



Source: FRED, as of 6/30/23 – 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

- Countries struggling to control inflation—primarily advanced economies—face a challenging path. Many central banks are grappling with high prices and slow growth, and the balancing act of fighting inflation but also trying to avoid recession. In contrast, most emerging economies are exceeding growth expectations, outside of China. Some of this strength has come from trade rotation as tensions remain between the U.S. and China and businesses rethink their trade partners.
- The IMF's October World Economic Outlook was little changed from July Projections, as global growth is still expected to slow in 2024.
 Regional divergences remained an emphasis, as emerging economies are projected to drive global output. India is expected to outpace all other countries with growth forecasts above 6% for both 2023 and 2024.
- Inflation in the Eurozone and United Kingdom has remained sticky, with inflation in September coming in at 4.3% and 6.7% yearover-year, respectively. Monetary policy is expected to be tighter for both the ECB and BOE, although rate decisions diverged at their respective September meetings, as the ECB raised rates by another 25 bps, while the BOE voted 5-4 to maintain their bank rate at 5.25%.
- Japan was a bright spot amongst developed economies, driven by strong exports in the second quarter. While growth was positive, the potential for an early end to ultra loose Bank of Japan (BOJ) monetary policy presents a potential headwind. A weak Japanese Yen adds to this story, as the currency has been greatly devalued, largely due to the BOJ's contrarian monetary policy relative to other major central banks.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment	
United States	2.9%	3.7%	3.8%	
	9/30/23	9/30/23	9/30/23	
Eurozone	0.5% 6/30/23	4.3 % 9/30/23	6.4% 8/31/23	
Japan	1.6%	2.8%	2.7%	
	6/30/23	9/30/23	8/31/23	
BRICS	6.1%	1.7%	4.8%	
Nations	6/30/23	9/30/23	12/31/22	
Brazil	3.4% 6/30/23	5.2 % <i>9/30/23</i>	7.8% 8/31/23	
Russia	4.9%	6.0%	3.0%	
	6/30/23	9/30/23	8/31/23	
India	7.8%	5.0%	7.1%	
	6/30/23	9/30/23	9/30/23	
China	4.9%	0.0%	5.0%	
	9/30/23	9/30/23	9/30/23	

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

International economies showed signs of slowing during the third quarter. While growth decelerated, economies have shown greater resilience to inflation and higher interest rate headwinds than originally expected.

Countries struggling to control inflation—primarily advanced economies—face a challenging path. Many central banks are grappling with high prices and slow growth, and the balancing act of fighting inflation but also trying to avoid recession. In contrast, most emerging economies are exceeding growth expectations, outside of China. Some of this strength has come

from trade rotation as tensions remain between the U.S. and China and businesses rethink their trade partners.

The outlook remains uncertain. Strong growth driven by services has started to wear off, while manufacturing activity remains depressed. Developed economies within the Eurozone and United Kingdom struggle with inflation, while China deals with its own domestic issues. Japan and India showed signs of strength, but are likely unable to buoy global economic growth, especially if the current issues plaguing larger nations persist.

REAL GDP GROWTH (YOY)

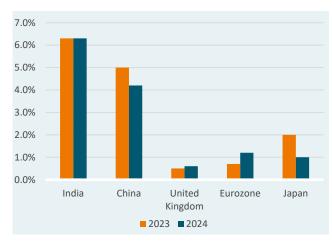


INFLATION (CPI YOY)



Source: Bloomberg, as of 9/30/23 – or most recent release

IMF WEO REAL GROWTH FORECASTS



Source: IMF World Economic Outlook Oct. 2023, as of 10/10/23



Source: Bloomberg, as of 6/30/23

International economics

	Aug-22	Sep-22	Oct-22	Nov-22	Dec-22	Jan-23	Feb-23	Mar-23	Apr-23	May-23	Jun-23	Jul-23	Aug-23
Manufacturing													
Global	50.3	49.8	49.4	48.8	48.7	49.1	49.9	49.6	49.6	49.5	48.7	48.6	49.0
Developed	50.2	50.1	48.8	47.8	47.3	48.0	48.1	48.4	48.5	47.6	46.3	47.1	46.8
US	52.9	51.0	50.0	49.0	48.4	47.4	47.7	46.3	47.1	46.9	46.0	46.4	47.6
UK	47.3	48.4	46.2	46.5	45.3	47.0	49.3	47.9	47.8	47.1	46.5	45.3	43.0
Eurozone	49.6	48.4	46.4	47.1	47.8	48.8	48.5	47.3	45.8	44.8	43.4	42.7	43.5
Germany	49.1	47.8	45.1	46.2	47.1	47.3	46.3	44.7	44.5	43.2	40.6	38.8	39.1
Japan	51.5	50.8	50.7	49.0	48.9	48.9	47.7	49.2	49.5	50.6	49.8	49.6	49.6
EM	50.2	49.3	49.8	49.7	49.8	49.9	51.6	50.7	50.5	51.4	51.1	50.2	51.4
Services													
Global	49.3	50.0	49.2	48.1	48.0	50.1	52.6	54.4	55.4	55.5	53.9	52.7	51.1
Developed	46.7	49.6	48.8	47.5	47.2	48.7	51.8	53.4	54.6	54.9	53.6	51.9	50.2
US	56.1	55.9	54.5	55.5	49.2	55.2	55.1	51.2	51.9	50.3	53.9	52.7	54.5
UK	50.9	50.0	48.8	48.8	49.9	48.7	53.5	52.9	55.9	55.2	53.7	51.5	49.5
Eurozone	49.8	48.8	48.6	48.5	49.8	50.8	52.7	55.0	56.2	55.1	52.0	50.9	47.9
Germany	47.7	45.0	46.5	46.1	49.2	50.7	50.9	53.7	56.0	57.2	54.1	52.3	47.3
Japan	49.5	52.2	53.2	50.3	51.1	52.3	54.0	55.0	55.4	55.9	54.0	53.8	54.3
EM	54.9	50.6	49.9	49.2	50.1	53.1	54.5	56.7	57.2	56.7	54.6	54.5	53.1

Service sectors

- which have
recently driven
global strength

- are now
showing signs
of moderation,
while
manufacturing
sectors remains
depressed

European markets seem to reflect the weakest future business conditions

Source: Bloomberg, as of 8/31/23 – The Purchasing Managers' Index (PMI) is an index based on a broad survey of supply chain managers across nineteen industries in each country. The survey gauges business sentiment, with a reading of below 50 indicating that businesses expect business conditions to worsen in the near-future. A reading of 50 indicates no expected change in business conditions. A reading above 50 indicates expectations for stronger (expanding) future business conditions.



Fixed income rates & credit



Fixed income environment

- The 10-year U.S. Treasury yield increased during the quarter from 3.81% to 4.58%—a level not seen since 2007—likely supported by higher for longer interest rate expectations. This has led to a flattening of the yield curve, though the curve remains inverted at -0.5% (defined as the 10-year Treasury yield minus 2-year Treasury yield).
- Rising interest rates combined with lower inflation have brought real (inflation-adjusted, based on the U.S. TIPS Inflation Breakeven Rate) 10- and 30-year Treasury yields to the highest levels in over a decade. Real yields for 10- and 30-year Treasuries finished the month at 2.24% and 2.33%, respectively. In March of 2022 these rates were negative.
- The Federal Reserve hiked interest rates by 0.25% in July but held rates steady at the September meeting as inflation moderated. Importantly, Chairman Powell signaled that additional rate hikes may be

- warranted if the economy remains strong and inflation above target.
- During Q3, higher quality bonds and U.S. Treasuries saw mild losses due primarily to their longer duration profile. Riskier credit performed well, with larger coupons and shorter duration contributing to positive performance.
- Longer duration investment grade corporate bonds (Bloomberg U.S. Long Corporate Credit) performed very poorly, falling by -7.3% during the quarter as rising interest rates acted as a headwind.
- With inflation moderating during the quarter, investors expressed optimism that the Federal Reserve would soon pause interest rate hikes. However, interest rate volatility increased during the period as concerns related to the U.S. government's budget deficit and the amount of expected issuance contributed to higher longterm bond yields.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	(3.2%)	0.6%
Core Plus Fixed Income (Bloomberg U.S. Universal)	(2.9%)	1.6%
U.S. Treasuries (Bloomberg U.S. Treasury)	(3.1%)	(0.8%)
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	(13.0%)	(10.7%)
U.S. High Yield (Bloomberg U.S. Corporate HY)	0.5%	10.3%
Bank Loans (S&P/LSTA Leveraged Loan)	3.4%	13.0%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	(3.3%)	13.1%
Emerging Market Debt Hard (JPM EMBI Global Diversified)	(2.2%)	10.0%
Mortgage-Backed Securities (Bloomberg MBS)	(4.1%)	(0.2%)

Source: Bloomberg, as of 9/30/23



A higher for longer rate environment

The "higher for longer" narrative gained steam throughout the quarter, driven by better-than-expected economic and labor metrics, above target inflation, and rising energy costs. The bond market saw the largest impact, as yields on the 10-year Treasury rose from 3.84% to 4.57% throughout the quarter, resulting in a -13.0% loss for longer-term U.S. Treasuries (Bloomberg U.S. Treasury 20+ Year Index).

A floor regarding how far inflation can fall, given price dynamics of certain goods and services, has set inflation expectations closer to levels around three to four percent, outpacing the Federal Reserve's two-percent mandate. This has brought rates higher, while also extending the expected timeline for higher rates. Implied rates on Fed Funds Futures contracts show rates remaining above four percent throughout the start of 2025.

The yield of cash is expected to remain elevated for years into the future

U.S. TREASURY YIELD CURVE - CHANGE THROUGH Q3 2023



FUTURE EXPECTATIONS FOR THE % YIELD OF CASH



Source: Bloomberg, as of 9/30/23

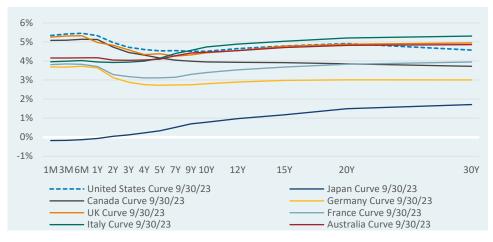


Yield environment

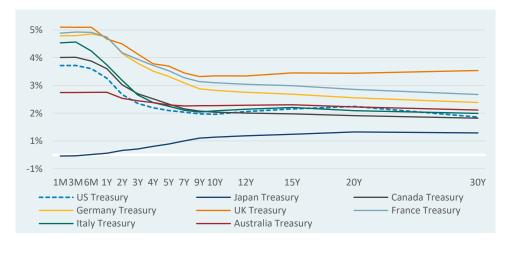
U.S. YIELD CURVE



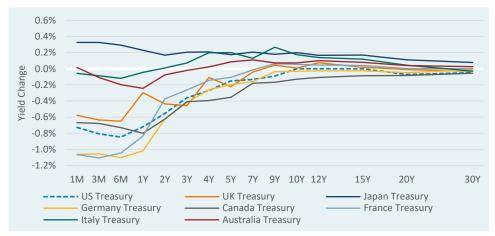
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 9/30/23



Credit environment

During the third quarter, fixed income markets delivered positive results with lower-quality credits such as high yield bonds and bank loans outperforming higher-quality credits. High yield bonds returned 0.5% (Bbg U.S. Corporate High Yield), while bank loans delivered a stronger 3.4% (CS Leveraged Loans), aided primarily by the lower duration of these bonds. Longer duration investment grade corporate bonds (Bloomberg U.S. Long Corporate Credit) performed poorly, falling by -7.3% during the quarter as rising interest rates acted as a headwind.

Similar to Q2, lower quality CCC-rated bonds outperformed BB- and B-rated bonds during the period. CCC-rated bonds returned 2.8% for the quarter compared to 1.0% and -0.3% for B-rated and BB-rated bonds, respectively. Bank loans also delivered an impressive 3.4% return,

with rising interest rates providing a mild tailwind to performance (floating rate bonds reprice as rates are rising, improving returns).

Credit spreads were broadly unchanged during the quarter despite concerns related to an economic slowdown, the potential for higher interest rates, increased credit stress, and lower equity prices. Lower-quality, CCC-rated high-yield bond spreads fell by 0.2% to 9.2%, while investment grade spreads decreased by roughly 0.1% to 1.3%. Broadly, spreads remain slightly below their long-term historical averages, which suggests that investors remain confident about the ability of those companies to service their debt. That said, should the U.S. economy begin to weaken, credit spreads could move higher as confidence fades.

SPREADS





HIGH YIELD BONDS MONTHLY INCOME RETURN

Source: Bloomberg, as of 9/30/23

CREDIT SPREAD (OAS)

Market	9/30/23	9/30/22
Long U.S. Corp	1.3%	2.0%
U.S. Inv Grade Corp	1.2%	1.6%
U.S. High Yield	3.9%	5.5%
U.S. Bank Loans*	5.2%	6.0%

Source: Barclays, Credit Suisse, Bloomberg, as of 9/30/23 *Discount margin (4-year life)





Default & issuance

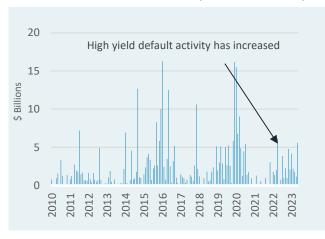
Default activity declined during Q3, to the lowest quarterly levels of 2023. Fourteen companies defaulted, which were concentrated in the Retail, Autos, Media, Technology, and Gaming sectors. A total of \$11.5 billion of bank loans and high yield bonds were affected by default or distressed exchanges, down from \$17.9 billion in the prior quarter. Notable company defaults included Carvana (Autos), Digital Media Solutions (Media), Exela Intermed (Technology), and Maverick (Gaming).

However, year-to-date default rates for both high-yield bonds and bank loans were higher than the first three quarters of 2022, totaling \$63 billion. High yield bond default rates have increased to roughly 2.5%, but are still below the long-term annual average of roughly 3.2%. High-yield

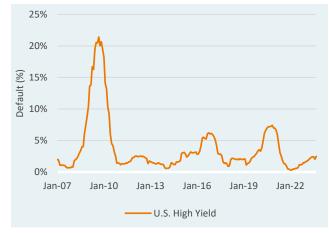
default recovery rates rose slightly to 35%, up from 33% during the previous quarter.

The issuance of investment-grade credit slowed from the prior quarter, down to roughly \$275 billion versus \$333 billion. Similarly, fewer lower quality companies issued new debt. High-yield bond issuance fell to \$40 billion, down from \$56 billion in Q2. As borrowing costs have jumped, the pace of both investment-grade and high yield issuance has been impacted. Although issuance overall remains dampened relative to history, high-yield issuance year-to-date is already greater than the total of 2022, and investment-grade bonds appear on track to match 2022 activity levels. It appears that a significant portion of issuance has moved into the private markets, creating opportunities for private allocations.

U.S. HY MONTHLY DEFAULTS (PAR WEIGHTED)

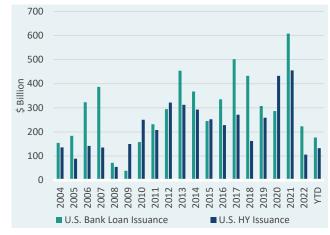


U.S. HY SECTOR DEFAULTS (LAST 12 MONTHS)



Source: BofA Merrill Lynch, as of 9/30/23 – par weighted

DEVELOPED MARKET ISSUANCE (\$ BILLIONS)



Source: BofA Merrill Lynch, all developed markets, as of 9/30/23



Source: BofA Merrill Lynch, as of 9/30/23

Equity



Equity environment

- Global equities delivered negative performance during the quarter (MSCI ACWI -3.4%). Weakness in markets was broad-based, with international developed (MSCI EAFE -4.1%) slightly underperforming domestic and emerging market equities (S&P 500 -3.3%, MSCI EM -2.9%).
- Over the quarter, the valuation gap between domestic and international equites grew even larger. An analysis of international developed Price/Earnings ratios shows that all sectors currently hold a valuation discount relative to U.S. shares, and that those discounts are generally much wider than the historical average.
- Currency movements dragged portfolio performance lower for investors with unhedged foreign currency exposure. Investors with unhedged international developed equity exposure saw losses of -

- 3.6% due to currency volatility during the quarter.
- U.S. investors continue to face a difficult environment for style factor investing. Over the past year, mega cap growth stocks have propelled the U.S. market higher, leading to dramatic outperformance of growth stocks and large cap stocks. However, value investing has delivered exceptional results in international developed markets, with value stocks outperforming growth by 11.5%.
- The Cboe VIX implied volatility index remained below-average for most of the third quarter, before rising to 17.5% to end September. Market risk has been falling fairly consistently throughout the year.

	QTD TOTA	L RETURN	1 YEAR TOT	AL RETURN		
	(unhedged)	(hedged)	(unhedged)	(hedged)		
U.S. Large Cap (S&P 500)	(3.3	3%)	21.6%			
U.S. Small Cap (Russell 2000)	(5.2	1%)	8.9	8.9%		
U.S. Equity (Russell 3000)	(3.3	3%)	20.5%			
U.S. Large Value (Russell 1000 Value)	(3.2	2%)	14.4%			
US Large Growth (Russell 1000 Growth)	(3.2	1%)	27.	7%		
Global Equity (MSCI ACWI)	(3.4%)	(2.3%)	20.8%	20.4%		
International Large (MSCI EAFE)	(4.1%)	(0.5%)	25.6%	24.1%		
Eurozone (EURO STOXX 50)	(7.7%)	(4.3%)	39.4%	33.0%		
U.K. (FTSE 100)	(1.9%)	2.2%	25.3%	16.0%		
Japan (TOPIX)	(1.0%)	4.0%	25.7%	36.6%		
Emerging Markets (MSCI Emerging Markets)	(2.9%)	(1.3%)	11.7%	11.1%		

Source: Russell Investments, MSCI, STOXX, FTSE, JPX, as of 9/30/23

Domestic equity

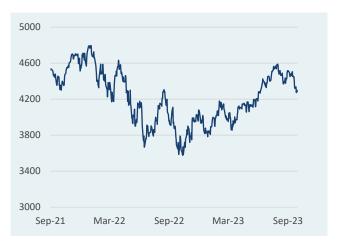
Domestic equities finished lower to end the quarter, breaking the previous three consecutive quarters of gains. The S&P 500 Index ended September down -3.3%, alongside losses across all other regional equity groups. Strong gains in July—influenced by better-than-expected earnings—were pared by losses in August and September as the *higher for longer* narrative raised recession fears while also helping to push Treasury yields significantly higher.

Early Q3 gains were driven by a continued rally across mega-cap technology names and better-than-expected earnings. Second quarter earnings marked the third straight quarter of year-over-year declines, yet the -4.1% fall was much better than the initially feared -7.0% projection

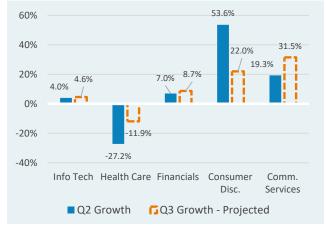
by FactSet. From a sector perspective, equity movements were less concentrated relative to the prior quarter. Energy was an outlier, where the sector's +12.2% gain was a function of higher oil prices due primarily to supply related issues.

Going forward, domestic equities remain challenged on both the earnings and valuations front. Earnings growth is expected to decline for the fourth straight quarter, although stable expectations amongst the S&P 500's largest sectors could provide an anchor. Earnings stability of some of the largest index names may also be contributing to higher valuations, which remain expensive relative to international developed and emerging market equities.

S&P 500 PRICE INDEX

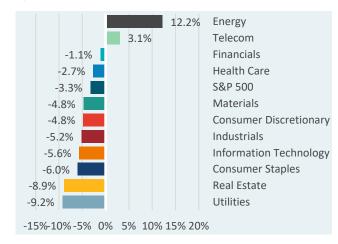


FIVE LARGEST SECTORS EPS GROWTH YOY



Source: FactSet, as of 9/30/23

Q3 2023 SECTOR PERFORMANCE



Source: Morningstar, as of 9/30/23

Source: Bloomberg, as of 9/30/23

Domestic equity size & style

Investors continue to face a difficult environment for style factor investing. Value underperformed growth mildly during the quarter (-3.2% vs. -3.1%), with sector trends appearing to have had less of an impact on value vs. growth stocks during Q2. Small cap equities materially lagged large caps (-5.1% vs -3.3%). *Higher for longer* rate expectations likely contributed to a repricing of growth-focused assets that are more sensitive to interest rate fluctuations.

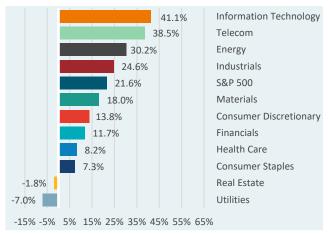
Over the past year, mega cap growth stocks have propelled the U.S. market higher, leading to dramatic outperformance of growth stocks and large cap stocks. Many of these market-leading stocks are concentrated in the Information Technology and Telecom sectors, which have outperformed the overall index (+41.1% and 38.5%, respectively).

In recent years value stocks have been extremely cheap. Value has rarely been this discounted relative to growth, and during the few historical periods when this was the case, value outperformed significantly. However, value has failed to deliver similar outperformance during the current period.

SMALL CAP VS LARGE CAP (YOY)



VALUE VS GROWTH (YOY)



Source: Morningstar, as of 9/30/23

1-YEAR SIZE & STYLE PERFORMANCE

	Value	Core	Growth
Large Cap	14.4%	21.2%	27.7%
Mid Cap	11.0%	13.4%	17.5%
Small Cap	7.8%	8.9%	9.6%

Source: FTSE, as of 9/30/23



Source: FTSE, as of 9/30/23

International developed equity

International developed shares fell -4.1% during Q3 in unhedged currency terms, underperforming U.S. and emerging markets. However, international developed equities in hedged currency terms were the best performing markets (returning -0.5%), as currency hedging would have avoided the U.S. dollar surge fueled by a *higher for longer* interest rate narrative.

Underperformance within the Eurozone dragged the overall index lower, with the STOXX 50 Index falling -7.7% over the quarter in unhedged terms—the worst performer across regional indices. The broader bloc continues to struggle to bring down inflation, while policymakers also deal with stagnant economic growth. In contrast to weakness seen from European

shares, Japanese equities delivered another quarter of positive performance in unhedged terms (TOPIX -1.0%), and significant outperformance in currency hedged terms (+4.0%). While a weaker Japanese Yen (JPY) hurt performance in U.S. dollar terms, the weak JPY has boosted local corporate earnings. These currency movements combined with meaningful inflation and equity reforms—meant to spark investment in wages, higher growth, and therefore shareholder value—have been a tailwind to strong year-over-year Japanese equity performance.

Overall, we believe international developed equities are less attractive in the near-term, specifically due to the economic headwinds facing the U.K. and broader Eurozone.

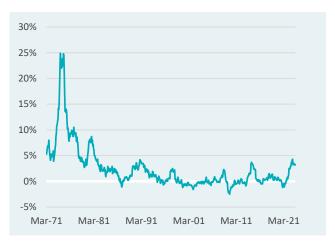
INTERNATIONAL DEVELOPED EQUITY



MANUFACTURING PMI



JAPANESE CPI



Source: S&P Global, as of 9/30/23

Source: Japan MIC, as of 8/31/23



Source: MSCI, as of 9/30/23

Emerging market equity

Emerging market equities outperformed domestic equities and international developed equities in Q3. The MSCI EM Index fell -2.9%, while the S&P 500 was -3.3% lower and the MSCI EAFE Index dropped -4.1%. Emerging markets have provided only a 2.1% annualized return over the past decade.

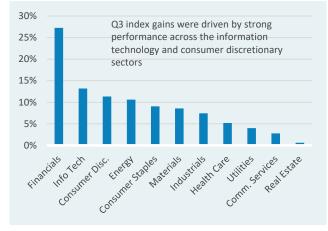
From an individual country perspective, the two largest weights in the index—China and India—outperformed, although Chinese equities were still -1.9% lower. This impact counterbalanced losses across other markets, since the combined weight of both countries makes up approximately 45% of the MSCI Emerging Markets Index.

Emerging market equities continue to offer fairly cheap valuations, yet sentiment has grown negative, especially as concerns around China are now mainstream. Outside of geopolitical tensions, the Chinese economy continues to show signs of struggle despite some small government stimulus efforts. The property market remains a large pain point, evidenced by credit stress and falling contracted sales amongst large property developers such as Country Garden and Evergrande.

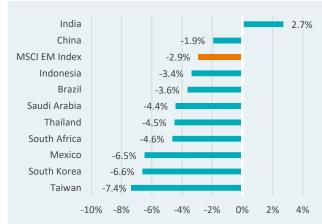
EMERGING MARKET EQUITY



MSCI INDIA SECTOR WEIGHTS



Q3 2023 MSCI EM COUNTRY RETURNS (USD)



Source: MSCI, as of 9/30/23 Source: Bloomberg, MSCI, as of 9/30/23



Equity valuations

Equity valuation disparities have grown even wider. U.S. equities are now priced at more than a 60% valuation premium (Price/Earnings) over international developed, averaging 22.5 and 13.8, respectively, during the quarter. Some of this gap can be explained by the greater concentration of U.S. markets in the technology sector, which tends to command higher valuations. However, as we see on the next slide, nearly all sectors are materially more expensive in U.S. markets relative to international developed markets.

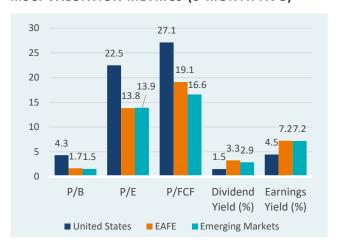
Despite very large valuation differences, we believe international developed equities currently provide lower

growth potential and unique challenges which may lead to further near-term underperformance relative to U.S equities.

Core fixed income now offers a yield greater than U.S. equities for the first time in more than two decades. Quickly rising interest rates should have theoretically resulted in a sharp fall in equity valuations in order to maintain the "equity risk premium" of stock returns over bond returns. This effect has not yet occurred, which may lead many investors to view bonds as relatively attractive (and stocks relatively less attractive) in the current environment.

Core fixed income is yielding more than equities for the first time in two decades

MSCI VALUATION METRICS (3-MONTH AVG)



Source: Bloomberg, as of 9/30/23

FORWARD PRICE/EARNINGS RATIO



Source: MSCI, Bloomberg, as of 9/30/23

U.S. VALUATIONS: BONDS VS. STOCKS

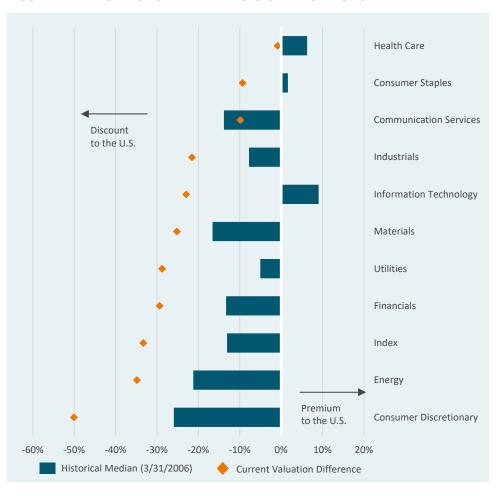


Source: Bloomberg, Standard & Poor's, as of 9/30/23



International developed valuations

MSCI EAFE VALUATIONS RELATIVE TO U.S. VALUATIONS



Over the quarter, the valuation gap between domestic and international equites grew even larger. Sector weightings play a large role when evaluating the broader indices, as the U.S. holds a larger weight in growth-focused sectors such as Information Technology which tends to command a higher valuation.

The valuation disparity between U.S. and international developed equities has been a topic of interest recently, since historically these markets have shown a much smaller discount relative to one another.

An analysis of international developed Price/Earnings ratios shows that all sectors currently hold a valuation discount relative to U.S. shares, and that those discounts are generally much wider than the historical average.

Despite very large valuation differences, we believe international developed equities currently provide lower growth potential and unique challenges which may lead to further near-term underperformance relative to U.S equities. Specifically, stagnant economic growth and higher inflation in the Eurozone and U.K. may result in headwinds.

Source: Bloomberg, MSCI, as of 9/30/23



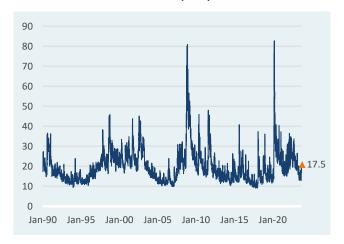
Market volatility

The Cboe VIX implied volatility index remained belowaverage for most of the third quarter, before rising to 17.5 to end September. Market risk has been falling fairly consistently throughout the year, which may be at least partly attributed to the perception that certain risks, such as regional bank contagion and near-term recession, seem to have eased.

Realized volatility of global equity markets has moderated, and is around average on a one-year basis. Emerging markets are an exception, displaying persistent elevated volatility. In contrast to recent years when emerging market volatility was lower than that of developed markets—an uncommon occurrence historically speaking—this trend has now reversed.

Bond markets have shown some shakiness, as indicated by the "MOVE" Index—which calculates the implied volatility of U.S. Treasury securities. This index has risen to levels not seen since the 2020 COVID-19 market selloff. Uncertainty around the Federal Reserve's interest rate path, potential recession, and the worsening U.S. fiscal situation, are likely contributing to greater Treasury market volatility.

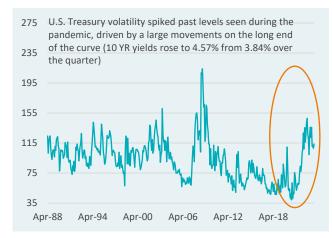
U.S. IMPLIED VOLATILITY (VIX)



REALIZED VOLATILITY



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



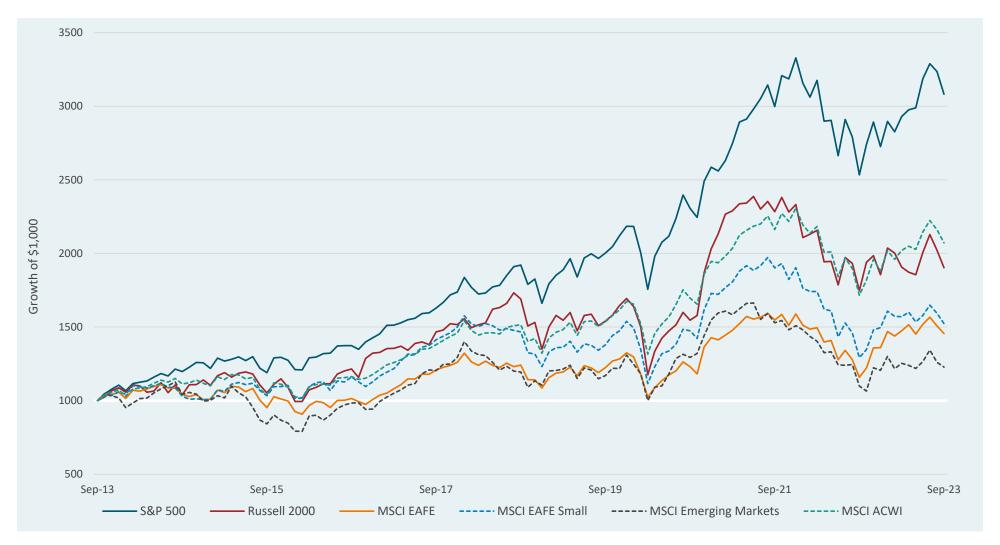
Source: S&P, MSCI, as of 9/30/23

Source: Bloomberg, as of 9/30/23



Source: Choe, as of 9/30/23

Long-term equity performance



Source: MPI, as of 9/30/23



Other assets



Currency

Currency movements dragged portfolio performance lower for investors with unhedged foreign exposure. On a trade-weighted basis, the value of the U.S. dollar shot higher as investors questioned the falling inflation story and bond yields rose on the *higher for longer* interest rate narrative.

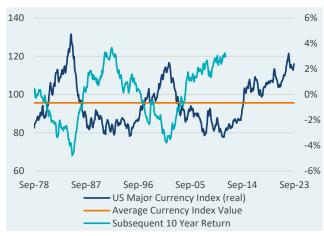
Investors with unhedged international developed equity exposure saw losses of -3.6% due to currency movements in Q3. After recently experiencing deep losses over multiple years from unhedged foreign currency exposure, along with ongoing volatility, many investors may be interested in exploring more thoughtful approaches to currency. A currency hedging program can reduce the uncompensated risk of unhedged foreign

currency exposure (what we call "embedded currency" risk). Additionally, the MSCI Currency Factor Mix Index—a representation of 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—has shown a positive one-year rolling return over most periods with low volatility. This is an approach to thoughtfully gain exposure to the currency market with the objective of generating a moderate positive return. A currency hedging program along with a passive investment in the currency market may allow investors to reduce overall portfolio risk while moderately increasing total portfolio expected returns.

EFFECT OF CURRENCY (1-YEAR ROLLING)



BLOOMBERG DOLLAR SPOT INDEX



Source: Bloomberg, as of 9/30/23

EMBEDDED CURRENCY VS CURRENCY FACTORS



Source: Bloomberg, MSCI, as of 9/30/23



Source: MSCI, as of 9/30/23

Commodities

Data pointing towards resilient economic growth was widely viewed as the initial driver of the "higher for longer" rate environment. Adding to this narrative in the third quarter was a tick up in energy costs due to supply side dynamics. This brought an increased focus to energy prices, as the four-decade high inflation experienced during 2022 was partly fueled by a rapid spike in oil and natural gas prices. As inflation has moderated back to levels closer to target, energy price movements have raised concerns of another potential catalyst for higher inflation, and therefore higher rates.

Oil was the largest contributor, as WTI and Brent Crude prices rose 24.3% and 28.5%, respectively. These significant price increases were driven by a combination of supply cuts by Saudi Arabia and Russia. A slowing economic outlook provides little motivation for oil companies to increase production.

From a performance standpoint, the outsized gain of the Bloomberg Commodity Energy Index (+19.6%) lifted the broader index, with the Bloomberg Commodity Index finishing the quarter up 4.7%.

A large jump in energy prices – specifically oil – has raised concerns over potentially higher inflation

ENERGY YEAR-OVER-YEAR CPI CHANGES

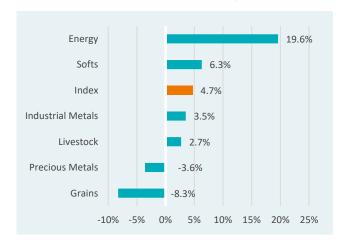


BRENT AND WTI CRUDE OIL PRICES



Source: Bloomberg, as of 9/30/23

BCOM SECTOR PERFORMANCE - Q3 2023



Source: Bloomberg, as of 9/30/23



Source: BLS, as of 9/30/23

Private real estate stalemate?

As summer ends, the real estate market looks much like it did as it began. Real estate transaction activity continues to be frozen, as buyers and sellers disagree about pricing, leading to a very large bid-ask spread. Private valuations remain higher than public, and write-downs should continue over the next several quarters. While movement has been slow thus far, opportunities may pick up as a wall of low interest rate loan maturities will be coming due and asset owners will need to either refinance at much higher rates, provide additional capital, and/or sell assets.

New capital should find a compelling environment to deploy in over the next several years at lower entry pricing. We are favoring managers experienced with investing in stressed and distressed environments and those with flexibility to invest across the debt and equity capital spectrum.

REAL ESTATE CAP RATE VS U.S. TREASURY YIELD



PROPERTY SALES (ANNUALIZED)



Source: NCREIF trends Report Q2 2023

PUBLIC VS PRIVATE REAL ESTATE PERFORMANCE



Source: NCREIF, Wilshire REIT Index



Source: NCREIF trends Report Q2

Hedge funds outperform, CTAs shine again

Hedge funds enjoyed broad outperformance vs markets in the third quarter as both stocks and bonds declined more than 3%. Most hedge fund strategies were actually positive on the quarter, reflected in the 0.8% return from the HFRI Composite Index.

Gains were led by Macro strategies while Event Driven was buoyed by a very strong quarter from Merger Arbitrage, rebounding after seeing spreads widen out earlier in the year. Popular Macro trades like short bonds and yield curve steepener paid off handsomely. Four of the last 7 quarters have seen simultaneous declines in the S&P 500 and the Bloomberg US Aggregate – in all of those, including the most recent one, CTAs have been positive.

Credit-focused strategies also outperformed high yield as duration impacts were hedged and higher, typically floating rate coupons in areas like asset-backed offset any credit deterioration.

3Q 2023 QUARTERLY RETURNS



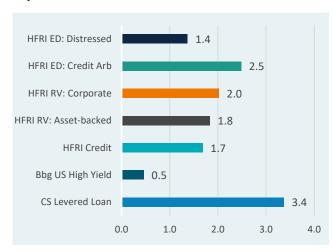
Source: HFR, MPI, as of 9/30/23

CTAS VS STOCKS/BONDS WHEN BOTH DECLINE



Source: MPI, SocGen. as of 9/30/23

3Q RETURNS FOR CREDIT STRATEGIES



Source: HFR, MPI, as of 9/30/23

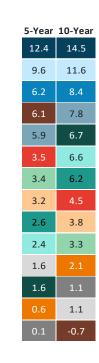


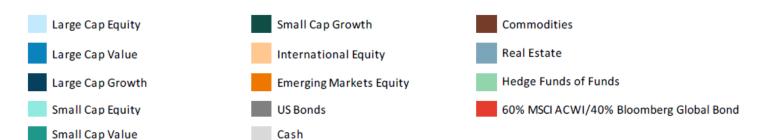
Appendix



Periodic table of returns

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD
Large Cap Growth	56.3	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	25.0
Large Cap Equity	48.5	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	13.0
International Equity	47.3	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	7.1
Small Cap Growth	46.0	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	5.2
60/40 Global Portfolio	39.2	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	5.1
Cash	30.0	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	3.6
Hedge Funds of Funds	29.9	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	3.0
Small Cap Equity	29.7	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	2.5
Emerging Markets Equity	25.2	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	1.8
Large Cap Value	23.9	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	1.8
Small Cap Value	11.6	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	-0.5
US Bonds	9.0	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	-1.2
Commodities	4.1	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	-3.4
Real Estate	1.0	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	-3.8



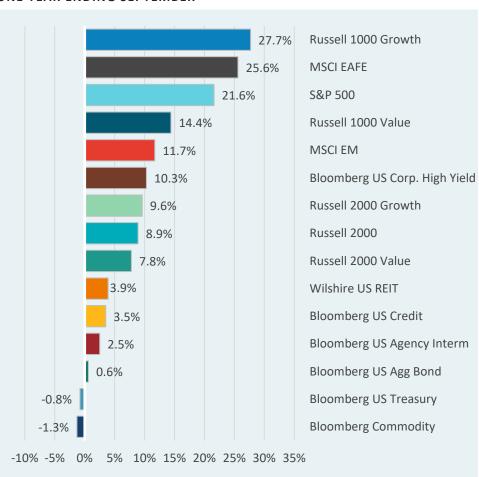


Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 6/30/23.



Major asset class returns

ONE YEAR ENDING SEPTEMBER



TEN YEARS ENDING SEPTEMBER



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

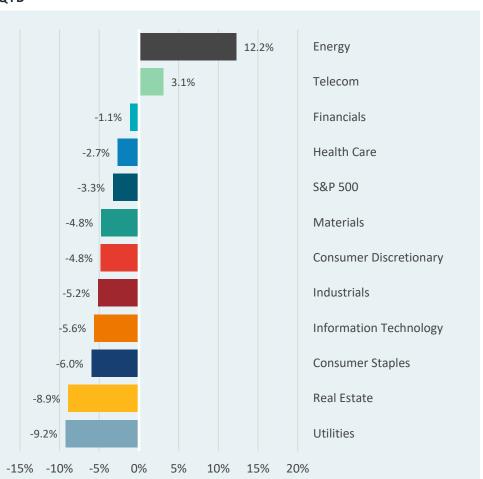
Source: Morningstar, as of 9/30/23

Source: Morningstar, as of 9/30/23

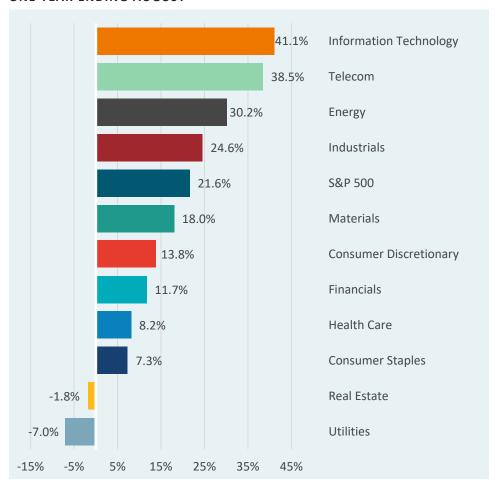


S&P 500 sector returns

QTD



ONE YEAR ENDING AUGUST



Source: Morningstar, as of 9/30/23

Source: Morningstar, as of 9/30/23



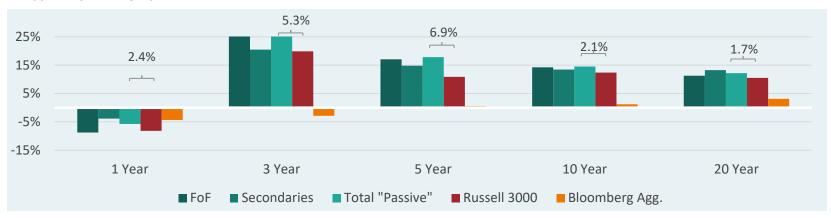
Private equity vs. traditional assets performance

DIRECT PRIVATE EQUITY FUND INVESTMENTS



Direct P.E Fund Investments outperformed comparable public equites across all time periods.

"PASSIVE" STRATEGIES



"Passive" strategies outperformed comparable public equities across all time periods.

Sources: Refinitiv PME: U.S. Private Equity Funds sub asset classes as of March 31, 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.



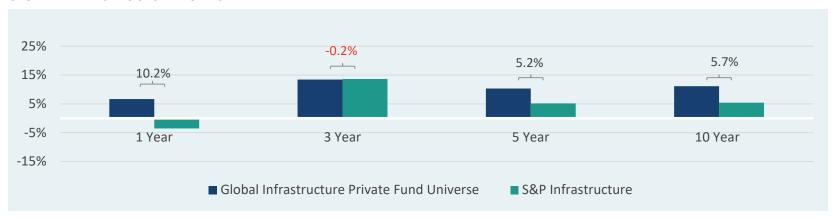
Private vs. liquid real assets performance

GLOBAL NATURAL RESOURCES FUNDS



N.R. funds underperformed the MSCI World Natural Resources benchmark across all periods, aside the 1-year basis.

GLOBAL INFRASTRUCTURE FUNDS



Infra. funds outperformed the S&P Infra. across all periods, aside the 3-year basis.

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 March 31, 2023. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real assets universes.



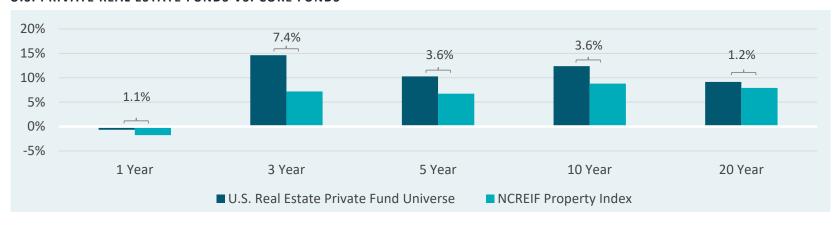
Private vs. liquid and core real estate performance

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



U.S. Private
R.E. funds have
underperformed
the Wilshire
U.S. REIT Index
over the past 20
years, but
outperformed
more recently

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 March 31, 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	(4.8)	(3.3)	13.1	21.6	10.2	9.9	11.9	Bloomberg US TIPS	(1.8)	(2.6)	(0.8)	1.2	(2.0)	2.1	1.7
S&P 500 Equal Weighted	(5.1)	(4.9)	1.8	13.6	11.4	8.0	10.2	Bloomberg US Treasury Bills	0.4	1.3	3.6	4.6	1.7	1.7	1.1
DJ Industrial Average	(3.4)	(2.1)	2.7	19.2	8.6	7.1	10.8	Bloomberg US Agg Bond	(2.5)	(3.2)	(1.2)	0.6	(5.2)	0.1	1.1
Russell Top 200	(4.6)	(2.7)	16.3	23.9	10.0	10.8	12.6	Bloomberg US Universal	(2.4)	(2.9)	(0.6)	1.6	(4.7)	0.3	1.4
Russell 1000	(4.7)	(3.1)	13.0	21.2	9.5	9.6	11.6	Duration							
Russell 2000	(5.9)	(5.1)	2.5	8.9	7.2	2.4	6.6	Bloomberg US Treasury 1-3 Yr	(0.0)	0.7	1.7	2.4	(0.9)	1.0	0.8
Russell 3000	(4.8)	(3.3)	12.4	20.5	9.4	9.1	11.3	Bloomberg US Treasury Long	(7.3)	(11.8)	(8.6)	(9.1)	(15.7)	(2.8)	0.8
Russell Mid Cap	(5.0)	(4.7)	3.9	13.4	8.1	6.4	9.0	Bloomberg US Treasury	(2.2)	(3.1)	(1.5)	(8.0)	(5.8)	(0.1)	0.6
Style Index								Issuer							
Russell 1000 Growth	(5.4)	(3.1)	25.0	27.7	8.0	12.4	14.5	Bloomberg US MBS	(3.2)	(4.1)	(2.3)	(0.2)	(5.1)	(8.0)	0.6
Russell 1000 Value	(3.9)	(3.2)	1.8	14.4	11.1	6.2	8.4	Bloomberg US Corp. High Yield	(1.2)	0.5	5.9	10.3	1.8	3.0	4.2
Russell 2000 Growth	(6.6)	(7.3)	5.2	9.6	1.1	1.6	6.7	Bloomberg US Agency Interm	(0.3)	0.2	1.6	2.5	(2.0)	0.7	0.9
Russell 2000 Value	(5.2)	(3.0)	(0.5)	7.8	13.3	2.6	6.2	Bloomberg US Credit	(2.6)	(3.0)	0.0	3.5	(4.8)	0.9	2.1
INTERNATIONAL EQUITY								OTHER							
Broad Index								Index							
MSCI ACWI	(4.1)	(3.4)	10.1	20.8	6.9	6.5	7.6	Bloomberg Commodity	(0.7)	4.7	(3.4)	(1.3)	16.2	6.1	(0.7)
MSCI ACWI ex US	(3.2)	(3.8)	5.3	20.4	3.7	2.6	3.3	Wilshire US REIT	(6.5)	(6.4)	(0.2)	3.9	5.7	2.9	6.0
MSCI EAFE	(3.4)	(4.1)	7.1	25.6	5.8	3.2	3.8	CS Leveraged Loans	0.9	3.4	9.9	12.5	5.9	4.3	4.3
MSCI EM	(2.6)	(2.9)	1.8	11.7	(1.7)	0.6	2.1	S&P Global Infrastructure	(4.7)	(7.3)	(3.7)	6.9	7.3	4.1	5.1
MSCI EAFE Small Cap	(4.4)	(3.5)	1.8	17.9	1.1	0.8	4.3	Alerian MLP	2.4	9.4	20.2	32.7	43.5	6.4	1.7
Style Index								Regional Index							
MSCI EAFE Growth	(6.0)	(8.6)	4.3	20.0	0.4	3.2	4.4	JPM EMBI Global Div	(2.6)	(2.2)	1.8	10.0	(4.6)	(0.4)	2.5
MSCI EAFE Value	(0.8)	0.6	9.9	31.5	11.1	2.8	3.0	JPM GBI-EM Global Div	(3.4)	(3.3)	4.3	13.1	(2.7)	(0.0)	(0.8)
Regional Index								Hedge Funds							
MSCI UK	(0.8)	(1.5)	6.8	24.9	12.1	2.9	2.5	HFRI Composite	(0.2)	0.8	4.3	6.7	6.9	5.0	4.6
MSCI Japan	(2.1)	(1.6)	11.2	25.9	2.8	2.1	4.4	HFRI FOF Composite	(0.2)	0.7	3.0	4.8	3.8	3.4	3.3
MSCI Euro	(5.4)	(7.5)	10.9	36.4	7.3	3.7	3.8	Currency (Spot)							
MSCI EM Asia	(2.6)	(2.9)	1.0	11.9	(3.5)	1.0	3.8	Euro	(2.5)	(3.0)	(0.8)	8.1	(3.4)	(1.8)	(2.4)
MSCI EM Latin American	(2.3)	(4.7)	12.9	19.4	15.1	2.8	0.2	Pound Sterling	(3.7)	(4.0)	1.5	9.3	(1.9)	(1.3)	(2.8)



Source: Morningstar, HFRI, as of 9/30/23.

(2.4) (3.1) (11.6) (3.0) (10.9) (5.3) (4.1)

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. (https://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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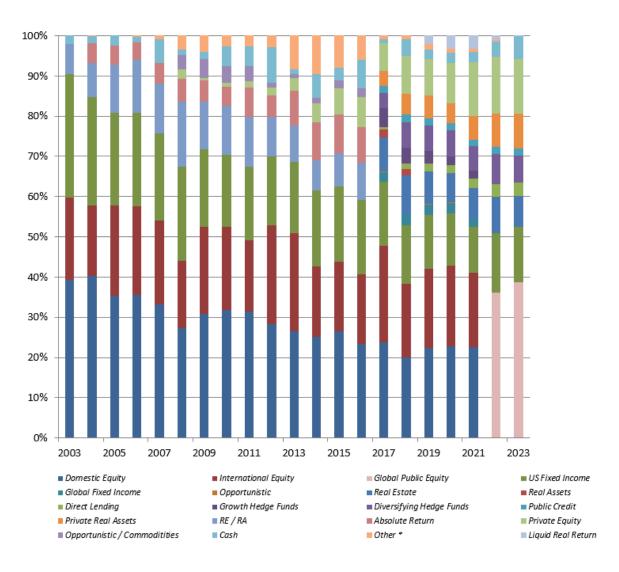




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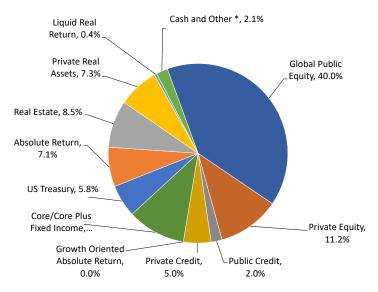
Quarter ending September 30th, 2023

- The Total Plan returned -1.8% gross in the third quarter of 2023 and ranked in the second quartile among other public funds greater than \$1 billion. The Plan underperformed its policy index by 30 bps over this period. Longer-term, the three-year return of 7.0% ranks just outside the top quartile of large public plan peer group. The five-year return of 6.9% ranks in the top quartile of the large public plan peer group.
- Third quarter results (net) were enhanced by the following factors:
 - 1. Within the Growth Asset category (-2.1%), which underperformed the total fund, Private Equity and Private Credit were the bright spots of the portfolio, returning 0.6% and 2.1%, respectively, for the quarter.
- Third quarter results (net) were hindered by the following factors:
 - 1. Global Public Equity detracted from overall portfolio returns, with a performance of -3.5% on the quarter. Performance was hurt most by International Equity, which declined -4.9% during the quarter.
 - 2. Core Fixed Income (-3.9%) dragged down Diversifying Asset Category performance (-1.5%), as rising yields lowered bond valuations.
 - 3. The Real Return category returned -0.7% vs. a benchmark return of -0.8%. The decline was led by Opportunistic Non-Core Real Estate, which returned -9.3%. However, Core Real Estate returned -1.7%, outperforming the benchmark (-1.9%) by 20bps.



	2003	2004	2005	2006	2007	2008	2009
US Equity ==	39.2	40.4	35.4	35.5	33.1	27.2	30.9
International Equity	20.6	17.5	22.3	22.0	20.9	16.8	21.5
US Fixed Income	30.6	26.9	23.1	23.3	21.7	23.5	19.3
Real Estate / Real Assets	7.5	8.5	11.9	13.1	12.4	16.1	11.9
Absolute Return	_	4.9	4.8	4.4	5.1	5.6	5.3
Private Equity	_	-	_		0.1	2.5	0.5
Opportunistic / Commodities	_	_	_	_	-	3.5	4.8
Cash	2.1	1.8	2.4	1.2	5.8	1.4	1.7
Other *		0.1		0.4	0.9	3.4	4.1
Other							
	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
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	38.5
US Fixed Income	16.0	14.6	13.6	13.2	11.4	14.8	13.7
Global Fixed Income	2.4	2.6	2.5	2.5	2.1	_	_
Public Credit	1.8	1.9	1.8	1.7	1.7	1.7	1.8
Real Estate / Real Assets	_	_	_	_	_	_	_
Real Estate	8.4	9.7	8.3	7.3	7.6	9.0	7.6
Real Assets	2.1	1.4	-	-	-	_	-
Private Real Assets	3.7	5.2	5.7	4.9	5.8	8.2	8.6
Liquid Real Return	_	_	2.0	3.3	3.2	1.2	0.1
Absolute Return	_	_	_	_	_		
Growth Hedge Funds	4.6	3.9	3.0	2.3	2.0	0.1	0.1
Diversifying Hedge Funds	3.8	6.2	6.4	6.4	6.0	7.5	6.6
Private Equity	6.9	9.3	9.0	10.1	13.4	14.2	13.5
Direct Lending	0.5	1.5	2.0	1.9	2.3	3.2	3.3
Opportunistic / Commodities	-	-	_	-	-	-	-
Opportunistic	0.1	0.1	0.1	0.0	0.0	_	_
Cash	1.1	4.3	2.4	2.5	2.6	3.7	5.7
Other *	0.8	0.9	1.4	1.0	0.8	0.4	0.7
- and	0.0	0.0	1.4	1.0	0.0	0.4	0.1

Current w/Overlay



Target

ASSET ALLOCATION	MARKET VALUE W/OVERLAY	W/ OVERLAY	W/O OVERLAY
Global Public Equity	4,942,173,641	40.0%	38.5%
Private Equity	1,381,432,996	11.2%	13.5%
Public Credit	245,372,102	2.0%	1.8%
Private Credit	611,238,376	5.0%	3.3%
Growth Oriented Absolute Return	34,980	0.0%	0.1%
Core/Core Plus Fixed Income	1,296,197,506	10.5%	10.5%
US Treasury	721,815,046	5.8%	3.2%
Absolute Return	876,537,622	7.1%	6.6%
Real Estate	1,051,580,005	8.5%	7.6%
Private Real Assets	903,016,757	7.3%	8.6%
Liquid Real Return	55,271,870	0.4%	0.1%
Cash and Other *	255,561,670	2.1%	6.4%
TOTAL	12,340,232,570	100.0%	100.0%

Cash and Other * Liquid Real_ 1.0% Return 2.0% Global Public Private Real Equity Assets 40.0% 7.0% Real Estate_ 9.0% Absolute Return_ 7.0% US Treasury_ 4.0% Private Equity Core/Core Plus 11.0% Fixed Income _Public Credit 12.0% Growth Oriented Absolute 2.0% Return Private Credit

5.0%

0.0%

ASSET ALLOCATION	ACTUAL	TARGET	DIFF
Global Public Equity	40.0%	40.0%	0.0%
Private Equity	11.2%	11.0%	0.2%
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	10.5%	12.0%	-1.5%
US Treasury	5.8%	4.0%	1.8%
Absolute Return	7.1%	7.0%	0.1%
Real Estate	8.5%	9.0%	-0.5%
Private Real Assets	7.3%	7.0%	0.3%
Liquid Real Return	0.4%	2.0%	-1.6%
Cash and Other *	2.1%	1.0%	1.1%

^{*} Other includes closing accounts (Heitman and SSgA Overla)

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Total Fund - Gross	12,340,232,570	100.0	-1.8 (46)	4.4 (48)	8.6 (85)	7.0 (32)	6.9 (20)	7.3 (30)	8.2	Jul-86
Total Fund - Net			-1.9	4.3	8.4	6.8	6.6	7.0	8.0	Jul-86
Policy Index			-1.5 (28)	4.9 (39)	9.2 (72)	6.2 (44)	5.8 (39)	6.7 (46)	8.2	Jul-86
InvMetrics Public DB > \$1B Median			-1.9	4.3	10.2	5.8	5.5	6.5		
Total Fund ex Overlay - Gross	12,259,823,797	99.3	-1.6 (29)	4.6 (46)	8.3 (89)	7.3 (27)	6.8 (21)	7.3 (29)	8.1	Jul-86
Total Fund ex Overlay - Net			-1.6	4.4	8.1	7.0	6.6	7.1	7.9	Jul-86
Policy Index			-1.5 (28)	4.9 (39)	9.2 (72)	6.2 (44)	5.8 (39)	6.7 (46)	8.2	Jul-86
Growth Asset Category - Gross	7,044,887,959	57.1	-2.0	7.7	14.8	9.4	8.4		9.9	Apr-17
Growth Asset Category - Net			-2.1	7.5	14.6	9.1	8.1		9.6	Apr-17
Growth Custom			-1.7	8.7	16.4	8.9	7.6	-	8.9	
Global Public Equity - Gross	4,750,293,638	38.5	-3.5	10.1	21.7	6.6	6.4	8.1	8.4	Jul-11
Global Public Equity - Net			-3.5	9.9	21.3	6.2	6.0	7.7	8.0	Jul-11
MSCI ACWI IMI			-3.3	9.8	20.8	7.0	6.5	7.6	7.6	
Domestic Equity - Gross	2,400,988,762	19.5	-2.4 (11)	14.2 (6)	22.9 (6)	10.2 (33)	9.4 (21)	11.2 (30)	10.2	Jul-86
Domestic Equity - Net			-2.4	13.9	22.6	9.9	9.1	10.9	10.0	Jul-86
Russell 3000 Index			-3.3 (39)	12.4 (22)	20.5 (33)	9.4 (61)	9.1 (32)	11.3 (29)	10.1	Jul-86
InvMetrics All DB US Equity Median			-3.3	11.1	19.9	9.7	8.8	11.0	-	
Large Cap - Gross	2,193,459,756	17.8	-2.0	15.3	24.2	10.8	9.9	11.7	7.2	Apr-98
Large Cap - Net			-2.1	15.2	23.9	10.5	9.7	11.5	7.0	Apr-98
Russell 1000 Index			-3.1	13.0	21.2	9.5	9.6	11.6	7.6	
Large Cap - Index	1,193,275,170	9.7	-3.1	13.0	21.2	9.6	9.7	11.6	11.3	Oct-08
Large Cap - Index			-3.1	13.0	21.2	9.5	9.6	11.6	11.2	Oct-08
Russell 1000 Index			-3.1	13.0	21.2	9.5	9.6	11.6	11.3	
AB - Gross	1,193,275,170	9.7	-3.1 (27)	13.0 (58)	21.2 (61)	9.6 (59)	9.7 (58)	11.6 (62)	10.2	May-89
AB - Net			-3.1	13.0	21.2	9.5	9.6	11.6	10.1	May-89
Russell 1000 Index			-3.1 (43)	13.0 (57)	21.2 (63)	9.5 (67)	9.6 (63)	11.6 (61)	10.3	May-89
eV US Passive Large Cap Equity Median			-3.2	13.0	21.6	10.0	9.9	11.9	-	•
Large Cap - Enhanced - Gross	336,153,857	2.7	-0.7	15.5	25.5	12.2	9.9		10.4	Aug-18
Large Cap - Enhanced - Net			-0.7	15.3	25.2	12.0	9.6		10.1	Aug-18
Russell 1000 Index			-3.1	13.0	21.2	9.5	9.6	-	10.1	
AQR US Enhanced Equity - Gross	336,153,857	2.7	-0.7 (3)	15.5 (7)	25.5 (5)	12.2 (10)	9.9 (28)	-	10.4	Aug-18
AQR US Enhanced Equity - Net	, , , , ,		-0.7	15.3	25.2	12.0	9.6	-	10.1	Aug-18
Russell 1000 Index			-3.1 (58)	13.0 (37)	21.2 (46)	9.5 (68)	9.6 (44)	-	10.1	Aug-18
eV US Enh Equity Median			-3.1	12.4	20.8	10.1	9.4	11.7	-	Ü

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	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Large Cap (130/30) - Gross	330,676,491	2.7	-2.0	13.4	22.1	11.0	10.0	12.3	12.0	Oct-08
Large Cap (130/30) - Net			-2.1	13.1	21.6	10.4	9.5	11.7	11.4	Oct-08
Russell 1000 Index			-3.1	13.0	21.2	9.5	9.6	11.6	11.3	
JP Morgan 130/30 - Gross	175,118,153	1.4	-1.9 (64)	16.5 (16)	26.5 (13)	12.1 (62)	12.0 (26)	13.3 (30)	12.5	Aug-08
JP Morgan 130/30 - Net			-2.0	16.0	25.7	11.4	11.4	12.6	11.7	Aug-08
Russell 1000 Index			-3.1 (91)	13.0 (34)	21.2 (40)	9.5 (88)	9.6 (52)	11.6 (76)	10.5	Aug-08
eV Extended US Equity Median			-1.3	10.4	18.3	14.2	9.8	12.6	-	
DE Shaw Broad Mkt Core Alpha Ext - Gross	155,558,338	1.3	-2.1 (71)	10.2 (56)	17.6 (57)	9.8 (87)	-	-	10.8	Feb-19
DE Shaw Broad Mkt Core Alpha Ext - Net			-2.1	10.0	17.3	9.5	-	-	10.5	Feb-19
Russell 1000 Index			-3.1 (91)	13.0 (34)	21.2 (40)	9.5 (88)	-	-	12.0	Feb-19
eV Extended US Equity Median			-1.3	10.4	18.3	14.2	9.8	12.6	-	
Large Cap Active - Gross	333,354,238	2.7	0.7	26.5	36.9	14.1	10.4	11.3	11.1	Oct-08
Large Cap Active - Net			0.5	25.9	35.9	13.3	9.6	10.5	10.4	Oct-08
Russell 1000			-3.1	13.0	21.2	9.5	10.0	10.4	9.9	
Eagle Capital - Gross	333,333,954	2.7	0.7 (1)	26.5 (1)	36.9 (1)	14.1 (3)	10.4 (25)	12.3 (20)	13.4	Mar-12
Eagle Capital - Net			0.5	25.9	35.9	13.3	9.6	11.4	12.6	Mar-12
Russell 1000 Index			-3.1 (56)	13.0 (28)	21.2 (36)	9.5 (56)	9.6 (42)	11.6 (45)	12.4	Mar-12
eV US Large Cap Core Equity Median			-3.1	9.7	19.8	9.7	9.3	11.5	-	
Small Cap - Gross	207,529,006	1.7	-6.0	3.0	10.8	4.3	3.8	7.9	11.1	Jan-91
Small Cap - Net			-6.2	2.3	9.9	3.6	3.1	7.2	10.4	Jan-91
Russell 2000 Index			-5.1	2.5	8.9	7.2	2.4	6.6	9.8	
Small Cap - Growth - Gross	90,065,228	0.7	-8.3	0.8	4.2	-4.6	3.0	8.4	10.2	Oct-08
Small Cap - Growth - Net			-8.3	0.0	3.3	-5.3	2.3	7.7	9.5	Oct-08
Russell 2000 Growth Index			-7.3	5.2	9.6	1.1	1.6	6.7	8.8	
Weatherbie - Gross	90,065,228	0.7	-8.3 (74)	0.8 (82)	4.2 (82)	-4.6 (92)	3.0 (77)	10.0 (31)	11.5	Jan-03
Weatherbie - Net			-8.3	0.0	3.3	-5.3	2.3	9.3	10.7	Jan-03
Russell 2000 Growth Index			-7.3 (64)	5.2 (52)	9.6 (58)	1.1 (64)	1.6 (89)	6.7 (95)	9.4	Jan-03
eV US Small Cap Growth Equity Median			-6.6	5.7	10.7	2.9	5.2	9.2	-	

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Small Cap - Value - Gross	117,463,778	1.0	-4.2	4.7	16.5	14.7	3.2	6.7	8.1	Oct-08
Small Cap - Value - Net			-4.4	4.0	15.6	13.9	2.6	6.0	7.3	Oct-08
Russell 2000 Value Index			-3.0	-0.5	7.8	13.3	2.6	6.2	7.2	
Snyder Capital Management - Gross	117,463,778	1.0	-4.2 (77)	4.7 (43)	16.5 (42)	-	-	-	3.9	Feb-21
Snyder Capital Management - Net			-4.4	4.0	15.6	-	-	-	3.2	Feb-21
Russell 2000 Value Index - Net			-3.0 (56)	-0.5 (86)	7.8 (93)	-	-	-	1.4	Feb-21
eV US Small Cap Value Equity Median			-2.5	3.6	15.3	16.2	5.3	7.9	-	
International Equity - Gross	1,992,685,452	16.1	-4.6 (67)	6.6 (51)	22.1 (52)	3.0 (79)	3.4 (57)	4.4 (45)	6.1	Jan-88
International Equity - Net			-4.7 (69)	6.2 (55)	21.6 (57)	2.5 (83)	2.8 (81)	3.9 (70)	5.7	Jan-88
MSCI AC World ex USA Index			-3.7 (38)	5.8 (60)	21.0 (65)	4.2 (54)	3.1 (69)	3.8 (73)	5.7	Jan-88
InvMetrics All DB Global ex-US Equity Median			-4.0	6.7	22.3	4.6	3.7	4.3	-	
International - Developed - Gross	1,434,379,184	11.6	-4.8 (61)	7.9 (25)	25.2 (20)	4.7 (48)	4.1 (41)	5.2 (29)	4.7	Apr-98
International - Developed - Net			-4.9 (64)	7.5 (26)	24.6 (23)	4.1 (49)	3.4 (61)	4.6 (53)	4.2	Apr-98
MSCI World ex U.S.			-4.0 (39)	7.3 (34)	24.7 (22)	6.6 (21)	4.0 (42)	4.4 (59)	4.7	Apr-98
InvMetrics All DB Developed Market ex-US Equity Median			-4.4	5.7	22.4	3.8	3.5	4.7	-	
Large Cap - Gross	1,245,803,258	10.1	-4.8 (59)	8.3 (39)	25.6 (47)	5.5 (55)	4.5 (42)	5.3 (31)	5.0	Jan-05
Large Cap - Net			-4.9 (60)	7.8 (45)	25.0 (53)	5.0 (59)	3.8 (60)	4.8 (50)	4.5	Jan-05
MSCI World ex U.S.			-4.0 (48)	7.3 (54)	24.7 (55)	6.6 (43)	4.0 (58)	4.4 (66)	5.0	Jan-05
eV EAFE Large Cap Equity Median			-4.1	7.4	25.3	5.9	4.2	4.8	-	
Lazard - Gross	309,930,418	2.5	-5.6 (62)	7.4 (35)	23.3 (35)	4.7 (40)	3.3 (61)	4.8 (55)	6.9	Jul-12
Lazard - Net			-5.7	7.0	22.7	4.3	2.9	4.5	6.6	Jul-12
MSCI World ex US Gross			-4.0 (44)	7.3 (36)	24.7 (27)	5.2 (36)	3.6 (52)	4.1 (74)	5.8	Jul-12
eV All ACWI ex-US Equity Median			-4.8	5.8	21.2	3.9	3.7	5.0	-	
Walter Scott & Partners Limited - Gross	449,975,336	3.6	-10.0 (79)	5.3 (23)	20.4 (35)	1.0 (39)	4.9 (34)	-	7.5	Apr-17
Walter Scott & Partners Limited - Net			-10.1	4.6	19.5	0.2	3.7	-	6.5	Apr-17
MSCI World ex U.S Growth			-8.2 (52)	4.7 (29)	19.7 (47)	0.8 (40)	3.7 (66)	-	5.7	Apr-17
eV EAFE Large Cap Growth Median			-8.1	3.7	19.5	0.4	4.4	5.3	-	
LSV - Gross	485,897,504	3.9	1.1 (8)	11.7 (29)	32.7 (31)	12.3 (33)	4.9 (44)	5.5 (18)	5.0	Jan-05
LSV - Net			1.0	11.3	32.2	11.9	4.5	5.0	4.5	Jan-05
MSCI World ex U.S. Value			0.3 (20)	9.9 (56)	29.9 (59)	12.4 (32)	3.8 (68)	3.7 (71)	4.5	Jan-05
eV EAFE Large Cap Value Median			-1.6	10.5	31.0	10.5	4.5	4.4	-	



	Market Value	% of Portfolio	3 Мо	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Small Cap - Gross	188,575,926	1.5	-4.7 (62)	2.3 (62)	18.4 (62)	-1.9 (82)	0.7 (69)	3.7 (88)	6.9	Oct-08
Small Cap - Net			-4.8	2.0	18.0	-2.6	0.0	3.0	6.0	Oct-08
MSCI World ex U.S. Small Cap Index			-3.4 (41)	2.3 (62)	17.9 (66)	2.3 (56)	1.7 (52)	4.6 (75)	6.8	Oct-08
eV EAFE Small Cap Equity Median			-3.8	3.7	20.3	2.9	2.0	5.5	-	
William Blair Dev Small Cap - Gross	91,056,880	0.7	-7.4 (83)	0.9 (77)	14.9 (74)	-4.3 (90)	1.1 (84)	3.8 (97)	7.1	Oct-08
William Blair Dev Small Cap - Net			-7.6	0.3	13.8	-5.2	0.2	2.9	6.1	Oct-08
MSCI World ex U.S. Small Cap Index			-3.4 (45)	2.3 (73)	17.9 (59)	2.3 (49)	1.7 (74)	4.6 (80)	6.8	Oct-08
eV ACWI ex-US Small Cap Equity Median			-3.8	4.6	19.5	1.8	3.4	6.0	-	
Acadian Asset Management - Gross	97,519,047	0.8	-2.0 (32)	-	-	-	-	-	-2.4	Apr-23
Acadian Asset Management - Net			-2.0 (33)	-	-	-	-	-	-2.5	Apr-23
MSCI AC World ex USA Small Value			0.5 (13)	7.1 (32)	23.2 (25)	9.0 (27)	3.4 (49)	4.7 (78)	6.7	Jun-94
eV ACWI ex-US Small Cap Equity Median			-4.0	4.2	19.3	0.9	2.6	5.2	-	
International - Emerging - Gross	558,302,276	4.5	-4.0	5.5	15.4	-2.4	1.4	2.1	5.3	Feb-00
International - Emerging - Net			-4.0	5.2	15.1	-2.7	1.1	1.8	4.9	Feb-00
MSCI Emerging Markets Index			-2.8	2.2	12.2	-1.3	0.9	2.5	5.7	
Arga Emg - Gross	186,543,301	1.5	-3.1 (50)	-	-	-	-	-	-0.9	Feb-23
Arga Emg - Net			-3.1	-	-	-	-	-	-1.2	Feb-23
MSCI Emerging Markets Index			-2.8 (45)	-	-	-	-	-	-5.3	Feb-23
eV Emg Mkts Equity Median			-3.1	4.0	14.6	0.4	2.4	3.5	-	
Baillie Gifford Emg All Cap - Gross	197,643,314	1.6	-4.5 (73)	6.2 (35)	18.4 (33)	-3.8 (83)	1.6 (64)	-	6.6	Apr-16
Baillie Gifford Emg All Cap - Net			-4.5	6.2	18.4	-3.8	1.6	-	6.6	Apr-16
MSCI Emerging Markets Index			-2.8 (45)	2.2 (64)	12.2 (65)	-1.3 (64)	0.9 (78)	-	4.7	Apr-16
eV Emg Mkts Equity Median			-3.1	4.0	14.6	0.4	2.4	3.5	-	
Oaktree Emg - Gross	171,439,606	1.4	-5.2 (85)	-	-	-	-	-	-9.4	Feb-23
Oaktree Emg - Net			-5.3	-	-	-	-	-	-9.8	Feb-23
MSCI Emerging Markets Index			-2.8 (45)	-	-	-	-	-	-5.3	Feb-23
eV Emg Mkts Equity Median			-3.1	4.0	14.6	0.4	2.4	3.5	-	

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Global/Unconstrained Equity - Gross	356,619,425	2.9	-4.7	3.8	10.3				-7.3	Apr-22
Global/Unconstrained Equity - Net			-4.7	3.8	10.3				-7.3	Apr-22
MSCI AC World IMI			-3.3 (28)	9.8 (26)	20.8 (64)	-	-	-	-3.3	Apr-22
InvMetrics All DB Global Equity Median			-4.0	8.7	21.5	6.6	6.4	5.7	-	
Artisan Partners Global Opp - Gross	120,527,473	1.0	-5.4	9.3	15.2	-	-	-	2.9	Sep-22
Artisan Partners Global Opp - Net			-5.4	9.3	15.2	-	-	-	2.9	Sep-22
MSCI ACWI IMI			-3.3	9.8	20.8	-	-	-	8.4	
Nikko Asset Management - Gross	117,360,000	1.0	-5.6	2.8	12.9	-	-	-	2.8	Sep-22
Nikko Asset Management - Net			-5.6	2.8	12.9	-	-	-	2.8	Sep-22
MSCI ACWI IMI			-3.3	9.8	20.8	-	-	-	8.4	·
Third Point Offshore Fund - Gross	46,086,627	0.4	-0.7	-3.2	-2.0	3.3	3.8	5.5	7.4	May-12
Third Point Offshore Fund - Net			-0.7	-3.2	-2.0	3.3	3.8	5.5	7.4	May-12
MSCI ACWI IMI			-3.3	9.8	20.8	7.4	6.6	7.9	8.8	,
Allspring Global Investments - Gross	72,645,325	0.6	-	-	-	-	-	-	-0.2	Sep-23
Allspring Global Investments - Net			-	-	-	-	-	-	-0.2	Sep-23
MSCI AC World IMI			-	-	-	-	-	-	0.0	·
Private Equity - Gross	1,669,224,305	13.5	0.6 (59)	1.6 (71)	1.2 (68)	20.2 (36)	18.3 (14)	16.9 (19)	7.0	Mar-08
Private Equity - Net			0.6	1.6	1.2	20.2	18.3	16.9	7.2	Mar-08
Cambridge Associates All PE 1 Qtr Lag			1.4 (42)	4.3 (46)	2.6 (58)	19.1 (43)	14.3 (45)	15.0 (31)	11.4	Jan-08
Russell 3000 +3% 1Q Lag			8.2 (2)	26.1 (1)	22.0 (1)	17.0 (63)	14.4 (45)	15.4 (30)	12.4	Mar-08
InvMetrics All DB Private Equity Median			0.9	4.0	3.5	18.7	13.7	13.5	-	
Abbott VI - Gross	25,947,267	0.2	2.4	0.1	-1.7	13.5	12.3	14.3	6.8	Aug-08
Abbott VI - Net			2.4	0.1	-1.7	13.5	12.3	14.3	-	Aug-08
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	12.4	
Accel-KKR V - Gross	26,789,578	0.2	2.2	6.7	7.7	29.6	26.8	-	22.9	Feb-17
Accel-KKR V - Net			2.2	6.7	7.7	29.6	26.8	-	22.9	Feb-17
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.6	
Accel-KKR VI - Gross	21,027,614	0.2	0.0	0.0	0.0	-	-	-	-22.5	Mar-21
Accel-KKR VI - Net			0.0	0.0	0.0	-	-	-	-22.5	Mar-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	18.0	
Accel-KKR Growth Partners II - Gross	10,000,425	0.1	1.1	5.6	4.1	43.6	35.2	-	17.4	Mar-15
Accel-KKR Growth Partners II - Net	, ,		1.1	5.6	4.1	43.6	35.2	-	17.4	Mar-15
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.4	

⁺ 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	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Accel-KKR Growth Partners III - Gross	31,011,484	0.3	1.6	6.1	4.9	16.3	-	-	3.9	Aug-19
Accel-KKR Growth Partners III - Net			1.6	6.1	4.9	16.3	-	-	3.9	Aug-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	15.6	
Accel-KKR Growth Partners IV - Gross	9,866,570	0.1	0.9	2.2	-2.5	-	-	-	-24.9	Jul-22
Accel-KKR Growth Partners IV - Net			0.9	2.2	-2.5	-	-	-	-24.9	Jul-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	-2.1	
Atalaya Special Opp V - Gross	465,305	0.0	4.7	-12.7	0.3	3.3	3.4	4.2	4.2	Aug-13
Atalaya Special Opp V - Net			4.7	-12.7	0.3	3.3	3.4	4.2	4.2	Aug-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	14.8	
Atalaya Special Opp VI - Gross	1,564,992	0.0	-5.6	-4.0	-0.9	9.8	11.6	-	10.1	May-16
Atalaya Special Opp VI - Net			-5.6	-4.0	-0.9	9.8	11.6	-	10.1	May-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.9	
Canvas Ventures III - Gross	14,133,839	0.1	0.1	-7.8	1.7	-	-	-	2.0	Dec-20
Canvas Ventures III - Net			0.1	-7.8	1.7	-	-	-	2.0	Dec-20
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	20.3	
Cortec Group Fund VII - Gross	26,271,279	0.2	4.1	18.9	18.5	27.1	-	-	26.3	Jan-20
Cortec Group Fund VII - Net			4.1	18.9	18.5	27.1	-	-	26.3	Jan-20
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	16.2	
Cortec Group Fund VIII - Gross	3,762,148	0.0	-7.3	-	-	-	-	-	-7.3	Apr-23
Cortec Group Fund VIII - Net			-7.3	-	-	-	-	-	-7.3	Apr-23
Cambridge Associates All PE 1 Qtr Lag			1.4	-	-	-	-	-	3.4	
CRV Select Fund I - Gross	17,844,539	0.1	3.7	-10.0	-8.8	-	-	-	0.5	Jun-21
CRV Select Fund I - Net			3.7	-10.0	-8.8	-	-	-	0.5	Jun-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	12.8	
CRV Select Fund II - Gross	5,249,200	0.0	6.2	-8.2	-0.8	-	-	-	-8.8	Apr-22
CRV Select Fund II - Net			6.2	-8.2	-0.8	-	-	-	-8.8	Apr-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	-2.2	
CRV XVIII LP - Gross	17,190,096	0.1	-2.1	-8.8	-10.2	-	-	-	2.5	Mar-21
CRV XVIII LP - Net			-2.1	-8.8	-10.2	-	-	-	2.5	Mar-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	18.0	
CRV XIX LP - Gross	5,278,955	0.0	-3.6	-14.6	-20.0	-	-	-	-21.6	Jul-22
CRV XIX LP - Net			-3.6	-14.6	-20.0	-	-	-	-21.6	Jul-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	-2.1	



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

** Cortec Group Fund VIII initial capital call 4/6/23.

Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Davidson Kempner LT Dist Opp IV - Gross	18,165,209	0.1	2.9	10.8	31.5	26.2	17.2	-	17.3	Apr-18
Davidson Kempner LT Dist Opp IV - Net			2.9	10.8	31.5	26.2	17.2	-	17.3	Apr-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.3	
Davidson Kempner LT Dist Opp V - Gross	31,561,881	0.3	1.2	5.9	4.3	16.4	-	-	14.5	Jun-20
Davidson Kempner LT Dist Opp V - Net			1.2	5.9	4.3	16.4	-	-	14.5	Jun-20
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	16.8	
Dyal Capital Partners II - Gross	39,083,192	0.3	5.3	12.0	21.1	30.7	14.1	-	4.8	Jan-15
Dyal Capital Partners II - Net			5.3	12.0	21.1	30.7	14.1	-	4.8	Jan-15
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.8	
Dyal Capital Partners III - Gross	29,858,342	0.2	2.1	15.1	23.2	32.2	23.0	-	24.3	Jan-17
Dyal Capital Partners III - Net			2.1	15.1	23.2	32.2	23.0	-	24.3	Jan-17
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.1	
Garrison Investment Group - Gross	2,025,388	0.0	-2.2	-5.1	94.3	51.2	23.7	11.1	10.6	Jun-12
Garrison Investment Group - Net	, ,		-2.2	-5.1	94.3	51.2	23.7	11.1	10.6	Jun-12
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.4	
Golden Capital Co Invest - Gross	14,053,174	0.1	-0.7	-4.5	-	-	-	-	-4.5	Nov-22
Golden Capital Co Invest - Net	, ,		-0.7	-4.5	-	-	-	-	-4.5	Nov-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	-	-	-	-	2.6	
Gridiron Capital Fund IV - Gross	52,170,306	0.4	1.1	5.5	9.1	35.4	-	-	31.3	Jun-20
Gridiron Capital Fund IV - Net			1.1	5.5	9.1	35.4	-	-	31.3	Jun-20
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	16.8	
Gridiron Capital Fund V - Gross	5,064,718	0.0	39.7	-	-	-	-	-	16.5	Feb-23
Gridiron Capital Fund V - Net	, ,		39.7	-	-	_	-	-	16.5	Feb-23
Cambridge Associates All PE 1 Qtr Lag			1.4	-	-	-	-	-	4.3	
Harbourvest VIII - Gross	2,835,019	0.0	-41.0	-43.0	-44.3	-5.0	-1.2	7.1	6.4	Jan-08
Harbourvest VIII - Net	, ,		-41.0	-43.0	-44.3	-5.0	-1.2	7.1	-	Jan-08
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	11.4	
Harbourvest Intl VI - Gross	5,711,429	0.0	-61.4	-60.2	-61.2	-20.2	-9.9	2.7	-8.7	Apr-09
Harbourvest Intl VI - Net	z,, . <u></u>		-61.4	-60.2	-61.2	-20.2	-9.9	2.7	-	Apr-09
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	16.1	
H.I.G. Bayside Loan III - Gross	3,811,813	0.0	-3.1	-4.0	-11.2	2.9	-1.3	4.5	2.9	Feb-13
H.I.G. Bayside Loan III - Net	3,5 / 1,0 10	0.0	-3.1	-4.0	-11.2	2.9	-1.3	4.5	2.9	Feb-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.7	. 55 10



Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Мо	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
H.I.G. Capital V - Gross	10,914,706	0.1	4.2	12.4	20.5	28.6	21.1	14.9	14.7	Aug-13
H.I.G. Capital V - Net			4.2	12.4	20.5	28.6	21.1	14.9	14.7	Aug-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	14.8	
H.I.G. Europe Capital II - Gross	10,055,848	0.1	-2.2	9.6	7.6	14.4	10.1	-	-15.7	Feb-14
H.I.G. Europe Capital II - Net			-2.2	9.6	7.6	14.4	10.1	-	-15.7	Feb-14
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.2	
Khosla IV - Gross	15,067,018	0.1	2.1	-7.0	-7.5	21.0	19.5	21.4	18.3	Aug-11
Khosla IV - Net			2.1	-7.0	-7.5	21.0	19.5	21.4	18.3	Aug-11
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	14.6	
Khosla V - Gross	39,247,134	0.3	2.7	-0.7	0.6	36.1	24.6	-	17.2	Dec-14
Khosla V - Net			2.7	-0.7	0.6	36.1	24.6	-	17.2	Dec-14
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.5	
Khosla VI - Gross	60,522,649	0.5	1.6	0.4	11.2	24.8	12.7	-	12.5	Sep-18
Khosla VI - Net			1.6	0.4	11.2	24.8	12.7	-	12.5	Sep-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.9	
Khosla VII - Gross	15,923,582	0.1	2.0	8.0	8.7	-	-	-	0.4	Feb-21
Khosla VII - Net			2.0	8.0	8.7	-	-	-	0.4	Feb-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	17.4	
Linden Capital III - Gross	26,047,924	0.2	-14.7	-27.1	-28.2	13.5	19.1	-	15.7	Jul-16
Linden Capital III - Net			-14.7	-27.1	-28.2	13.5	19.1	-	15.7	Jul-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.2	
Linden Capital Partners IV - Gross	49,250,367	0.4	2.0	7.7	10.0	25.7	15.4	-	15.4	Oct-18
Linden Capital Partners IV - Net			2.0	7.7	10.0	25.7	15.4	-	15.4	Oct-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.3	
Linden Capital Partners V - Gross	16,683,888	0.1	4.1	9.1	5.7	-	-	-	4.9	Aug-22
Linden Capital Partners V - Net			4.1	9.1	5.7	-	-	-	4.9	Aug-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	-2.2	
Marlin Equity IV - Gross	10,297,882	0.1	-3.1	0.7	-10.5	4.9	8.7	-	5.0	Dec-13
Marlin Equity IV - Net	,		-3.1	0.7	-10.5	4.9	8.7	-	5.0	Dec-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.9	
Marlin Equity V - Gross	33,769,275	0.3	2.3	8.5	8.2	24.2	23.7	-	19.3	Mar-18
Marlin Equity V - Net	,,		2.3	8.5	8.2	24.2	23.7	-	19.3	Mar-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.1	



Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Marlin Heritage - Gross	4,002,592	0.0	-10.6	-24.7	-28.3	-5.6	8.6	-	14.0	Aug-14
Marlin Heritage - Net			-10.6	-24.7	-28.3	-5.6	8.6	-	14.0	Aug-14
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.9	
Marlin Heritage II - Gross	10,929,855	0.1	-5.7	-8.8	-7.9	13.1	11.1	-	6.0	Nov-17
Marlin Heritage II - Net			-5.7	-8.8	-7.9	13.1	11.1	-	6.0	Nov-17
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.9	
Marlin Heritage III - Gross	3,671,457	0.0	0.2	-56.1	-	-	-	-	-56.1	Jan-23
Marlin Heritage III - Net			0.2	-56.1	-	-	-	-	-56.1	Jan-23
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	-	-	-	-	4.3	
Marlin Heritage Europe - Gross	19,223,046	0.2	3.8	19.0	16.4	27.9	29.6	-	22.7	Sep-17
Marlin Heritage Europe - Net			3.8	19.0	16.4	27.9	29.6	-	22.7	Sep-17
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.3	
New Enterprise 14 - Gross	36,100,481	0.3	2.2	-6.5	-5.4	11.2	11.2	15.4	12.6	Jun-12
New Enterprise 14 - Net			2.2	-6.5	-5.4	11.2	11.2	15.4	12.6	Jun-12
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.4	
New Enterprise 15 - Gross	28,873,767	0.2	-1.0	-7.0	-11.2	-0.7	3.3	-	8.2	May-15
New Enterprise 15 - Net			-1.0	-7.0	-11.2	-0.7	3.3	-	8.2	May-15
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.1	
New Enterprise 16 - Gross	38,188,668	0.3	2.4	-0.7	-2.4	6.5	10.2	-	6.5	Jun-17
New Enterprise 16 - Net			2.4	-0.7	-2.4	6.5	10.2	-	6.5	Jun-17
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.3	
New Enterprise 17 - Gross	20,581,977	0.2	-0.8	-5.3	-5.7	12.3	-	-	8.9	Aug-19
New Enterprise 17 - Net			-0.8	-5.3	-5.7	12.3	-	-	8.9	Aug-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	15.6	
Oaktree Power Opp Fund VI - Gross	14,980,626	0.1	9.7	15.8	12.4	-	-	-	3.5	Jun-22
Oaktree Power Opp Fund VI - Net			9.7	15.8	12.4	-	-	-	3.5	Jun-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	-2.5	
OrbiMed Private Investments VIII - Gross	9,760,874	0.1	10.9	10.7	16.9	-	-	-	3.2	Jan-21
OrbiMed Private Investments VIII - Net	, , .		10.9	10.7	16.9	-	-	-	3.2	Jan-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	16.8	
OrbiMed Private Investments IX - Gross	1,074,394	0.0	13.7	-27.2		=	-	-	-27.2	Dec-22
OrbiMed Private Investments IX - Net	1,21 1,001		13.7	-27.2		-	_	-	-27.2	Dec-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	_	_	-	_	2.6	200 22



Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Private Equity X - Gross	5,600,072	0.0	-56.2	-56.6	-57.9	-16.6	-10.7	0.7	-4.6	Jul-08
Private Equity X - Net			-56.2	-56.6	-57.9	-16.6	-10.7	0.7	-	Jul-08
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	12.7	
RCP Multi-Fund Feeder - Gross	82,194,278	0.7	2.5	9.1	12.6	24.5	-	-	11.3	Dec-18
RCP Multi-Fund Feeder - Net			2.5	9.1	12.6	24.5	-	-	11.3	Dec-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	14.8	
RRJ Capital Master Fund II - Gross	5,688,331	0.0	9.3	-15.1	-24.3	6.0	0.7	5.3	6.9	Jun-13
RRJ Capital Master Fund II - Net			9.3	-15.1	-24.3	6.0	0.7	5.3	6.9	Jun-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.3	
RRJ Capital Master Fund III - Gross	8,261,078	0.1	-17.2	-7.2	-3.9	-11.0	-6.4	-	-10.7	Jan-16
RRJ Capital Master Fund III - Net			-17.2	-7.2	-3.9	-11.0	-6.4	-	-10.7	Jan-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.4	
Shamrock Capital II - Gross	13,497,475	0.1	3.1	7.3	10.2	-75.5	-	-	-73.6	Aug-20
Shamrock Capital II - Net			3.1	7.3	10.2	-75.5	-	-	-73.6	Aug-20
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	21.2	
Shamrock Capital III - Gross	161,527	0.0	-99.9	-100.0	-	-	-	-	-100.0	Jan-23
Shamrock Capital III - Net			-99.9	-100.0	-	-	-	-	-100.0	Jan-23
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	-	-	-	-	4.3	
Shamrock Capital Growth Fund V - Gross	8,722,792	0.1	0.9	-2.1	-4.5	-	-	-	-31.9	Aug-21
Shamrock Capital Growth Fund V - Net			0.9	-2.1	-4.5	-	-	-	-31.9	Aug-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	8.9	
Sixth Street Opp Partners V - Gross	11,051,735	0.1	2.9	0.0	-2.2	-	-	-	-6.4	Jul-22
Sixth Street Opp Partners V - Net			2.9	0.0	-2.2	-	-	-	-6.4	Jul-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	-2.1	
Spectrum Equity VII - Gross	38,542,820	0.3	1.8	-0.1	-6.6	16.7	29.3	-	18.4	Jan-15
Spectrum Equity VII - Net	, ,		1.8	-0.1	-6.6	16.7	29.3	-	18.4	Jan-15
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.8	
Spectrum Equity Fund VIII - Gross	24,729,294	0.2	1.9	0.8	-5.0	41.7	0.9	-	-13.5	Jul-18
Spectrum Equity Fund VIII - Net	,,		1.9	0.8	-5.0	41.7	0.9	-	-13.5	Jul-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.4	
Spectrum Equity Fund IX - Gross	20,198,955	0.2	0.2	-4.0	-6.9	-10.1	-	-	-10.1	Oct-20
Spectrum Equity Fund IX - Net	23,.30,000	V. <u>-</u>	0.2	-4.0	-6.9	-10.1	_	_	-10.1	Oct-20
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	_	_	19.1	33, 20



Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Strategic Value Spl Fund V - Gross	17,407,994	0.1	4.8	13.4	7.5	-	-	-	8.8	Sep-21
Strategic Value Spl Fund V - Net			4.8	13.4	7.5	-	-	-	8.8	Sep-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	9.3	
Summit EUR Growth Equity II - Gross	44,354,688	0.4	7.9	21.5	32.6	56.7	47.4	-	71.5	Feb-18
Summit EUR Growth Equity II - Net			7.9	21.5	32.6	56.7	47.4	-	71.5	Feb-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.8	
Summit EUR Growth Equity III - Gross	18,403,566	0.1	8.9	12.4	1.6	-	-	-	-8.5	Feb-21
Summit EUR Growth Equity III - Net			8.9	12.4	1.6	-	-	-	-8.5	Feb-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	17.4	
Summit Ventures III - Gross	3,608,513	0.0	-1.6	13.6	19.3	12.3	14.4	15.8	13.4	Jul-12
Summit Ventures III - Net			-1.6	13.6	19.3	12.3	14.4	15.8	13.4	Jul-12
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.2	
Summit Ventures IV - Gross	53,518,377	0.4	0.9	-0.4	4.5	35.2	35.8	-	34.4	Jun-16
Summit Ventures IV - Net			0.9	-0.4	4.5	35.2	35.8	-	34.4	Jun-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	16.1	
Summit Ventures V - Gross	10,670,407	0.1	5.1	6.2	4.2	-	-	-	-2.4	Jun-21
Summit Ventures V - Net			5.1	6.2	4.2	-	-	-	-2.4	Jun-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	12.8	
Thoma Bravo XI - Gross	35,567,370	0.3	12.3	33.6	22.2	7.7	25.8	-	22.6	Jul-14
Thoma Bravo XI - Net			12.3	33.6	22.2	7.7	25.8	-	22.6	Jul-14
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.9	
Thoma Bravo XII - Gross	32,445,169	0.3	3.2	9.2	12.5	16.6	17.2	-	11.3	Jun-16
Thoma Bravo XII - Net			3.2	9.2	12.5	16.6	17.2	-	11.3	Jun-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	16.1	
Thoma Bravo XIII - Gross	71,783,661	0.6	6.0	14.0	9.3	22.9	-	-	26.0	Mar-19
Thoma Bravo XIII - Net			6.0	14.0	9.3	22.9	-	-	26.0	Mar-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	14.8	
Threshold Ventures III - Gross	23,016,745	0.2	-11.1	-18.9	-23.9	18.9	-	-	9.6	Nov-19
Threshold Ventures III - Net	-,,		-11.1	-18.9	-23.9	18.9	_	-	9.6	Nov-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	15.6	
Threshold Ventures IV - Gross	4,106,562	0.0	-4.7	-23.6	-90.1	-	<u>-</u>	-	-84.2	Jul-22
Threshold Ventures IV - Net	.,.00,002		-4.7	-23.6	-90.1	_	_	_	-84.2	Jul-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	_	_	_	-2.1	Vui LL



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
TPG Opp Partners III - Gross	7,055,386	0.1	0.3	-4.1	-4.5	6.0	4.8	-	-6.9	Apr-14
TPG Opp Partners III - Net			0.3	-4.1	-4.5	6.0	4.8	-	-6.9	Apr-14
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.8	
Trinity Ventures XI - Gross	44,481,208	0.4	1.2	-6.7	-16.0	10.7	9.5	8.9	6.7	May-13
Trinity Ventures XI - Net			1.2	-6.7	-16.0	10.7	9.5	8.9	6.7	May-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.3	
Trinity Ventures XII - Gross	49,553,177	0.4	5.6	-18.2	-26.3	16.8	22.8	-	17.9	May-16
Trinity Ventures XII - Net			5.6	-18.2	-26.3	16.8	22.8	-	17.9	May-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.9	
TSG7 A LP - Gross	17,491,644	0.1	-8.7	-2.9	-11.9	24.7	17.7	-	-181.5	Apr-16
TSG7 A LP - Net			-8.7	-2.9	-11.9	24.7	17.7	-	-181.5	Apr-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.9	
TSG7 B LP - Gross	4,087,799	0.0	-3.5	-6.2	-4.2	15.9	9.5	-	-4.3	Feb-16
TSG7 B LP - Net			-3.5	-6.2	-4.2	15.9	9.5	-	-4.3	Feb-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.5	
TSG8 LP - Gross	38,745,323	0.3	1.4	7.9	4.7	10.7	-	-	-64.1	Feb-19
TSG8 LP - Net			1.4	7.9	4.7	10.7	-	-	-64.1	Feb-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	14.6	
TSG9 LP - Gross	5,088,831	0.0	-4.4	-	-	-	-	-	-37.8	Feb-23
TSG9 LP - Net			-4.4	-	-	-	-	-	-37.8	Feb-23
Cambridge Associates All PE 1 Qtr Lag			1.4	-	-	-	-	-	4.3	
TSSP Opportunities Partners IV - Gross	29,937,059	0.2	3.5	6.6	8.3	15.3	-	-	11.7	Feb-19
TSSP Opportunities Partners IV - Net			3.5	6.6	8.3	15.3	-	-	11.7	Feb-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	14.6	
Waterland V - Gross	1,038,975	0.0	-0.8	-10.8	-18.3	24.2	22.8	43.6	22.2	Sep-11
Waterland V - Net			-0.8	-10.8	-18.3	24.2	22.8	43.6	22.2	Sep-11
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	14.9	
Waterland VI - Gross	21,980,940	0.2	-1.0	19.0	4.1	22.7	24.4	-	7.2	Aug-15
Waterland VI - Net	,,.		-1.0	19.0	4.1	22.7	24.4	-	7.2	Aug-15
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.7	
Wayzata Opportunities III - Gross	3,513,318	0.0	-2.4	12.7	33.2	10.8	5.1	0.8	-0.8	Mar-13
Wayzata Opportunities III - Net	3,310,010	0.0	-2.4	12.7	33.2	10.8	5.1	0.8	-0.8	Mar-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.8	



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Wynnchurch Capital Partners V - Gross	16.833.049	0.1	-1.3	0.8	0.5	1.0	-	-	-4.4	May-20
Wynnchurch Capital Partners V - Net	.,,		-1.3	0.8	0.5	1.0	-	-	-4.4	May-20
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	16.3	,
Public Credit - Gross	216,076,078	1.8	2.1	8.2	7.4	5.9	3.5		4.2	Dec-13
Public Credit - Net			2.1	8.2	7.4	5.9	3.5		4.2	Dec-13
Brigade Custom			1.9	7.9	11.4	3.9	3.6	-	4.1	
Brigade Capital - Gross	216,076,078	1.8	2.1 (3)	8.2 (4)	7.4 (92)	5.9 (2)	3.5 (20)	-	4.2	Dec-13
Brigade Capital - Net			2.1 (3)	8.2 (4)	7.4 (92)	5.9 (2)	3.5 (20)	-	4.2	Dec-13
Brigade Custom			1.9 (5)	7.9 (5)	11.4 (10)	3.9 (11)	3.6 (16)	-	4.1	Dec-13
eV US High Yield Fixed Inc Median			0.6	5.4	9.5	1.9	2.9	3.9	-	
Private Credit - Gross	401,520,991	3.3	2.1	7.7	9.2	10.8	8.5	8.4	7.7	Nov-11
Private Credit - Net			2.1	7.7	9.2	10.8	8.5	8.4	7.7	Nov-11
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	6.2	6.5	
Ares Capital Europe Fund V - Gross	31,210,254	0.3	2.1	9.5	10.8	-	-	-	12.3	Aug-2
Ares Capital Europe Fund V - Net			2.1	9.5	10.8	-	-	-	12.3	Aug-2
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	-	-	-	5.8	·
Athyrium Opp II - Gross	6,819,768	0.1	2.8	17.5	16.1	6.5	8.6	-	7.3	Jul-1
Athyrium Opp II - Net			2.8	17.5	16.1	6.5	8.6	-	7.3	Jul-1
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	-	6.2	
Athyrium Opp III - Gross	7,918,509	0.1	4.3	10.9	7.0	-1.0	1.8	-	-0.1	Jun-1
Athyrium Opp III - Net			4.3	10.9	7.0	-1.0	1.8	-	-0.1	Jun-1
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	-	6.1	
Benefit St Pr Sr Secure Opp - Gross	26,563,670	0.2	2.4	7.5	8.4	9.6	6.1	-	6.0	Feb-1
Benefit St Pr Sr Secure Opp - Net			2.4	7.5	8.4	9.6	6.1	-	6.0	Feb-1
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	-	6.1	
Benefit St Pr Sr Secure Opp II - Gross	36,872,911	0.3	3.2	9.0	11.8	7.2	-	-	8.8	Jan-2
Benefit St Pr Sr Secure Opp II - Net			3.2	9.0	11.8	7.2	-	-	8.8	Jan-2
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	-	-	6.1	
IFM US Infrastructure DB FD LP - Gross	36,927,552	0.3	0.7	7.4	9.2	-	-	-	7.6	Apr-2
IFM US Infrastructure DB FD LP - Net			0.7	7.4	9.2	-	-	-	7.6	Apr-2
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	-	-	-	6.3	
MCP Private Capital IV - Gross	25,842,093	0.2	7.1	22.7	23.3	4.9	-	-	5.1	May-20
MCP Private Capital IV - Net			7.1	22.7	23.3	4.9	-	-	5.1	May-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	-	-	5.8	

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



^{**}Private Credit returns are lagged one quarter.

Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
OrbiMed Royalty & Credit Opp III - Gross	16,907,604	0.1	2.7	8.1	11.5	25.3	-	-	16.5	Oct-19
OrbiMed Royalty & Credit Opp III - Net			2.7	8.1	11.5	25.3	-	-	16.5	Oct-19
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	-	-	6.1	
OrbiMed Royalty & Credit Opp IV - Gross	7,016,621	0.1	1.3	6.3	8.5	-	-	-	8.5	Oct-22
OrbiMed Royalty & Credit Opp IV - Net			1.3	6.3	8.5	-	-	-	8.5	Oct-22
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	-	-	-	12.3	
Shamrock Capital Debt Fund I - Gross	9,696,067	0.1	1.2	3.0	4.5	-	-	-	-44.5	Aug-21
Shamrock Capital Debt Fund I - Net			1.2	3.0	4.5	-	-	-	-44.5	Aug-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	-	-	-	5.8	
Silver Point Specialty Credit Fund II - Gross	31,162,715	0.3	2.7	9.1	12.7	14.0	-	-	13.3	Aug-20
Silver Point Specialty Credit Fund II - Net			2.7	9.1	12.7	14.0	-	-	13.3	Aug-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	-	-	9.7	
Silver Point Specialty Credit Fund III - Gross	8,957,074	0.1	1.8	-	-	-	-	-	-1.9	Apr-23
Silver Point Specialty Credit Fund III - Net			1.8	-	-	-	-	-	-1.9	Apr-23
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	-	-	-	-	-	7.4	
Summit Credit - Gross	236,935	0.0	-27.8	-5.5	-5.4	4.2	0.5	5.2	5.0	Nov-11
Summit Credit - Net			-27.8	-5.5	-5.4	4.2	0.5	5.2	5.0	Nov-11
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	6.2	6.5	
Summit Credit II - Gross	10,600,986	0.1	-7.5	-5.0	-6.0	3.6	2.8	-	4.6	Dec-14
Summit Credit II - Net			-7.5	-5.0	-6.0	3.6	2.8	-	4.6	Dec-14
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	-	6.0	
Summit Credit III - Gross	16,490,006	0.1	-3.0	-2.1	-0.5	15.1	-	-	13.3	Nov-18
Summit Credit III - Net			-3.0	-2.1	-0.5	15.1	-	-	13.3	Nov-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	-	-	6.0	
Summit Credit IV - Gross	14,630,385	0.1	3.2	13.4	16.2	-	-	-	10.6	Dec-21
Summit Credit IV - Net			3.2	13.4	16.2	-	-	-	10.6	Dec-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	-	-	-	5.6	
TCP Direct Lending VIII - Gross	113,667,840	0.9	2.6	5.7	7.4	10.2	8.2	-	7.3	Mar-18
TCP Direct Lending VIII - Net			2.6	5.7	7.4	10.2	8.2	-	7.3	Mar-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	-	6.2	



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Growth Oriented Absolute Return - Gross	7,772,946	0.1	0.4	1.4	1.2	4.5	3.3	4.1	4.6	Sep-04
Growth Oriented Absolute Return - Net			0.4	1.4	1.2	4.5	3.3	4.1	4.6	Sep-04
HFRI FoF Composite Index + 1%			0.8	3.6	5.7	4.8	4.4	4.8	5.7	
Grosvenor SCARF Growth - Gross	7,772,946	0.1	0.4 (37)	1.0 (88)	0.8 (91)	1.7 (93)	1.4 (94)	3.0 (100)	4.3	Dec-11
Grosvenor SCARF Growth - Net			0.4	1.0	0.8	1.7	1.4	3.0	4.3	Dec-11
HFRI FoF Composite Index + 1%			0.8 (29)	3.6 (49)	5.7 (73)	4.8 (67)	4.4 (65)	4.8 (64)	4.9	Dec-11
eV Alt Fund of Funds - Multi-Strategy Median			-0.3	3.4	9.9	7.8	5.7	5.4	-	
Diversifying Asset Category - Gross	2,759,531,529	22.4	-1.5	1.1	2.3	-1.2	1.7		1.7	Apr-17
Diversifying Asset Category - Net			-1.5	1.0	2.2	-1.3	1.6		1.6	Apr-17
Diversifying Custom			-1.6	0.3	1.9	-2.2	1.2	-	1.3	
Fixed Income - Gross	1,693,244,418	13.7	-3.7	-0.8	0.7	-4.9	0.6	1.6	1.9	Jul-11
Fixed Income - Net	1,693,244,418	13.7	-3.7	-1.0	0.6	-5.0	0.4	1.5	1.7	Jul-11
Fixed Income Custom			-2.6	-0.3	1.5	-4.6	0.3	-	-	
Core/Core Plus Fixed Income - Gross	1,295,091,508	10.5	-3.9	-0.7	1.2	-4.5	8.0	1.7	2.0	Jul-11
Core/Core Plus Fixed Income - Net			-3.9	-0.9	1.0	-4.7	0.7	1.6	1.8	Jul-11
Blmbg. U.S. Aggregate Index			-3.2	-1.2	0.6	-5.2	0.1	1.1	1.5	
Prudential - Gross	325,891,537	2.6	-2.3 (15)	0.9 (8)	2.8 (10)	-4.2 (23)	0.9 (29)	-	2.1	Aug-14
Prudential - Net			-2.4	0.7	2.6	-4.4	0.7	-	1.9	Aug-14
Blmbg. U.S. Aggregate Index			-3.2 (76)	-1.2 (86)	0.6 (83)	-5.2 (92)	0.1 (95)	-	0.8	Aug-14
eV US Core Fixed Inc Median			-3.0	-0.6	1.2	-4.7	0.6	1.6	-	
TCW MetWest Fixed - Gross	323,793,116	2.6	-3.6 (95)	-0.9 (73)	1.1 (66)	-4.6 (45)	0.9 (31)	1.7 (38)	4.6	Jan-02
TCW MetWest Fixed - Net			-3.7	-1.1	0.8	-4.8	0.7	1.5	4.4	Jan-02
Blmbg. U.S. Aggregate Index			-3.2 (76)	-1.2 (86)	0.6 (83)	-5.2 (92)	0.1 (95)	1.1 (98)	3.3	Jan-02
eV US Core Fixed Inc Median			-3.0	-0.6	1.2	-4.7	0.6	1.6	-	
Brandywine US FI - Gross	314,583,070	2.5	-5.4 (100)	-2.4 (99)	-2.0 (100)	-	-	-	-5.7	Jun-22
Brandywine US FI - Net			-5.5	-2.7	-2.2	-	-	-	-5.9	Jun-22
Blmbg. U.S. Aggregate Index			-3.2 (80)	-1.2 (94)	0.6 (91)	-	-	-	-4.3	Jun-22
eV US Core Plus Fixed Inc Median			-2.9	-0.4	1.6	-4.4	0.6	1.7	-	
Reams Core Plus FI - Gross	330,823,785	2.7	-4.0 (98)	-0.3 (60)	3.0 (22)	-	-	-	-2.5	Jun-22
Reams Core Plus FI - Net			-4.1	-0.4	2.8	-	-	-	-2.6	Jun-22
Blmbg. U.S. Aggregate Index			-3.2 (80)	-1.2 (94)	0.6 (91)	-	-	-	-4.3	Jun-22
eV US Core Plus Fixed Inc Median			-2.9	-0.1	2.0	-4.1	1.0	2.1	-	



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
U.S. Treasury - Gross	398,152,911	3.2	-3.0	-1.2	-0.8	-5.7	0.0		0.1	Mar-18
U.S. Treasury - Net			-3.0	-1.3	-0.8	-5.7	0.0		0.1	Mar-18
Blmbg. U.S. Treasury Index			-3.1	-1.5	-0.8	-5.8	-0.1	-	0.0	
Neuberger Berman - Gross	398,152,911	3.2	-3.0 (66)	-1.2 (56)	-0.8 (75)	-5.7 (79)	0.0 (73)	1.2 (28)	5.4	Jul-88
Neuberger Berman - Net			-3.0	-1.3	-0.8	-5.7	0.0	1.1	5.4	Jul-88
Blmbg. U.S. Government			-3.0 (66)	-1.4 (61)	-0.7 (75)	-5.7 (80)	0.0 (74)	0.7 (91)	4.9	Jul-88
eV US Government Fixed Inc Median			-2.8	-1.0	-0.1	-4.9	0.3	1.1	-	
Absolute Return - Gross	816,134,556	6.6	2.3	4.5	4.7	5.8	3.7	2.7	2.8	Dec-11
Absolute Return - Net			2.3	4.5	4.7	5.8	3.7	2.7	2.8	Dec-11
HFRI FoF Conservative Index			1.5	3.5	5.0	5.7	4.1	4.5	4.6	
Aristeia Partners LP - Gross	52,145,945	0.4	2.1 (12)	6.1 (5)	5.3 (83)	-	-	-	5.5	Jan-21
Aristeia Partners LP - Net			2.1	6.1	5.3	-	-	-	5.5	Jan-21
HFRI FoF Conservative Index			1.5 (15)	3.5 (19)	5.0 (85)	-	-	-	4.0	Jan-21
eV Alt Relative Value - Multi-Market Arbitrage Median			-0.8	2.8	9.6	3.4	0.9	2.1	-	
BlackRock Event Driven Equity Fund - Gross	54,616,758	0.4	1.5 (35)	1.7 (84)	3.4 (93)	2.4 (83)	-	-	2.7	Mar-20
BlackRock Event Driven Equity Fund - Net			1.5	1.7	3.4	2.4	-	-	2.7	Mar-20
HFRI FoF Conservative Index			1.5 (35)	3.5 (67)	5.0 (86)	5.7 (70)	-	-	5.0	Mar-20
eV Alt All Event Driven Median			0.9	5.1	8.0	7.2	5.7	7.4	-	
Davidson Kempner Instl Partners LP - Gross	60,511,590	0.5	1.5 (33)	3.7 (56)	5.6 (56)	5.0 (51)	-	-	4.6	May-19
Davidson Kempner Instl Partners LP - Net			1.5	3.7	5.6	5.0	-	-	4.6	May-19
HFRI FoF Conservative Index			1.5 (33)	3.5 (58)	5.0 (57)	5.7 (51)	-	-	4.4	<i>May-19</i>
eV Alt All Multi-Strategy Median			0.4	4.4	6.5	5.7	4.9	4.3	-	
Elliott Associates - Gross	81,857,184	0.7	1.9 (33)	5.0 (52)	4.1 (91)	9.1 (35)	8.6 (7)	7.6 (33)	8.0	May-12
Elliott Associates - Net			1.9	5.0	4.1	9.1	8.6	7.6	8.0	May-12
HFRI FoF Conservative Index			1.5 (35)	3.5 (67)	5.0 (86)	5.7 (70)	4.1 (61)	4.5 (100)	4.6	Jan-11
eV Alt All Event Driven Median			0.9	5.1	8.0	7.2	5.7	7.4	-	
Graham Global Inv II - Gross	51,647,590	0.4	3.8 (18)	3.8 (38)	-1.3 (73)	15.5 (13)	8.5 (31)	-	6.3	Mar-17
Graham Global Inv II - Net			3.8	3.8	-1.3	15.5	8.5	-	6.3	Mar-17
HFRI FoF Conservative Index			1.5 (42)	3.5 (40)	5.0 (53)	5.7 (75)	4.1 (86)	-	4.1	Mar-17
eV Alt All Managed Futures Median			-0.3	1.5	6.1	11.2	5.9	3.4	-	
Grosvenor SCARF Diversifying - Gross	232,699,993	1.9	2.0 (20)	4.9 (40)	6.9 (60)	4.8 (67)	4.4 (65)	2.3 (100)	2.7	Dec-11
Grosvenor SCARF Diversifying - Net			2.0	4.9	6.9	4.8	4.4	2.3	2.7	Dec-11
HFRI FoF Conservative Index			1.5 (25)	3.5 (50)	5.0 (87)	5.7 (63)	4.1 (67)	4.5 (80)	4.6	Dec-11
eV Alt Fund of Funds - Multi-Strategy Median			-0.3	3.4	9.9	7.8	5.7	5.4	-	



Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Laurion Capital - Gross	60,689,468	0.5	2.1 (15)	4.9 (59)	5.7 (74)	7.6 (56)	9.2 (35)	-	7.7	Mar-14
Laurion Capital - Net			2.1	4.9	5.7	7.6	9.2	-	7.7	Mar-14
HFRI FoF Conservative Index			1.5 (25)	3.5 (72)	5.0 (76)	5.7 (67)	4.1 (78)	-	4.5	Mar-14
eV Alt Relative Value - Equity Relative Value Median			0.6	5.7	11.9	8.5	7.0	-	-	
LMR Fund LTD - Gross	56,063,713	0.5	3.0 (21)	4.0 (54)	8.1 (42)	11.1 (22)	-	-	5.8	Nov-19
LMR Fund LTD - Net			3.0	4.0	8.1	11.1	-	-	5.8	Nov-19
HFRI FoF Conservative Index			1.5 (33)	3.5 (58)	5.0 (57)	5.7 (51)	-	-	4.9	Nov-19
eV Alt All Multi-Strategy Median			0.4	4.4	6.5	5.7	4.9	4.3	-	
MW Global Opportunities Fund - Gross	58,741,817	0.5	2.3 (22)	6.5 (40)	6.6 (69)	4.6 (65)	-	-	6.1	Jan-19
MW Global Opportunities Fund - Net			2.3	6.5	6.6	4.6	-	-	6.1	Jan-19
HFRI FoF Conservative Index			1.5 (25)	3.5 (56)	5.0 (78)	5.7 (62)	-	-	5.0	Jan-19
eV Alt Fundamental - Long/Short Equity Median			-1.7	4.8	14.0	8.1	7.9	8.1	-	
PSquared Event Driven Opp Fund - Gross	55,029,218	0.4	4.8 (18)	1.0 (89)	-0.3 (100)	3.3 (81)	-	-	3.1	Aug-20
PSquared Event Driven Opp Fund - Net			4.8	1.0	-0.3	3.3	-	-	3.1	Aug-20
HFRI FoF Conservative Index			1.5 (35)	3.5 (67)	5.0 (86)	5.7 (70)	4.1 (61)	4.5 (100)	4.6	Jan-11
eV Alt All Event Driven Median			0.9	5.1	8.0	7.2	5.7	7.4	-	
Sculptor Domestic II - Gross	1,223,787	0.0	0.0 (57)	4.8 (48)	6.4 (53)	1.1 (74)	4.9 (52)	5.1 (36)	6.3	Jan-12
Sculptor Domestic II - Net			0.0	4.8	6.4	1.1	4.9	5.1	6.3	Jan-12
HFRI FoF Conservative Index			1.5 (33)	3.5 (58)	5.0 (57)	5.7 (51)	4.1 (61)	4.5 (41)	4.6	Jan-12
eV Alt All Multi-Strategy Median			0.4	4.4	6.5	5.7	4.9	4.3	-	
Tudor BVI Global Fund - Gross	50,907,493	0.4	1.8	1.8	-	-	-	-	1.8	Jan-23
Tudor BVI Global Fund - Net			1.8	1.8	-	-	-	-	1.8	Jan-23
HFRI FOF Conservative Index			1.5	3.5	-	-	-	-	3.5	

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Dedicated Cash Allocation - Gross	250,152,555	2.0	1.4	3.8	4.8	1.8			1.6	Jul-19
Dedicated Cash Allocation - Net			1.4	3.8	4.8	1.8			1.6	Jul-19
Secured Overnight Financing Rate			1.3	3.8	4.7	1.8	-	-	1.7	
Real Return Asset Category - Gross	2,000,158,537	16.2	-0.7	-1.0	-2.3	10.5	7.3		8.4	Apr-17
Real Return Asset Category - Net			-0.7	-1.0	-2.4	10.4	7.1		8.3	Apr-17
Real Return Custom			-0.8	-1.7	-2.6	10.1	6.1	-	6.5	
Real Estate - Gross	932,078,391	7.6	-2.9 (92)	-6.9 (72)	-11.6 (79)	8.0 (51)	7.0 (29)	9.2 (15)	9.9	Jul-11
Real Estate - Net			-2.9	-7.0	-11.7	7.9	6.8	8.7	9.3	Jul-11
Real Estate Custom			-2.2 (80)	-8.0 (78)	-11.3 (77)	7.6 (53)	6.1 (49)	8.0 (55)	8.6	Jul-11
InvMetrics All DB Real Estate Private Median			-1.1	-4.6	-7.6	8.2	5.9	8.2	-	
Core RE - Limited Partnership - Gross	653,549,859	5.3	-1.7	-8.5	-13.5	9.0	7.7	9.8	5.9	Oct-08
Core RE - Limited Partnership - Net			-1.7	-8.6	-13.7	8.8	7.5	9.4	5.4	Oct-08
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	8.2	5.6	
Brookfield Premier RE Partners - Gross	108,400,832	0.9	-4.9	-13.1	-19.5	6.1	5.7	-	5.7	Oct-18
Brookfield Premier RE Partners - Net			-4.9	-13.1	-19.5	6.1	5.7	-	5.7	Oct-18
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	-	5.7	
Clarion Lion Properties - Gross*	116,226,485	0.9	0.0	-10.7	-15.3	7.2	6.2	-	6.2	Oct-18
Clarion Lion Properties - Net*			0.0	-11.1	-15.9	6.4	5.4	-	5.4	Oct-18
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	-	5.7	
Metlife Core Property - Gross	81,032,129	0.7	-0.2	-7.4	-12.3	9.5	7.5	-	9.7	Jan-14
Metlife Core Property - Net	, ,		-0.2	-7.6	-12.6	9.0	7.0	-	9.2	Jan-14
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	-	8.0	
Principal US Property - Gross	56,875,140	0.5	-3.9	-8.8	-14.4	5.8	4.7	-	6.3	Nov-15
Principal US Property - Net	,,		-3.9	-8.8	-14.4	5.8	4.7	_	6.3	Nov-15
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	-	6.7	
Prologis Targeted Euro Logistics - Gross	60,513,874	0.5	-2.1	-4.1	-10.3	3.0	6.3	-	8.7	Nov-15
Prologis Targeted Euro Logistics - Net	,-,-,-,-		-2.1	-4.1	-10.3	3.0	6.3	_	8.7	Nov-1
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	_	6.7	
Prologis Targeted US Logistics - Gross	77,316,361	0.6	-2.2	-6.1	-11.0	18.5	15.8	-	16.4	Aug-1
Prologis Targeted US Logistics - Net	17,510,001	0.0	-2.2	-6.1	-11.0	18.5	15.8	_	16.4	Aug-1
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	_	7.0	, lug II
Townsend Real Estate - Gross*	153,185,039	1.2	0.0	-7.7	-11.1	10.0	7.8	-	8.6	Apr-16
Townsend Real Estate - Net*	100,100,000	1.4	0.0	-7.7 -7.7	-11.1	10.0	7.8	-	8.6	Apr-16
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7		6.5	7 tp1-10

*Value as of 6/30/2023.



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Non-Core RE - Opportunistic - Gross	164,121,800	1.3	-9.3	-6.4	-11.0	5.0	3.2		13.4	Mar-14
Non-Core RE - Opportunistic - Net			-9.3	-6.4	-11.0	5.0	3.2		12.9	Mar-14
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.8	
Carlyle China Realty - Gross	6,873,202	0.1	-14.0	-19.9	-21.5	-5.7	-3.5	-	-4.9	Jul-17
Carlyle China Realty - Net			-14.0	-19.9	-21.5	-5.7	-3.5	-	-4.9	Jul-17
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	7.0	
Carlyle China Rome Logistics - Gross	30,407,867	0.2	-14.2	-19.8	-21.3	-5.3	-4.5	-	-4.4	Jul-17
Carlyle China Rome Logistics - Net			-14.2	-19.8	-21.3	-5.3	-4.5	-	-4.4	Jul-17
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	7.0	
CIM Opportunity VIII - Gross	23,619,508	0.2	-4.3	-18.0	-19.7	-11.3	-8.7	-	-2.4	Mar-15
CIM Opportunity VIII - Net			-4.3	-18.0	-19.7	-11.3	-8.7	-	-3.0	Mar-15
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.4	
Kohlberg Kravis Roberts - Gross	1,583,715	0.0	-0.2	-10.6	-9.7	-7.1	-8.8	-	-0.3	Mar-14
Kohlberg Kravis Roberts - Net			-0.2	-10.6	-9.7	-7.1	-8.8	-	-0.5	Mar-14
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.8	
Lasalle China Logistics Venture LP - Gross	5,536,758	0.0	-3.8	-0.5	-13.7	-	-	-	-25.5	Oct-21
Lasalle China Logistics Venture LP - Net			-3.8	-0.5	-13.7	-	-	-	-25.5	Oct-21
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	-	-	-	8.0	
NREP Nordic Strat II - Gross	16,744,651	0.1	-10.1	13.9	1.6	23.2	17.2	-	17.6	Jul-16
NREP Nordic Strat II - Net			-10.1	13.9	1.6	23.2	17.2	-	17.6	Jul-16
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	7.2	
NREP Nordic Strat III - Gross	33,602,958	0.3	-12.2	4.1	-5.1	12.9	5.3	-	5.1	Aug-18
NREP Nordic Strat III - Net			-12.2	4.1	-5.1	12.9	5.3	-	5.1	Aug-18
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	6.8	
NREP Nordic Strat IV - Gross	18,617,857	0.2	-12.4	-2.0	-9.7	10.3	-	-	9.7	Aug-20
NREP Nordic Strat IV - Net			-12.4	-2.0	-9.7	10.3	-	-	9.7	Aug-20
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	-	-	7.2	
NREP Nordic Strat V - Gross	6,880,843	0.1	-8.1	-25.8	-	-	-	-	-25.8	Nov-22
NREP Nordic Strat V - Net			-8.1	-25.8	-	-	-	-	-25.8	Nov-22
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-	-	-	-	-9.4	
Sculptor Real Estate Fund III - Gross	4,089,913	0.0	1.8	21.7	29.8	41.4	27.8	-	17.6	Oct-14
Sculptor Real Estate Fund III - Net			1.8	21.7	29.8	41.4	27.8	-	15.1	Oct-14
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.3	

See Policy Index and Benchmark History

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



^{*} Non-Core RE returns are lagged one quarter.

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Sculptor Real Estate Fund IV - Gross	16,164,528	0.1	2.6	6.6	7.0	12.0	-	-	5.6	Jul-20
Sculptor Real Estate Fund IV - Net			2.6	6.6	7.0	12.0	-	-	5.6	Jul-20
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	-	-	7.0	
Non-Core RE - Value Added - Gross	114,406,733	0.9	-1.2	5.4	3.0	4.5	7.1	9.1	0.9	Oct-08
Non-Core RE - Value Added - Net			-1.2	5.4	3.0	4.5	7.1	8.7	0.0	Oct-08
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	9.0	7.5	
Asana Partners Fund II - Gross	30,929,903	0.3	-2.5	3.9	2.7	14.5	-	-	-175.2	May-19
Asana Partners Fund II - Net			-2.5	3.9	2.7	14.5	-	-	-175.2	May-19
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	-	-	6.6	
Asana Partners Fund III - Gross	11,541,098	0.1	-8.2	-3.9	-13.7	-	-	-	-18.0	May-22
Asana Partners Fund III - Net			-8.2	-3.9	-13.7	-	-	-	-18.0	May-22
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	-	-	-	1.3	
ECE Euro Prime Shopping II - Gross	34,814,253	0.3	0.3	15.4	8.5	0.3	1.7	-	7.9	Aug-15
ECE Euro Prime Shopping II - Net			0.3	15.4	8.5	0.3	1.7	-	7.4	Aug-15
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.2	
European RE Debt II - Gross*	450,254	0.0	0.0	-55.9	-59.1	-47.4	-31.4	-	-15.2	Dec-13
European RE Debt II - Net*			0.0	-55.9	-59.1	-47.4	-31.4	-	-15.2	Dec-13
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	9.2	
Hammes II - Gross	3,148,951	0.0	3.6	7.3	7.4	145.8	120.9	-	72.0	Aug-15
Hammes II - Net			3.6	7.3	7.4	145.8	120.9	-	70.0	Aug-15
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.2	
Hammes III - Gross	20,317,786	0.2	1.9	3.9	5.3	20.3	-	-	-2.5	Nov-18
Hammes III - Net			1.9	3.9	5.3	20.3	-	-	-2.5	Nov-18
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	-	-	6.8	
Hammes IV - Gross	1,595,123	0.0	0.0	0.0	-	-	-	-	0.0	Dec-22
Hammes IV - Net			0.0	0.0	-	-	-	-	0.0	Dec-22
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-	-	-	-	-9.5	
Seven Seas Japan Opp Fund - Gross	11,609,365	0.1	-4.1	5.9	9.6	-	-	-	-1.1	Apr-22
Seven Seas Japan Opp Fund - Net			-4.1	5.9	9.6	-	-	-	-1.1	Apr-22
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	-	-	-	1.3	

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



See Policy Index and Benchmark History
* Non-Core RE returns are lagged one quarter, European RE Debt II as of 3/31/2023.

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Private Real Assets - Gross	1,057,810,615	8.6	1.3	4.5	6.5	16.3	10.0	14.2	6.9	Feb-13
Private Real Assets - Net			1.3	4.5	6.5	16.3	10.0	14.2	6.9	Feb-13
Private Real Assets Custom			1.3	6.7	7.3	14.3	7.5	7.2	7.2	
ACM II - Gross	14,761,410	0.1	-1.2	-19.3	-18.7	-11.3	-10.0	-	-9.1	Oct-16
ACM II - Net			-1.2	-19.3	-18.7	-11.3	-10.0	-	-9.1	Oct-16
NCREIF Farmland 1 Qtr Lag			0.8	6.3	8.4	7.7	6.5	-	6.5	
ArcLight Energy VI - Gross	14,163,834	0.1	-1.7	-5.4	13.8	9.2	1.0	-	3.8	Sep-15
ArcLight Energy VI - Net			-1.7	-5.4	13.8	9.2	1.0	-	3.8	Sep-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	12.0	
Brookfield Infra III - Gross	42,061,966	0.3	3.1	13.6	14.1	14.6	11.8	-	12.3	Jun-16
Brookfield Infra III - Net			3.1	13.6	14.1	14.6	11.8	-	12.3	Jun-16
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	11.7	
Brookfield Infra IV - Gross	40,345,501	0.3	4.8	12.4	13.6	16.6	-	-	11.0	Oct-19
Brookfield Infra IV - Net			4.8	12.4	13.6	16.6	-	-	11.0	Oct-19
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	-	-	10.4	
Brookfield Infra Debt Fund III - Gross	17,812,020	0.1	1.6	-	-	-	-	-	2.0	Apr-23
Brookfield Infra Debt Fund III - Net			1.6	-	-	-	-	-	2.0	Apr-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	-	-	-	-	-	4.0	
Brookfield Super Core Infra - Gross	102,671,700	0.8	1.6	5.5	6.6	-	-	-	5.7	Aug-22
Brookfield Super Core Infra - Net			1.6	5.5	6.6	-	-	-	5.7	Aug-22
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	-	-	-	7.0	
Carlyle Power II - Gross	39,535,557	0.3	1.1	3.2	19.1	18.8	13.0	-	6.9	Nov-15
Carlyle Power II - Net			1.1	3.2	19.1	18.8	13.0	-	6.9	Nov-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	11.4	
Digital Colony Partners II - Gross	34,257,632	0.3	1.9	6.1	7.9	-	-	-	6.6	Jun-21
Digital Colony Partners II - Net			1.9	6.1	7.9	-	-	-	6.6	Jun-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	-	-	-	11.1	
EnCap Energy IX - Gross	9,994,742	0.1	2.6	17.3	17.9	52.3	8.8	10.7	3.9	Feb-13
EnCap Energy IX - Net			2.6	17.3	17.9	52.3	8.8	10.7	3.9	Feb-13
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	4.4	3.0	3.4	

^{**}Private Real Assets returns are lagged one quarter.



See Policy Index and Benchmark History

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

Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
EnCap Energy X - Gross	22,433,381	0.2	5.5	10.9	7.3	46.1	19.0	-	9.5	May-15
EnCap Energy X - Net			5.5	10.9	7.3	46.1	19.0	-	9.5	May-15
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	4.4	-	3.3	
EnCap Flatrock Midstream III - Gross	11,890,092	0.1	0.1	4.8	18.5	13.4	6.7	-	7.6	Aug-14
EnCap Flatrock Midstream III - Net			0.1	4.8	18.5	13.4	6.7	-	7.6	Aug-14
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	10.9	
EnCap Flatrock Midstream IV - Gross	12,749,360	0.1	1.9	4.2	7.6	8.6	8.4	-	3.8	Mar-18
EnCap Flatrock Midstream IV - Net			1.9	4.2	7.6	8.6	8.4	-	3.8	Mar-18
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	10.7	
EQT Infrastructure Fund IV - Gross	37,919,285	0.3	0.9	9.0	4.4	11.3	-	-	2.5	Jul-19
EQT Infrastructure Fund IV - Net			0.9	9.0	4.4	11.3	-	-	2.5	Jul-19
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	-	-	10.5	
First Reserve - Gross	11,225,090	0.1	-2.5	-9.6	-9.5	-6.2	-1.4	-	-2.4	Jan-15
First Reserve - Net			-2.5	-9.6	-9.5	-6.2	-1.4	-	-2.4	Jan-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	11.0	
Harrison St Social Infra Fd - Gross	108,552,774	0.9	1.8	3.8	5.5	-	-	-	6.7	Aug-21
Harrison St Social Infra Fd - Net			1.8	3.8	5.5	-	-	-	6.7	Aug-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	-	-	-	11.2	
IFM Global Infrastructure US LP - Gross	164,122,992	1.3	2.5	9.4	9.6	12.3	11.5	-	11.7	May-17
IFM Global Infrastructure US LP - Net			2.5	9.4	9.6	12.3	11.5	-	11.7	May-17
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	11.8	·
ISQ Global Infrastructure Fund II - Gross	53,582,184	0.4	2.0	8.7	10.2	14.3	-	-	12.5	Nov-18
ISQ Global Infrastructure Fund II - Net			2.0	8.7	10.2	14.3	-	-	12.5	Nov-18
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	-	-	10.6	
ISQ Global Infrastructure Fund III - Gross	14,818,499	0.1	1.4	20.1	23.6	-	-	-	17.5	Jan-22
ISQ Global Infrastructure Fund III - Net			1.4	20.1	23.6	-	-	-	17.5	Jan-22
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	-	-	-	10.2	
Meridiam Infra N America III - Gross	38,828,895	0.3	-0.8	-0.1	-4.7	30.5	-35.2	-	-55.1	Oct-17
Meridiam Infra N America III - Net	. ,		-0.8	-0.1	-4.7	30.5	-35.2	-	-55.1	Oct-17
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	10.8	
Meridiam Infra N America IV - Gross	7,566,887	0.1	-	-	-	-	-	-	0.0	Aug-23
Meridiam Infra N America IV - Net	,,		-	-	-	-	-	-	0.0	Aug-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			-	-	-	-	-	-	1.5	. 5



Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Meridiam Sa Infra Euro IV - Gross	9,924,561	0.1	-2.0	11.8	-1.0	-	-	-	-53.7	Aug-2
Meridiam Sa Infra Euro IV - Net			-2.0	11.8	-1.0	-	-	-	-53.7	Aug-2
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	-	-	-	11.2	
NGP Royalty Partners - Gross	29,062,034	0.2	6.0	12.5	25.6	38.2	-	-	37.0	Sep-2
NGP Royalty Partners - Net			6.0	12.5	25.6	38.2	-	-	37.0	Sep-2
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	-	-	21.3	
NGP Royalty Partners II - Gross	20,966,668	0.2	-2.7	-17.3	-	-	-	-	-17.3	Jan-2
NGP Royalty Partners II - Net			-2.7	-17.3	-	-	-	-	-17.3	Jan-2
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	-	-	-	-	3.6	
Paine Schwartz Food Chain V - Gross	35,403,006	0.3	0.7	8.1	13.0	27.9	-	-	11.4	Feb-2
Paine Schwartz Food Chain V - Net			0.7	8.1	13.0	27.9	-	-	11.4	Feb-
NCREIF Farmland 1 Qtr Lag			0.8	6.3	8.4	7.7	-	-	7.0	
Pantheon Ventures - Gross	37,796,471	0.3	1.1	3.8	0.7	11.3	6.9	-	15.0	Aug-
Pantheon Ventures - Net			1.1	3.8	0.7	11.3	6.9	-	15.0	Aug-
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	10.9	
Quantum Energy VI - Gross	25,202,357	0.2	-3.8	-22.9	-23.0	22.0	16.0	-	19.2	Dec-
Quantum Energy VI - Net			-3.8	-22.9	-23.0	22.0	16.0	-	19.2	Dec-
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	4.4	-	1.5	
Quantum Energy VII - Gross	40,260,252	0.3	-1.5	-0.3	-0.3	36.3	16.6	-	12.1	Sep-
Quantum Energy VII - Net			-1.5	-0.3	-0.3	36.3	16.6	-	12.1	Sep-
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	4.4	-	5.3	
Ridgewood Water & Strategy Infra II - Gross	4,773,404	0.0	3.3	-106.7	-	-	-	-	-106.7	Jan-
Ridgewood Water & Strategy Infra II - Net			3.3	-106.7	-	-	-	-	-106.7	Jan-
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	-	-	-	-	8.3	
Tailwater Energy Fund III - Gross	21,055,863	0.2	-4.3	-1.0	3.1	7.1	2.0	-	2.0	Oct-
Failwater Energy Fund III - Net			-4.3	-1.0	3.1	7.1	2.0	-	2.0	Oct-
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	4.4	-	4.4	
Tailwater Energy IV - Gross	25,494,476	0.2	0.8	20.6	34.9	30.0	-	-	6.5	Nov-
Tailwater Energy IV - Net	,		0.8	20.6	34.9	30.0	-	-	6.5	Nov-
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	-	-	7.0	
Wastewater Opportunity - Gross	8,577,721	0.1	0.5	10.5	9.9	16.5	8.5	-	-8.8	Jan-
Wastewater Opportunity - Net	, ,		0.5	10.5	9.9	16.5	8.5	-	-8.8	Jan-
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	11.4	



Total Fund Performance Summary

Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Liquid Real Return - Gross	10,269,531	0.1	-1.7	1.6	7.4	6.2			3.6	Jul-19
Liquid Real Return - Net			-3.2	-0.1	5.5	5.3			2.9	Jul-19
SSgA Real Asset			-2.2	-1.7	4.2	5.7	-	-	2.9	
SSgA Passive Real Return Proxy - Gross	9,708,903	0.1	-2.1	0.4	6.5	6.6	4.3	2.9	2.2	Feb-08
SSgA Passive Real Return Proxy - Net			-2.1	0.3	6.3	6.4	4.0	2.6	2.0	Feb-08
SSgA Real Asset			-2.2	-1.7	4.2	5.7	3.6	2.4	-	
Brookfield Liquid Real Return	560,627	0.0								
Cash - Gross	455,237,382	3.7	1.4	4.0	5.1	2.3	2.3	1.8	3.0	Aug-92
Cash - Net			1.4	4.0	5.1	2.3	2.3	1.8		Aug-92
Secured Overnight Financing Rate			1.3	3.8	4.7	1.8	1.8	1.2	2.5	
Cash Account - Gross	455,237,382	3.7	1.4	4.0	5.1	2.4	2.5	1.9	3.1	Jul-92
Cash Account - Net			1.4	4.0	5.1	2.4	2.5	1.9	-	Jul-92
Secured Overnight Financing Rate			1.3	3.8	4.7	1.8	1.8	1.2	2.5	

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AQR US Enhanced Equity	\$1,193,275,170 \$336,153,857	9.7 2.7
	· · · · ·	1.4
JP Morgan 130/30	\$175,118,153	
DE Shaw Broad Mkt Core Alpha Ext	\$155,558,338	1.3
Eagle Capital	\$333,333,954	2.7
Huber Capital	\$20,284	0.0
Weatherbie	\$90,065,228	0.7
Snyder Capital Management	\$117,463,778	1.0
Lazard	\$309,930,418	2.5
Walter Scott & Partners Limited	\$449,975,336	3.6
LSV	\$485,897,504	3.9
William Blair Dev Small Cap	\$91,056,880	0.7
Acadian Asset Management	\$97,519,047	0.8
Arga Emg	\$186,543,301	1.5
Baillie Gifford Emg All Cap	\$197,643,314	1.6
Oaktree Emg	\$171,439,606	1.4
CBRE Clarion	\$3,992	0.0
Allspring Global Investments	\$72,645,325	0.6
Artisan Partners Global Opp	\$120,527,473	1.0
Nikko Asset Management	\$117,360,000	1.0
Third Point Offshore Fund	\$46,086,627	0.4
Abbott VI	\$25,947,267	0.2
Accel-KKR V	\$26,789,578	0.2
Accel-KKR VI	\$21,027,614	0.2
Accel-KKR Growth Partners II	\$10,000,425	0.1
Accel-KKR Growth Partners III	\$31,011,484	0.3
Accel-KKR Growth Partners IV	\$9,866,570	0.1
Atalaya Special Opp VI	\$1,564,992	0.0
Atalaya Special Opp V	\$465,305	0.0
Canvas Ventures III	\$14,133,839	0.1
Cortec Group Fund VII	\$26,271,279	0.2
Cortec Group Fund VIII	\$3,762,148	0.0
CRV Select Fund I	\$17,844,539	0.1
CRV Select Fund II	\$5,249,200	0.0
CRV XVIII LP	\$17,190,096	0.1
Ott /ttill El	ψ11,100,000	V. 1



Davidson Kempner LT Dist Opp IV \$11,165,209 0.1 Davidson Kempner LT Dist Opp V \$31,561,831 0.3 Dyal Capital Parthers II \$39,063,192 0.3 Dyal Capital Parthers III \$29,568,342 0.2 Garison Investment Group \$2,065,388 0.0 Golden Capital Co Invest \$14,083,174 0.1 Gridron Capital Fund V \$5,064,718 0.0 Harbourvest VIII \$2,885,019 0.0 Harbourvest IVII \$5,071,29 0.0 H.I.G. Bayside Loan III \$3,811,813 0.0 H.I.G. Sapida Loan III \$10,944,706 0.1 H.I.G. Capital IV \$10,965,848 0.1 Khosla IV \$15,067,848 0.1 Khosla IV \$15,067,848 0.1 Khosla VI \$15,067,849 0.5 Khosla VI \$15,067,849 0.5 Khosla VI \$1,067,849 0.5 Khosla VI \$1,067,849 0.5 Khosla VI \$1,067,849 0.2 Linden Capital Partners IV <t< th=""><th>CRV XIX LP</th><th>\$5,278,955</th><th>0.0</th></t<>	CRV XIX LP	\$5,278,955	0.0
Dyal Capital Partners II \$39,083.192 0.3 Dyal Capital Partners III \$29,858.342 0.2 Garrison Investment Group \$2,025.388 0.0 Golden Capital Co Invest \$14,053,174 0.1 Gridron Capital Fund IV \$52,170.306 0.4 Gridron Capital Fund IV \$5,064,718 0.0 Harbourvest VIII \$5,711.429 0.0 Harbourvest IVII V \$5,711.429 0.0 H.I.G. Bayside Loan III \$3,811.813 0.0 H.I.G. Europe Capital II \$10,955.848 0.1 H.I.G. Europe Capital II \$10,055.848 0.1 Khosia V \$15,07018 0.1 Khosia VI \$15,057.018 0.1 Khosia VI \$15,933.582 0.1 Khosia VI \$15,933.582 0.1 Linden Capital Partners IV \$4,925.367 0.4 Linden Capital Partners IV \$1,668.388 0.1 Linden Capital Partners V \$3,789.275 0.3 Marin Heritage III \$10,297.882 0.1 M	Davidson Kempner LT Dist Opp IV	\$18,165,209	0.1
Dyal Capital Partners III \$29.858,342 0.2 Gartison Investment Group \$2025,388 0.0 Golden Capital Co Invest \$14,655,174 0.1 Gridino Capital Fund IV \$52,170,306 0.4 Gridino Capital Fund V \$5,064,718 0.0 Harbourvest IVII \$2,835,019 0.0 Harbourvest IVII \$5,711,429 0.0 Harbourvest IVII \$5,711,429 0.0 Harbourvest IVII \$13,811,813 0.0 H.I.G. Bayoide Loan III \$1,914,706 0.1 H.I.G. Capital V \$10,914,706 0.1 H.I.G. Capital V \$10,914,706 0.1 H.I.G. Capital V \$10,914,706 0.1 H.I.G. Europe Capital II \$10,925,848 0.1 Khosla V \$15,067,018 0.1 Khosla VI \$15,067,018 0.5 Khosla VI \$15,067,018 0.5 Linden Capital Partners IV \$15,067,018 0.2 Linden Capital Partners IV \$1,062,019 0.2 Linden Capital Partner	Davidson Kempner LT Dist Opp V	\$31,561,881	0.3
Garison Investment Group \$2,025,388 0.0 Golden Capital Co Invest \$14,053,174 0.1 Gridron Capital Fund V \$5,064,718 0.0 Harbourvest VIII \$2,835,019 0.0 Harbourvest VIII V \$5,711,429 0.0 H.I.G. Bayside Loan III \$3,311,813 0.0 H.I.G. Capital V \$10,914,706 0.1 H.I.G. Europe Capital II \$10,055,848 0.1 H.I.G. Europe Capital II \$10,055,848 0.1 Khosla IV \$15,067,018 0.1 Khosla VI \$00,522,649 0.5 Khosla VI \$00,522,649 0.5 Khosla VI \$00,522,649 0.5 Khosla VI \$15,932,552 0.1 Linden Capital III \$15,932,552 0.1 Linden Capital Partners IV \$49,200,367 0.4 Linden Capital Partners V \$10,683,888 0.1 Marin Equity V \$10,279,882 0.1 Marin Heritage III \$3,671,457 0.0 Marin Heritage III \$3,	Dyal Capital Partners II	\$39,083,192	0.3
Golden Capital Co Invest \$14,053,174 0.1 Gridinon Capital Fund IV \$5,104,718 0.0 Harbourvest VIII \$5,064,718 0.0 Harbourvest Intl VI \$5,071,429 0.0 H.I.G. Bayside Loan III \$3,311,813 0.0 H.I.G. Europe Capital II \$10,055,848 0.1 H.I.G. Europe Capital II \$10,055,848 0.1 Khosla IV \$15,067,018 0.1 Khosla V \$39,247,134 0.3 Khosla VI \$50,252,649 0.5 Khosla VI \$15,925,582 0.1 Linden Capital III \$15,925,582 0.1 Linden Capital Partners V \$49,250,367 0.4 Linden Capital Partners V \$16,683,888 0.1 Marlin Equity V \$10,297,882 0.1 Marlin Heritage \$1,097,882 0.1 Marlin Heritage II \$10,928,855 0.1 Marlin Heritage II \$3,601,457 0.0 Marlin Heritage II \$3,601,457 0.0 Marlin Heritage II	Dyal Capital Partners III	\$29,858,342	0.2
Gridiron Capital Fund IV \$5.04,710.306 0.4 Gridiron Capital Fund V \$5.064,718 0.0 Harbourvest Intl VI \$2,283,019 0.0 Harbourvest Intl VI \$5,711,429 0.0 H.I.G. Bayside Loan III \$3,811,813 0.0 H.I.G. Expree Capital II \$10,916,706 0.1 H.I.G. Europe Capital II \$10,058,848 0.1 Khosla IV \$15,067,018 0.1 Khosla VI \$90,522,649 0.5 Khosla VI \$60,522,649 0.5 Khosla VI \$15,923,852 0.1 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners IV \$16,683,888 0.1 Marlin Equity IV \$10,297,882 0.1 Marlin Equity V \$10,297,882 0.1 Marlin Heritage II \$1,092,855 0.3 Marlin Heritage III \$3,671,457 0.0 Marlin Heritage III \$3,671,457 0.0 Marlin Heritage Eu	Garrison Investment Group	\$2,025,388	0.0
Gridiron Capital Fund V \$5,064,718 0.0 Harbourvest VIII \$2,835,019 0.0 Harbourvest VIII V \$5,711,429 0.0 H.I.G. Bayside Loan III \$3,811,813 0.0 H.I.G. Capital V \$10,917,006 0.1 H.I.G. Europe Capital II \$10,055,848 0.1 Khosla V \$15,067,018 0.1 Khosla V \$93,247,134 0.3 Khosla VII \$65,22,649 0.5 Khosla VII \$15,923,582 0.1 Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners IV \$10,297,882 0.1 Linden Capital Partners IV \$10,297,882 0.1 Marlin Equity IV \$10,297,882 0.1 Marlin Heritage II \$10,929,855 0.1 Marlin Heritage II \$10,929,855 0.1 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 <	Golden Capital Co Invest	\$14,053,174	0.1
Harbourvest IVII \$2,835,019 0.0 Harbourvest IntIVI \$5,711,429 0.0 H.I.G. Bayside Loan III \$3,811,813 0.0 H.I.G. Capital V \$10,914,706 0.1 H.I.G. Europe Capital II \$10,055,648 0.1 Khosla V \$15,067,018 0.1 Khosla VI \$0,922,649 0.5 Khosla VI \$15,923,582 0.1 Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$19,280,367 0.4 Linden Capital Partners IV \$10,297,882 0.1 Marlin Equity IV \$10,297,882 0.1 Marlin Equity IV \$10,297,882 0.1 Marlin Heritage II \$10,929,855 0.3 Marlin Heritage II \$10,929,855 0.1 Marlin Heritage Europe \$19,230,46 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,5	Gridiron Capital Fund IV	\$52,170,306	0.4
Harbourvest Intl VI \$5,711,429 0.0 H.I.G. Bayside Loan III \$3,811,813 0.0 H.I.G. Capital V \$10,914,706 0.1 H.I.G. Europe Capital II \$10,055,848 0.1 Khosla IV \$15,067,018 0.1 Khosla VI \$39,247,134 0.3 Khosla VII \$60,522,649 0.5 Khosla VII \$15,923,582 0.1 Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$44,250,367 0.4 Linden Capital Partners V \$16,683,888 0.1 Marlin Equity IV \$10,297,882 0.1 Marlin Equity V \$10,297,882 0.1 Marlin Heritage II \$10,929,885 0.1 Marlin Heritage III \$3,671,457 0.0 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,	Gridiron Capital Fund V	\$5,064,718	0.0
H.I.G. Bayside Loan III \$3,811,813 0.0 H.I.G. Capital V \$10,914,706 0.1 K. Locapital V \$10,055,848 0.1 Khosla VI \$15,067,018 0.1 Khosla VI \$60,522,649 0.5 Khosla VIII \$25,047,924 0.2 Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners V \$49,250,367 0.4 Marlin Equity V \$10,297,882 0.1 Marlin Heritage \$4,002,592 0.0 Marlin Heritage III \$33,769,275 0.3 Marlin Heritage III \$35,671,457 0.0 Marlin Heritage Europe \$10,929,855 0.1 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$33,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Okw Enterprise 17 \$20,581,977 0.2 Okbimed Private Investments VIII 9	Harbourvest VIII	\$2,835,019	0.0
H.I.G. Capital V \$10,914,706 0.1 H.I.G. Europe Capital II \$10,055,848 0.1 Khosla IV \$10,055,848 0.1 Khosla V \$39,247,134 0.3 Khosla VI \$60,522,649 0.5 Khosla VII \$50,622,649 0.2 Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners V \$16,683,888 0.1 Marlin Equity V \$33,769,275 0.3 Marlin Heritage Buth V \$33,769,275 0.3 Marlin Heritage III \$10,929,855 0.1 Marlin Heritage III \$35,1457 0.0 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$38,886,68 0.3 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 OkwEnterprise 17 \$20,581,977 0.2 OkwEnterprise 17 \$20,581,977 0.2 Okimed Private Investments VIII \$1,074,394	Harbourvest Intl VI	\$5,711,429	0.0
H.I.G. Europe Capital II \$10,055,848 0.1 Khosla IV \$15,067,018 0.1 Khosla VI \$39,247,134 0.3 Khosla VII \$60,522,649 0.5 Khosla VII \$15,923,582 0.1 Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners V \$16,683,888 0.1 Martin Equity IV \$10,297,882 0.1 Martin Equity V \$33,769,275 0.3 Martin Heritage III \$10,929,855 0.1 Martin Heritage III \$3,671,457 0.0 Martin Heritage Europe \$19,223,046 0.2 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 0.2 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbifMed Private Investments VIII 9,760,874 0.1 Orbifmed Private Investments VIII 0.0 0.1	H.I.G. Bayside Loan III	\$3,811,813	0.0
Khosla IV \$15,067,018 0.1 Khosla VI \$39,247,134 0.3 Khosla VII \$60,522,649 0.5 Khosla VII \$15,923,552 0.1 Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners V \$16,683,888 0.1 Martin Equity V \$10,297,882 0.1 Martin Equity V \$33,769,275 0.3 Martin Heritage III \$10,929,855 0.1 Martin Heritage III \$3,611,457 0.0 Martin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$33,188,668 0.3 New Enterprise 17 \$20,551,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 Orbinded Private Investments VIII 9,760,874 0.1 Orbinded Private Investments VIII 0.0	H.I.G. Capital V	\$10,914,706	0.1
Khosla V \$39,247,134 0.3 Khosla VI \$60,522,649 0.5 Khosla VII \$15,923,582 0.1 Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners V \$16,683,888 0.1 Martin Equity IV \$10,297,882 0.1 Martin Equity V \$33,769,275 0.3 Martin Heritage \$4,002,592 0.0 Martin Heritage III \$10,929,855 0.1 Martin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 Orbinded Private Investments VIII \$9,760,874 0.1 Orbinded Private Investments IX \$1,074,394 0.0	H.I.G. Europe Capital II	\$10,055,848	0.1
Khosla VII \$60,522,649 0.5 Khosla VII \$15,923,582 0.1 Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners V \$16,683,888 0.1 Martin Equity IV \$10,297,882 0.1 Martin Heritage \$4,002,592 0.3 Martin Heritage III \$10,929,855 0.1 Martin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 Orbinked Private Investments VIII \$9,760,874 0.1 Orbinked Private Investments IX \$1,074,394 0.0	Khosla IV	\$15,067,018	0.1
Khosla VII \$15,923,582 0.1 Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners V \$16,683,888 0.1 Marlin Equity IV \$10,297,882 0.1 Marlin Heritage \$4,002,592 0.0 Marlin Heritage III \$10,929,855 0.1 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 Orbinked Private Investments VIII \$9,760,874 0.1 Orbinked Private Investments IX \$1,074,394 0.0	Khosla V	\$39,247,134	0.3
Linden Capital III \$26,047,924 0.2 Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners V \$16,683,888 0.1 Marlin Equity IV \$10,297,882 0.1 Marlin Heritage \$4,002,592 0.3 Marlin Heritage III \$10,929,855 0.1 Marlin Heritage III \$3,671,457 0.0 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 Orbinded Private Investments VIII \$9,760,874 0.1 Orbinded Private Investments IX \$1,074,394 0.0	Khosla VI	\$60,522,649	0.5
Linden Capital Partners IV \$49,250,367 0.4 Linden Capital Partners V \$16,683,888 0.1 Marlin Equity IV \$10,297,882 0.1 Marlin Equity V \$33,769,275 0.3 Marlin Heritage \$4,002,592 0.0 Marlin Heritage II \$10,929,855 0.1 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	Khosla VII	\$15,923,582	
Linden Capital Partners V \$16,683,888 0.1 Marlin Equity IV \$10,297,882 0.1 Marlin Equity V \$33,769,275 0.3 Marlin Heritage \$4,002,592 0.0 Marlin Heritage II \$10,929,855 0.1 Marlin Heritage Europe \$3,671,457 0.0 Merit Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	Linden Capital III	\$26,047,924	0.2
Marlin Equity IV \$10,297,882 0.1 Marlin Equity V \$33,769,275 0.3 Marlin Heritage \$4,002,592 0.0 Marlin Heritage III \$10,929,855 0.1 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	Linden Capital Partners IV	\$49,250,367	0.4
Marlin Equity V \$33,769,275 0.3 Marlin Heritage \$4,002,592 0.0 Marlin Heritage III \$10,929,855 0.1 Marlin Heritage Europe \$3,671,457 0.0 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	Linden Capital Partners V	\$16,683,888	0.1
Marlin Heritage \$4,002,592 0.0 Marlin Heritage II \$10,929,855 0.1 Marlin Heritage III \$3,671,457 0.0 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	Marlin Equity IV	\$10,297,882	0.1
Marlin Heritage II \$10,929,855 0.1 Marlin Heritage III \$3,671,457 0.0 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	Marlin Equity V	\$33,769,275	0.3
Marlin Heritage III \$3,671,457 0.0 Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	Marlin Heritage	\$4,002,592	0.0
Marlin Heritage Europe \$19,223,046 0.2 New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	Marlin Heritage II	\$10,929,855	
New Enterprise 14 \$36,100,481 0.3 New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	Marlin Heritage III		
New Enterprise 15 \$28,873,767 0.2 New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	Marlin Heritage Europe	\$19,223,046	
New Enterprise 16 \$38,188,668 0.3 New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	New Enterprise 14	\$36,100,481	0.3
New Enterprise 17 \$20,581,977 0.2 Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	New Enterprise 15	\$28,873,767	
Oaktree Power Opp Fund VI \$14,980,626 0.1 OrbiMed Private Investments VIII \$9,760,874 0.1 Orbimed Private Investments IX \$1,074,394 0.0	New Enterprise 16	\$38,188,668	
OrbiMed Private Investments VIII\$9,760,8740.1Orbimed Private Investments IX\$1,074,3940.0	New Enterprise 17	\$20,581,977	
Orbimed Private Investments IX \$1,074,394 0.0	· ·		
Private Equity X \$5,600,072 0.0	Orbimed Private Investments IX		
	Private Equity X	\$5,600,072	0.0



RCP Multi-Fund Feeder	\$82,194,278	0.7
RRJ Capital Master Fund II	\$5,688,331	0.0
RRJ Capital Master Fund III	\$8,261,078	0.1
Shamrock Capital II	\$13,497,475	0.1
Shamrock Capital III	\$161,527	0.0
Shamrock Capital Growth Fund V	\$8,722,792	0.1
Sixth Street Opp Partners V	\$11,051,735	0.1
Spectrum Equity VII	\$38,542,820	0.3
Spectrum Equity Fund VIII	\$24,729,294	0.2
Spectrum Equity Fund IX	\$20,198,955	0.2
Strategic Value Spl Fund V	\$17,407,994	0.1
Summit EUR Growth Equity II	\$44,354,688	0.4
Summit EUR Growth Equity III	\$18,403,566	0.1
Summit Ventures III	\$3,608,513	0.0
Summit Ventures IV	\$53,518,377	0.4
Summit Ventures V	\$10,670,407	0.1
Thoma Bravo XI	\$35,567,370	0.3
Thoma Bravo XII	\$32,445,169	0.3
Thoma Bravo XIII	\$71,783,661	0.6
Threshold Ventures III	\$23,016,745	0.2
Threshold Ventures IV	\$4,106,562	0.0
TPG Opp Partners III	\$7,055,386	0.1
Trinity Ventures XI	\$44,481,208	0.4
Trinity Ventures XII	\$49,553,177	0.4
TSG7 A LP	\$17,491,644	0.1
TSG7 B LP	\$4,087,799	0.0
TSG8 LP	\$38,745,323	0.3
TSG9 LP	\$5,088,831	0.0
TSSP Opportunities Partners IV	\$29,937,059	0.2
Waterland V	\$1,038,975	0.0
Waterland VI	\$21,980,940	0.2
Wayzata Opportunities III	\$3,513,318	0.0
Wynnchurch Capital Partners V	\$16,833,049	0.1
Brigade Capital	\$216,076,078	1.8
Ares Capital Europe Fund V	\$31,210,254	0.3



Athyrium Opp II	\$6,819,768	0.1
Athyrium Opp III	\$7,918,509	0.1
Benefit St Pr Sr Secure Opp	\$26,563,670	0.2
Benefit St Pr Sr Secure Opp II	\$36,872,911	0.3
IFM US Infrastructure DB FD LP	\$36,927,552	0.3
OrbiMed Royalty & Credit Opp III	\$16,907,604	0.1
Orbimed Royalty & Credit Opp IV	\$7,016,621	0.1
Shamrock Capital Debt Fund I	\$9,696,067	0.1
Silver Point Specialty Credit Fund II	\$31,162,715	0.3
Silver Point Specialty Credit Fund III	\$8,957,074	0.1
Summit Credit	\$236,935	0.0
Summit Credit II	\$10,600,986	0.1
Summit Credit III	\$16,490,006	0.1
Summit Credit IV	\$14,630,385	0.1
TCP Direct Lending VIII	\$113,667,840	0.9
Grosvenor SCARF Growth	\$7,772,946	0.1
Prudential	\$325,891,537	2.6
TCW MetWest Fixed	\$323,793,116	2.6
Brandywine US FI	\$314,583,070	2.5
Reams Core Plus FI	\$330,823,785	2.7
Neuberger Berman	\$398,152,911	3.2
Aristeia Partners LP	\$52,145,945	0.4
BlackRock Event Driven Equity Fund	\$54,616,758	0.4
Davidson Kempner Instl Partners LP	\$60,511,590	0.5
Elliott Associates	\$81,857,184	0.7
Graham Global Inv II	\$51,647,590	0.4
Grosvenor SCARF Diversifying	\$232,699,993	1.9
Laurion Capital	\$60,689,468	0.5
LMR Fund LTD	\$56,063,713	0.5
MW Global Opportunities Fund	\$58,741,817	0.5
PSquared Event Driven Opp Fund	\$55,029,218	0.4
Sculptor Domestic II	\$1,223,787	0.0
Tudor BVI Global Fund	\$50,907,493	0.4
Dedicated Cash Allocation	\$250,152,555	2.0
Brookfield Premier RE Partners	\$108,400,832	0.9



Clarion Lion Properties	\$116,226,485	0.9
Metlife Core Property	\$81,032,129	0.7
Principal US Property	\$56,875,140	0.5
Prologis Targeted Euro Logistics	\$60,513,874	0.5
Prologis Targeted US Logistics	\$77,316,361	0.6
Townsend Real Estate	\$153,185,039	1.2
Carlyle China Realty	\$6,873,202	0.1
Carlyle China Rome Logistics	\$30,407,867	0.2
CIM Opportunity VIII	\$23,619,508	0.2
Kohlberg Kravis Roberts	\$1,583,715	0.0
Lasalle China Logistics Venture LP	\$5,536,758	0.0
NREP Nordic Strat II	\$16,744,651	0.1
NREP Nordic Strat III	\$33,602,958	0.3
NREP Nordic Strat IV	\$18,617,857	0.2
NREP Nordic Strat V	\$6,880,843	0.1
Sculptor Real Estate Fund III	\$4,089,913	0.0
Sculptor Real Estate Fund IV	\$16,164,528	0.1
Asana Partners Fund II	\$30,929,903	0.3
Asana Partners Fund III	\$11,541,098	0.1
ECE Euro Prime Shopping II	\$34,814,253	0.3
European RE Debt II	\$450,254	0.0
Hammes II	\$3,148,951	0.0
Hammes III	\$20,317,786	0.2
Hammes IV	\$1,595,123	0.0
Seven Seas Japan Opp Fund	\$11,609,365	0.1
ACM II	\$14,761,410	0.1
ArcLight Energy VI	\$14,163,834	0.1
Brookfield Infra III	\$42,061,966	0.3
Brookfield Infra IV	\$40,345,501	0.3
Brookfield Infra Debt Fund III	\$17,812,020	0.1
Brookfield Super Core Infra	\$102,671,700	0.8
Carlyle Power II	\$39,535,557	0.3
Digital Colony Partners II	\$34,257,632	0.3
EnCap Energy IX	\$9,994,742	0.1
EnCap Energy X	\$22,433,381	0.2

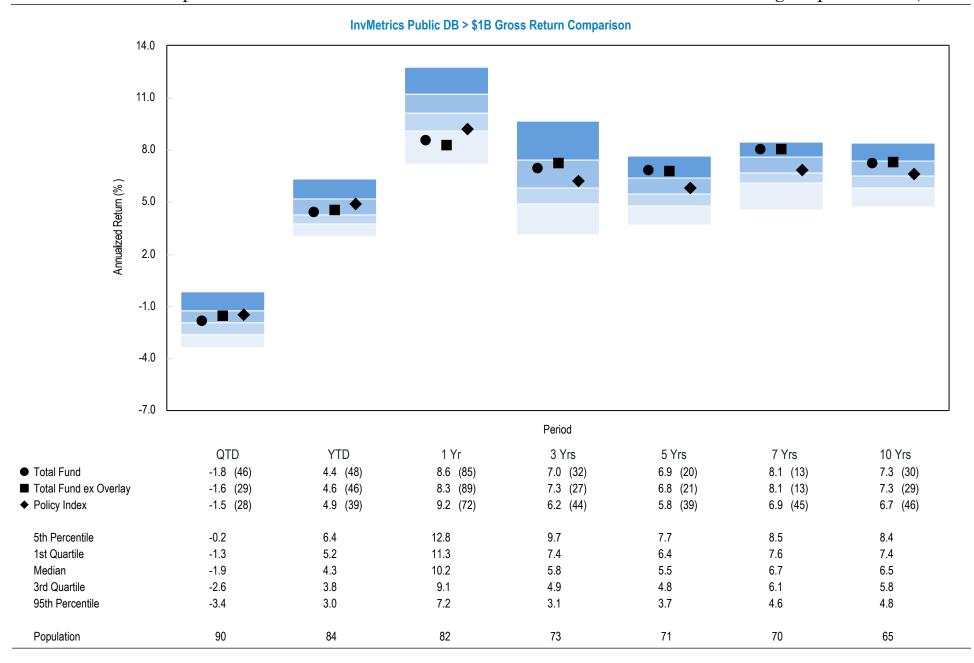


EnCap Flatrock Midstream III	\$11,890,092	0.1
EnCap Flatrock Midstream IV	\$12,749,360	0.1
EQT Infrastructure Fund IV	\$37,919,285	0.3
First Reserve	\$11,225,090	0.1
Harrison St Social Infra Fd	\$108,552,774	0.9
IFM Global Infrastructure US LP	\$164,122,992	1.3
ISQ Global Infrastructure Fund II	\$53,582,184	0.4
ISQ Global Infrastructure Fund III	\$14,818,499	0.1
Meridiam Infra N America III	\$38,828,895	0.3
Meridiam Infra N America IV	\$7,566,887	0.1
Meridiam Sa Infra Euro IV	\$9,924,561	0.1
NGP Royalty Partners	\$29,062,034	0.2
NGP Royalty Partners II	\$20,966,668	0.2
Paine Schwartz Food Chain V	\$35,403,006	0.3
Pantheon Ventures	\$37,796,471	0.3
Quantum Energy VI	\$25,202,357	0.2
Quantum Energy VII	\$40,260,252	0.3
Ridgewood Water & Strategy Infra II	\$4,773,404	0.0
Tailwater Energy IV	\$25,494,476	0.2
Tailwater Energy Fund III	\$21,055,863	0.2
Wastewater Opportunity	\$8,577,721	0.1
Brookfield Liquid Real Return	\$560,627	0.0
SSgA Barclays 1-10 Yrs TIPS Index	\$2,945,363	0.0
SSgA Real Asset	\$6,763,541	0.1
Cash Account	\$455,237,382	3.7
Heitman Adv JMB V	\$8,390	0.0
Transition Account	\$2,676,055	0.0
SSgA Overlay	\$80,408,773	0.7
Total Fund	\$12,340,232,570	100.0

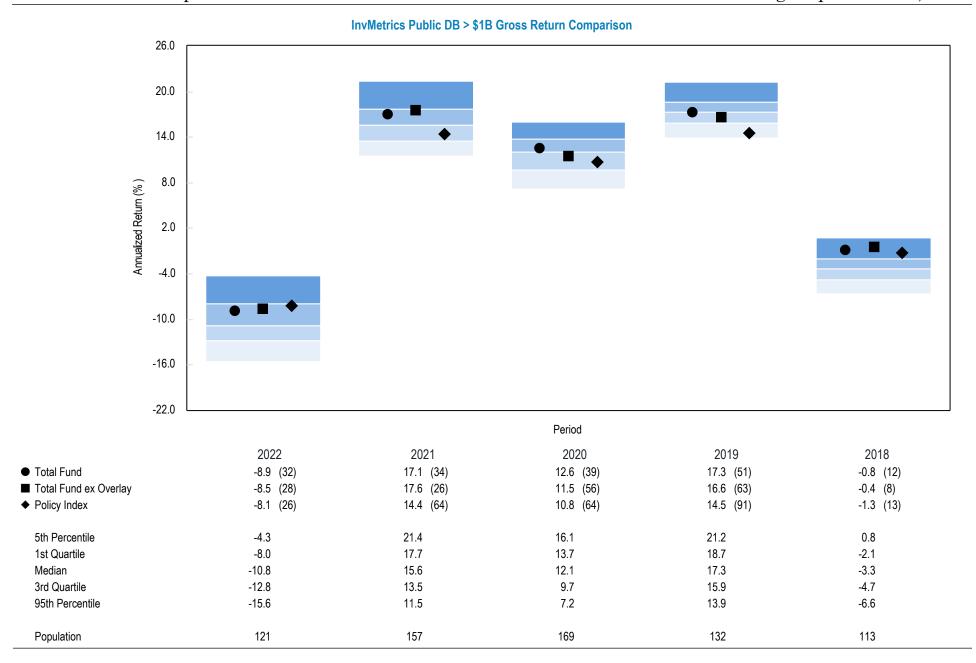


		3 \	/ears		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	7.0 (32)	8.3 (18)	0.6 (24)	0.2 (33)	3.0 (45)
Policy Index	6.2 (44)	8.3 (18)	0.6 (35)	-	0.0
Total Fund ex Overlay	7.3 (27)	7.8 (15)	0.7 (18)	0.3 (32)	3.1 (46)
Policy Index	6.2 (44)	8.3 (18)	0.6 (35)	-	0.0

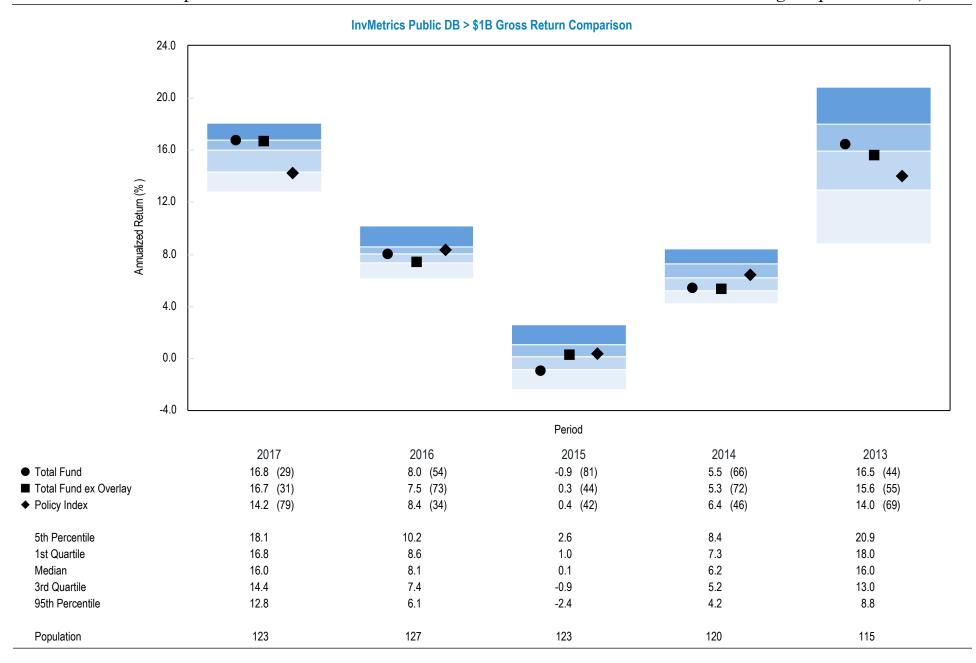
		5 Years	S		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	6.9 (20)	8.7 (14)	0.6 (14)	0.4 (19)	2.8 (25)
Policy Index	5.8 (39)	8.4 (13)	0.5 (27)	-	0.0
Total Fund ex Overlay	6.8 (21)	8.4 (12)	0.6 (13)	0.3 (22)	2.9 (30)
Policy Index	5.8 (39)	8.4 (13)	0.5 (27)	-	0.0













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	1/1/00	7/1/86
91-day UST Bill +5% (AR)				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%	30.0%	
Bloomberg US Treasury	4.0%	5.0%	5.0%	5.0%							
ICE BofA ML High Yield II	1.0%	1.0%	1.0%	1.0%	1.0%						
Bloomberg Commodity			2.0%	2.0%			5.0%				
Cambridge Associates Private Energy 1 Qtr Lag	2.1%	2.5%	2.5%								
Cambridge Associates Private Infrastructure 1 Qtr Lag	4.2%	3.2%	3.2%								
FTSE BIG											23.0%
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		20.0%	20.0%	20.0%	22.5%	22.5%	20.0%				
MSCI ACWI IMI	40.0%										
MSCI EAFE								15.0%	15.0%	15.0%	15.0%
MSCI Emerging Markets								5.0%	5.0%	5.0%	
NAREIT							3.0%	3.0%			
NFI-ODCE	5.4%	4.6%	4.6%								
NFI-ODCE net +1% 1Q Lag	3.6%	2.5%	2.5%								
NCREIF	5.575	2.070	2.070	7.0%			12.0%	12.0%	15.0%	10.0%	15.0%
NCREIF Farmland 1 Qtr Lag	0.7%	0.7%	0.7%	11070			12.070	.2.070	10.070	10.070	10.070
NCREIF Timberland Index Lagged	0.170	0.7%	0.7%								
Russell 1000		0.170	0.1 /0					30.0%	30.0%	35.0%	
Russell 1000 +3% 1QL (PE)					10.0%	10.0%		30.076	30.070	33.070	
Russell 2000					10.076	10.070		5.0%	5.0%	5.0%	
Russell 3000		20.0%	21.0%	21.0%	22.5%	22.5%	30.0%	J.U /0	J.U /0	J.U /0	47.0%
		20.0%	21.0%	21.0%	22.5%	22.5%					47.0%
S&P 500 +2% 1QL (PE)	44.00/	0.00/	0.00/	0.00/			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%									
Secured Overnight Financing Rate	1.0%										
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



Growth Benchmark	As of:	7/4/40	7/4/47	41414-
04 Dev. T.D.:II . 50/	4/1/22	7/1/19	7/1/17	4/1/1 7 5.08%
91 Day T-Bill +5% ICE BofA ML High Yield II	1.73%	1.73%	1.70%	1.70%
•	1.73%	1.73%	1.70%	1.70%
Credit Suisse Leveraged Loans	8.62%	6.90%	6.78%	6.78%
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag HFRI FoF Composite Index + 1%	0.02%	5.17%	5.08%	0.70%
MSCI ACWI ex US	27.58%	34.48%	33.90%	33.90%
MSCI ACWI MI	6.90%	34.40%	33.90%	33.90%
Russell 3000	34.48%	34.48%	35.59%	35.59%
	18.97%	15.52%	15.25%	15.25%
Cambridge Associates All PE 1 Qtr Lag	10.97%	100.0%	100.0%	100.0%
	100.0%	100.0%	100.0%	100.0%
Global Public Equity Benchmark	As of:			
	4/1/22	7/1/11		
MSCI ACWI		100.0%		
MSCI ACWI IMI	100.0%			
	100.0%	100.0%		
Demont's Feet's Beechmant	A E			
Domestic Equity Benchmark	As of: 1/1/08	9/1/04	1/1/00	7/1/86
Russell 1000	1/1/00	85.71%	87.5%	77 1700
Russell 2000		14.29%	12.5%	
Russell 3000	100.0%	14.23/0	12.J/0	100.0%
11035GI 5000	100.0%	100.0%	100.0%	100.0%
	100.070	100.070	100.070	100.07
Large Cap Active Benchmark	As of:			
•	2/1/19	9/1/08		
Russell 1000 Value		100.0%		
Russell 1000	100.0%			
	100.0%	100.0%		
International Equity Benchmark	As of:			
	1/1/08	1/1/00	7/1/86	
MSCI ACWI ex US	100.0%			
MSCI EAFE		75.0%	100.0%	
MSCI Emerging Markets		25.0%		
	100.0%	100.0%	100.0%	
Private Equity Benchmark	As of:			
qay Bollollillain	4/1/17	1/1/12	1/1/08	
	41111	100.0%	1, 1, 00	
Russell 1000 +3% 1QI				
Russell 1000 +3% 1QL S&P 500 +2% 1QI		100.070	100 0%	
Russell 1000 +3% 1QL S&P 500 +2% 1QL Cambridge Associates All PE 1 Qtr Lag	100.0%	100.070	100.0%	

Public Credit Benchmark	As of: 4/1/17		
ICE BofA ML High Yield II	50.0%		
Credit Suisse Leveraged Loans	50.0%		
Credit Suisse Leveraged Loans	100.0%		
	100.070		
Growth Oriented Absolute Return Benchmark	As of:	414147	
04 day LICT Dill : 50/	7/1/17	4/1/17 100.0%	
91-day UST Bill +5%	100.0%	100.0%	
HFRI FoF Composite Index + 1%	100.0%	100.09/	
	100.0%	100.0%	
Diversifying Benchmark	As of:		
Diversitying benchmark	AS 01. 4/1/22	7/1/17	4/1/17
91 Day T-Bill +5%	4/ 1/22	1/1/1/	28.00%
Bloomberg US Aggregate	50.00%	40.00%	40.00%
Bloomberg US Treasury	16.67%	20.00%	20.00%
FTSE WGBI ex US Unhedged	10.07 /0	9.60%	9.60%
HFRI FoF Conservative Index	29.17%	28.00%	3.0076
JPM GBI EM Diversified	23.17/0	2.40%	2.40%
Secured Overnight Financing Rate	4.16%	2.40 /0	2.40 /0
Secured Overnight Financing Nate			
	100 0%	100 0%	100 0%
	100.0%	100.0%	100.0%
Absolute Return Benchmark	100.0% As of:	100.0%	100.0%
Absolute Return Benchmark		4/1/17	100.0%
Absolute Return Benchmark 91-day UST Bill +5%	As of:		100.0%
	As of:	4/1/17	100.0%
91-day UST Bill +5%	As of: 7/1/17	4/1/17	100.0%
91-day UST Bill +5%	As of: 7/1/17	4/1/17 100.0%	100.0%
91-day UST Bill +5%	As of: 7/1/17	4/1/17 100.0%	100.0%
91-day UST Bill +5% HFRI FoF Conservative Index	As of: 7/1/17 100.0% 100.0%	4/1/17 100.0%	4/1/17
91-day UST Bill +5% HFRI FoF Conservative Index	As of: 7/1/17 100.0% 100.0% As of:	4/1/17 100.0% 100.0%	
91-day UST Bill +5% HFRI FoF Conservative Index Real Return Benchmark	As of: 7/1/17 100.0% 100.0% As of: 4/1/22	4/1/17 100.0% 100.0%	4/1/17
91-day UST Bill +5% HFRI FoF Conservative Index Real Return Benchmark Real Estate Benchmark	As of: 7/1/17 100.0% 100.0% As of: 4/1/22 50.00%	4/1/17 100.0% 100.0% 4/1/19 43.75%	4/1/17 43.75%
91-day UST Bill +5% HFRI FoF Conservative Index Real Return Benchmark Real Estate Benchmark Private Real Assets Benchmark	As of: 7/1/17 100.0% 100.0% As of: 4/1/22 50.00%	4/1/17 100.0% 100.0% 4/1/19 43.75%	4/1/17 43.75% 43.75%
91-day UST Bill +5% HFRI FoF Conservative Index Real Return Benchmark Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity	As of: 7/1/17 100.0% 100.0% As of: 4/1/22 50.00% 38.89%	4/1/17 100.0% 100.0% 4/1/19 43.75% 43.75%	4/1/17 43.75% 43.75%
91-day UST Bill +5% HFRI FoF Conservative Index Real Return Benchmark Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity Liquid Real Return Custom Benchmark	As of: 7/1/17 100.0% 100.0% As of: 4/1/22 50.00% 38.89% 11.11% 100.0%	4/1/17 100.0% 100.0% 4/1/19 43.75% 43.75%	4/1/17 43.75% 43.75% 12.50%
91-day UST Bill +5% HFRI FoF Conservative Index Real Return Benchmark Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity	As of: 7/1/17 100.0% 100.0% As of: 4/1/22 50.00% 38.89% 11.11% 100.0% As of:	4/1/17 100.0% 100.0% 4/1/19 43.75% 43.75% 12.50% 100.0%	4/1/17 43.75% 43.75% 12.50%
91-day UST Bill +5% HFRI FoF Conservative Index Real Return Benchmark Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity Liquid Real Return Custom Benchmark Real Estate Benchmark	As of: 7/1/17 100.0% 100.0% As of: 4/1/22 50.00% 38.89% 11.11% 100.0%	4/1/17 100.0% 100.0% 4/1/19 43.75% 43.75%	4/1/17 43.75% 43.75% 12.50% 100.0%
91-day UST Bill +5% HFRI FoF Conservative Index Real Return Benchmark Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity Liquid Real Return Custom Benchmark Real Estate Benchmark NCREIF	As of: 7/1/17 100.0% 100.0% As of: 4/1/22 50.00% 38.89% 11.11% 100.0% As of: 4/1/22	4/1/17 100.0% 100.0% 4/1/19 43.75% 43.75% 12.50% 100.0%	4/1/17 43.75% 43.75% 12.50%
91-day UST Bill +5% HFRI FoF Conservative Index Real Return Benchmark Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity Liquid Real Return Custom Benchmark Real Estate Benchmark NCREIF NFI-ODCE	As of: 7/1/17 100.0% 100.0% As of: 4/1/22 50.00% 38.89% 11.11% 100.0% As of: 4/1/22 60.0%	4/1/17 100.0% 100.0% 4/1/19 43.75% 43.75% 12.50% 100.0%	4/1/17 43.75% 43.75% 12.50% 100.0%
91-day UST Bill +5% HFRI FoF Conservative Index Real Return Benchmark Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity Liquid Real Return Custom Benchmark Real Estate Benchmark NCREIF	As of: 7/1/17 100.0% 100.0% As of: 4/1/22 50.00% 38.89% 11.11% 100.0% As of: 4/1/22	4/1/17 100.0% 100.0% 4/1/19 43.75% 43.75% 12.50% 100.0%	4/1/17 43.75% 43.75% 12.50% 100.0%



RE-Value Added Benchmark	As of:				Lazard Benchmark	As of:		
		7/1/16	10/1/08			4/1/22	7/1/12	
NCREIF +2% 1Q Lag	4	00.00/	100.0%		MSCI ACWI ex USA		100.0%	
		00.0% 100.0%	100.0%		MSCI World ex US	100.0%		
		100.0%	100.0%			100.0%	100.0%	
Private Real Assets Benchmark	As of:							
		4/1/22	7/1/17	4/1/17	Brigade Benchmark	As of:		
				100.0%	105 0 4 14 17 1 17 114	12/1/13		
Cambridge Associates Private Energy 1 Qtr Lag	;	30.0%	35.0%		ICE BofA ML High Yield II	50.0%		
		60.0%	45.0%		Credit Suisse Leveraged Loans	50.0%		
NCREIF Farmland 1 Qtr Lag		10.0%	10.0%			100.0%		
			10.0%		B 1011B 1B 1 B 1			
	1	100.0%	100.0%	100.0%	Brookfield Real Return Custom	As of: 12/1/2019		
Liquid Real Return Custom Benchmark	As of:				FTSE Global Core Infrastructure 50/50 Index	30.0%		
·		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 Index	10.0%		
		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%		
		25.0%				100.0%		
Bloomberg U.S. Government Inflation-Linked 1-10 Yrs		30.0%						
		15.0%			SSgA Real Asset Benchmark	As of:		
		100.0%				3/2/2018	10/1/15	2/1/08
		100.0%			Bloomberg US Govt Inflation-Linked 1-10 Yrs	3/2/2018	10/1/15 10.0%	2/1/08
Cash Benchmark	As of:		7/4/00			3/2/2018		2/1/08 20.0%
	As of:	4/1/22	7/1/92		Bloomberg US Govt Inflation-Linked 1-10 Yrs	3/2/2018 30.0%	10.0%	
Cash Benchmark 91 Day T-Bills	As of:	4/1/22	7/1/92 100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS		10.0%	
	As of:	4/1/22 00.0%	100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS	30.0%	10.0% 10.0%	
	As of:	4/1/22			Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR	30.0% 10.0%	10.0% 10.0%	
91 Day T-Bills	As of: 1 1	4/1/22 00.0%	100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr	30.0% 10.0%	10.0% 10.0%	20.0%
	As of: 1 1 As of:	4/1/22 00.0% 100.0%	100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT	30.0% 10.0% 10.0%	10.0% 10.0% 20.0%	20.0%
91 Day T-Bills AllianceBernstein Benchmark	As of: 1 1 As of: 1/1/01	4/1/22 00.0%	100.0%	1	Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT FTSE EPRA/NAREIT Developed Liquid	30.0% 10.0% 10.0%	10.0% 10.0% 20.0%	20.0%
91 Day T-Bills AllianceBernstein Benchmark Russell 1000	As of: 1 1 As of:	4/1/22 00.0% 100.0%	100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT FTSE EPRA/NAREIT Developed Liquid MSCI World Natural Resources	30.0% 10.0% 10.0% 15.0%	10.0% 10.0% 20.0%	20.0%
91 Day T-Bills AllianceBernstein Benchmark Russell 1000 Russell 3000	As of: 1 1 As of: 1/1/01	4/1/22 00.0% 100.0%	100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT FTSE EPRA/NAREIT Developed Liquid MSCI World Natural Resources S&P Global Large Mid Cap Commodity Resources	30.0% 10.0% 10.0% 15.0%	10.0% 10.0% 20.0%	20.0%
91 Day T-Bills AllianceBernstein Benchmark Russell 1000	As of: 1 1 As of: 1/1/01 100.0%	4/1/22 00.0% 100.0% 1/1/98	100.0% 100.0% 5/1/89		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT FTSE EPRA/NAREIT Developed Liquid MSCI World Natural Resources S&P Global Large Mid Cap Commodity Resources S&P Global Infrastructure	30.0% 10.0% 10.0% 15.0%	10.0% 10.0% 20.0%	20.0% 30.0% 25.0%
91 Day T-Bills AllianceBernstein Benchmark Russell 1000 Russell 3000	As of: 1 1 As of: 1/1/01	4/1/22 00.0% 100.0%	100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT FTSE EPRA/NAREIT Developed Liquid MSCI World Natural Resources S&P Global Large Mid Cap Commodity Resources S&P Global Infrastructure S&P GS Commodities	30.0% 10.0% 10.0% 15.0%	10.0% 10.0% 20.0% 10.0% 20.0%	20.0% 30.0% 25.0%
91 Day T-Bills AllianceBernstein Benchmark Russell 1000 Russell 3000 Wilshire 2500	As of: 100.0%	4/1/22 00.0% 100.0% 1/1/98	100.0% 100.0% 5/1/89		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT FTSE EPRA/NAREIT Developed Liquid MSCI World Natural Resources S&P Global Large Mid Cap Commodity Resources S&P GS Commodities S&P MLP	30.0% 10.0% 10.0% 15.0% 10.0% 25.0%	10.0% 10.0% 20.0% 10.0% 20.0% 20.0%	20.0% 30.0% 25.0%
91 Day T-Bills AllianceBernstein Benchmark Russell 1000 Russell 3000	As of: 11 As of: 1/1/01 100.0% As of:	4/1/22 00.0% 100.0% 1/1/98 100.0%	100.0% 100.0% 5/1/89 100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT FTSE EPRA/NAREIT Developed Liquid MSCI World Natural Resources S&P Global Large Mid Cap Commodity Resources S&P Global Infrastructure S&P GS Commodities	30.0% 10.0% 10.0% 15.0% 10.0% 25.0%	10.0% 10.0% 20.0% 10.0% 20.0% 20.0% 10.0%	20.0% 30.0% 25.0%
91 Day T-Bills AllianceBernstein Benchmark Russell 1000 Russell 3000 Wilshire 2500 Eagle Capital Benchmark	As of: 100.0%	4/1/22 00.0% 100.0% 1/1/98 100.0%	100.0% 100.0% 5/1/89 100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT FTSE EPRA/NAREIT Developed Liquid MSCI World Natural Resources S&P Global Large Mid Cap Commodity Resources S&P GS Commodities S&P MLP Cash Account Benchmark	30.0% 10.0% 10.0% 15.0% 10.0% 25.0%	10.0% 10.0% 20.0% 10.0% 20.0% 20.0% 10.0%	20.0% 30.0% 25.0%
91 Day T-Bills AllianceBernstein Benchmark Russell 1000 Russell 3000 Wilshire 2500 Eagle Capital Benchmark Russell 1000 Value	As of: 11 As of: 1/1/01 100.0% 100.0% As of: 2/1/19	4/1/22 00.0% 100.0% 1/1/98 100.0%	100.0% 100.0% 5/1/89 100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT FTSE EPRA/NAREIT Developed Liquid MSCI World Natural Resources S&P Global Large Mid Cap Commodity Resources S&P GS Commodities S&P MLP Cash Account Benchmark 91 Day T-Bills	30.0% 10.0% 10.0% 15.0% 10.0% 25.0% As of: 4/1/22	10.0% 10.0% 20.0% 10.0% 20.0% 20.0% 10.0%	20.0% 30.0% 25.0%
91 Day T-Bills AllianceBernstein Benchmark Russell 1000 Russell 3000 Wilshire 2500 Eagle Capital Benchmark	As of: 11 As of: 1/1/01 100.0% As of:	4/1/22 00.0% 100.0% 1/1/98 100.0%	100.0% 100.0% 5/1/89 100.0%		Bloomberg US Govt Inflation-Linked 1-10 Yrs Bloomberg US TIPS Bloomberg 1-10 Yr US TIPS Bloomberg Roll Select Commodity TR Bloomberg USD Floating Rate Note <5yr DJ US Select REIT FTSE EPRA/NAREIT Developed Liquid MSCI World Natural Resources S&P Global Large Mid Cap Commodity Resources S&P GS Commodities S&P MLP Cash Account Benchmark	30.0% 10.0% 10.0% 15.0% 10.0% 25.0%	10.0% 10.0% 20.0% 10.0% 20.0% 20.0% 10.0%	20.0% 30.0% 25.0%



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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Verus receives universe data from InvMetrics, eVestment Alliance, and Morningstar. We believe this data to be robust and appropriate for peer comparison. Nevertheless, these universes may not be comprehensive of all peer investors/managers but rather of the investors/managers that comprise that database. The resulting universe composition is not static and will change over time. Returns are annualized when they cover more than one year. Investment managers may revise their data after report distribution. Verus will make the appropriate correction to the client account but may or may not disclose the change to the client based on the materiality of the change.



Sacramento County Employees' Retirement System

Investment Performance Review Period Ending: September 30, 2023



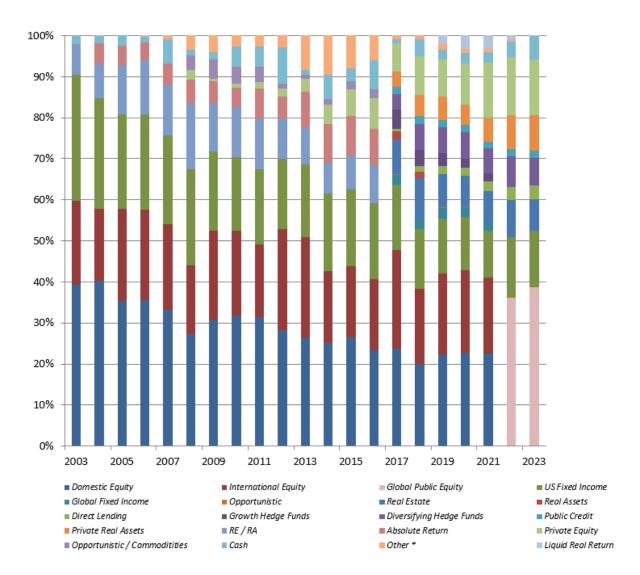
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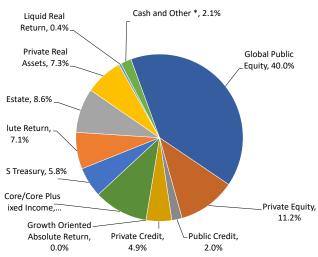
Quarter ending September 30th, 2023

- The Total Plan returned -1.8% gross in the third quarter of 2023 and ranked in the second quartile among other public funds greater than \$1 billion. The Plan underperformed its policy index by 30 bps over this period. Longer-term, the three-year return of 7.0% ranks just outside the top quartile of large public plan peer group. The five-year return of 6.9% ranks in the top quartile of the large public plan peer group.
- Third quarter results (net) were enhanced by the following factors:
 - 1. Within the Growth Asset category (-2.1%), which underperformed the total fund, Private Equity and Private Credit were the bright spots of the portfolio, returning 0.6% and 2.1%, respectively, for the quarter.
- Third quarter results (net) were hindered by the following factors:
 - 1. Global Public Equity detracted from overall portfolio returns, with a performance of -3.5% on the quarter. Performance was hurt most by International Equity, which declined -4.9% during the quarter.
 - 2. Core Fixed Income (-3.9%) dragged down Diversifying Asset Category performance (-1.5%), as rising yields lowered bond valuations.
 - 3. The Real Return category returned -0.3% vs. a benchmark return of -0.8%. The decline was led by Opportunistic Non-Core Real Estate, which returned -9.3%. However, Core Real Estate returned -0.4%, outperforming the benchmark (-1.9%) by 150bps.



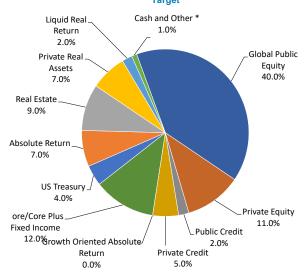
	2003	2004	2005	2006	2007	2008	2009
US Equity =	39.2	40.4	35.4	35.5	33.1	27.2	30.9
International Equity	20.6	17.5	22.3	22.0	20.9	16.8	21.5
US Fixed Income	30.6	26.9	23.1	23.3	21.7	23.5	19.3
Real Estate / Real Assets	7.5	8.5	11.9	13.1	12.4	16.1	11.9
Absolute Return	-	4.9	4.8	4.4	5.1	5.6	5.3
Private Equity	_	-	-	_	0.1	2.5	0.5
Opportunistic / Commodities	_	_	_	_	_	3.5	4.8
Cash	2.1	1.8	2.4	1.2	5.8	1.4	1.7
Other *	-	0.1	-	0.4	0.9	3.4	4.1
_	2010	2011	2012	2013	2014	2015	2016
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
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	38.5
US Fixed Income	16.0	14.6	13.6	13.2	11.4	14.8	13.7
Global Fixed Income	2.4	2.6	2.5	2.5	2.1	-	-
Public Credit	1.8	1.9	1.8	1.7	1.7	1.7	1.7
Real Estate / Real Assets	-	-	-	-	-	-	-
Real Estate	8.4	9.7	8.3	7.3	7.6	9.0	7.6
Real Assets	2.1	1.4	-	-	-	-	-
Private Real Assets	3.7	5.2	5.7	4.9	5.8	8.2	8.6
Liquid Real Return	-	-	2.0	3.3	3.2	1.2	0.1
Absolute Return	-	-	-	-	-		
Growth Hedge Funds	4.6	3.9	3.0	2.3	2.0	0.1	0.1
Diversifying Hedge Funds	3.8	6.2	6.4	6.4	6.0	7.5	6.6
Private Equity	6.9	9.3	9.0	10.1	13.4	14.2	13.5
Direct Lending	0.5	1.5	2.0	1.9	2.3	3.2	3.3
Opportunistic / Commodities	-	-	-	-	-	-	-
Opportunistic	0.1	0.1	0.1	0.0	0.0	-	-
Cash	1.1	4.3	2.4	2.5	2.6	3.7	5.7
Other *	0.8	0.9	1.4	1.0	0.8	0.4	0.7

Current w/Overlay



ASSET ALLOCATION	MARKET VALUE W/OVERLAY	W/ OVERLAY	W/O OVERLAY
Global Public Equity	4,942,173,641	40.0%	38.5%
Private Equity	1,381,432,996	11.2%	13.5%
Public Credit	245,372,102	2.0%	1.7%
Private Credit	611,238,376	4.9%	3.3%
Growth Oriented Absolute Return	34,980	0.0%	0.1%
Core/Core Plus Fixed Income	1,296,197,506	10.5%	10.5%
US Treasury	721,815,046	5.8%	3.2%
Absolute Return	876,537,622	7.1%	6.6%
Real Estate	1,060,315,974	8.6%	7.6%
Private Real Assets	903,016,757	7.3%	8.6%
Liquid Real Return	55,271,870	0.4%	0.1%
Cash and Other *	255,553,280	2.1%	6.4%
TOTAL	12,348,960,149	100.0%	100.0%

Target



ASSET ALLOCATION	ACTUAL	TARGET	DIFF
Global Public Equity	40.0%	40.0%	0.0%
Private Equity	11.2%	11.0%	0.2%
Public Credit	2.0%	2.0%	0.0%
Private Credit	4.9%	5.0%	-0.1%
Growth Oriented Absolute Return	0.0%	0.0%	0.0%
Core/Core Plus Fixed Income	10.5%	12.0%	-1.5%
US Treasury	5.8%	4.0%	1.8%
Absolute Return	7.1%	7.0%	0.1%
Real Estate	8.6%	9.0%	-0.4%
Private Real Assets	7.3%	7.0%	0.3%
Liquid Real Return	0.4%	2.0%	-1.6%
Cash and Other *	2.1%	1.0%	1.1%

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

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Total Fund - Gross	12,348,968,539	100.0	-1.8 (40)	4.5 (48)	8.7 (83)	7.0 (32)	6.9 (19)	7.3 (30)	8.2	Jul-86
Total Fund - Net			-1.8	4.4	8.5	6.8	6.7	7.0	8.0	Jul-86
Policy Index			-1.5 (28)	4.9 (39)	9.2 (72)	6.2 (44)	5.8 (39)	6.7 (46)	8.2	Jul-86
InvMetrics Public DB > \$1B Median			-1.9	4.3	10.2	5.8	5.5	6.5	-	
Total Fund ex Overlay - Gross	12,268,559,766	99.3	-1.5 (28)	4.6 (45)	8.4 (89)	7.3 (27)	6.8 (20)	7.3 (29)	8.1	Jul-86
Total Fund ex Overlay - Net			-1.5	4.5	8.2	7.1	6.6	7.1	7.9	Jul-86
Policy Index			-1.5 (28)	4.9 (39)	9.2 (72)	6.2 (44)	5.8 (39)	6.7 (46)	8.2	Jul-86
Growth Asset Category - Gross	7,044,887,959	57.0	-2.0	7.7	14.8	9.4	8.4		9.9	Apr-17
Growth Asset Category - Net			-2.1	7.5	14.6	9.1	8.1		9.6	Apr-17
Growth Custom			-1.7	8.7	16.4	8.9	7.6	-	8.9	
Global Public Equity - Gross	4,750,293,638	38.5	-3.5	10.1	21.7	6.6	6.4	8.1	8.4	Jul-11
Global Public Equity - Net			-3.5	9.9	21.3	6.2	6.0	7.7	8.0	Jul-11
MSCI ACWI IMI			-3.3	9.8	20.8	7.0	6.5	7.6	7.6	
Domestic Equity - Gross	2,400,988,762	19.4	-2.4 (11)	14.2 (6)	22.9 (6)	10.2 (33)	9.4 (21)	11.2 (30)	10.2	Jul-86
Domestic Equity - Net			-2.4	13.9	22.6	9.9	9.1	10.9	10.0	Jul-86
Russell 3000 Index			-3.3 (39)	12.4 (22)	20.5 (33)	9.4 (61)	9.1 (32)	11.3 (29)	10.1	Jul-86
InvMetrics All DB US Equity Median			-3.3	11.1	19.9	9.7	8.8	11.0	-	
Large Cap - Gross	2,193,459,756	17.8	-2.0	15.3	24.2	10.8	9.9	11.7	7.2	Apr-98
Large Cap - Net			-2.1	15.2	23.9	10.5	9.7	11.5	7.0	Apr-98
Russell 1000 Index			-3.1	13.0	21.2	9.5	9.6	11.6	7.6	
Large Cap - Index	1,193,275,170	9.7	-3.1	13.0	21.2	9.6	9.7	11.6	11.3	Oct-08
Large Cap - Index			-3.1	13.0	21.2	9.5	9.6	11.6	11.2	Oct-08
Russell 1000 Index			-3.1	13.0	21.2	9.5	9.6	11.6	11.3	
AB - Gross	1,193,275,170	9.7	-3.1 (27)	13.0 (58)	21.2 (61)	9.6 (59)	9.7 (58)	11.6 (62)	10.2	May-89
AB - Net			-3.1	13.0	21.2	9.5	9.6	11.6	10.1	May-89
Russell 1000 Index			-3.1 (43)	13.0 (57)	21.2 (63)	9.5 (67)	9.6 (63)	11.6 (61)	10.3	May-89
eV US Passive Large Cap Equity Median			-3.2	13.0	21.6	10.0	9.9	11.9	-	•
Large Cap - Enhanced - Gross	336,153,857	2.7	-0.7	15.5	25.5	12.2	9.9		10.4	Aug-18
Large Cap - Enhanced - Net			-0.7	15.3	25.2	12.0	9.6		10.1	Aug-18
Russell 1000 Index			-3.1	13.0	21.2	9.5	9.6	-	10.1	
AQR US Enhanced Equity - Gross	336,153,857	2.7	-0.7 (3)	15.5 (7)	25.5 (5)	12.2 (10)	9.9 (28)	-	10.4	Aug-18
AQR US Enhanced Equity - Net	,,••		-0.7	15.3	25.2	12.0	9.6	-	10.1	Aug-18
Russell 1000 Index			-3.1 (58)	13.0 (37)	21.2 (46)	9.5 (68)	9.6 (44)	-	10.1	Aug-18
eV US Enh Equity Median			-3.1	12.4	20.8	10.1	9.4	11.7	-	

See Policy Index and Benchmark History



Verus

**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	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Large Cap (130/30) - Gross	330,676,491	2.7	-2.0	13.4	22.1	11.0	10.0	12.3	12.0	Oct-08
Large Cap (130/30) - Net			-2.1	13.1	21.6	10.4	9.5	11.7	11.4	Oct-08
Russell 1000 Index			-3.1	13.0	21.2	9.5	9.6	11.6	11.3	
JP Morgan 130/30 - Gross	175,118,153	1.4	-1.9 (64)	16.5 (16)	26.5 (13)	12.1 (62)	12.0 (26)	13.3 (30)	12.5	Aug-08
JP Morgan 130/30 - Net			-2.0	16.0	25.7	11.4	11.4	12.6	11.7	Aug-08
Russell 1000 Index			-3.1 (91)	13.0 (34)	21.2 (40)	9.5 (88)	9.6 (52)	11.6 (76)	10.5	Aug-08
eV Extended US Equity Median			-1.3	10.4	18.3	14.2	9.8	12.6	-	
DE Shaw Broad Mkt Core Alpha Ext - Gross	155,558,338	1.3	-2.1 (71)	10.2 (56)	17.6 (57)	9.8 (87)	-	-	10.8	Feb-19
DE Shaw Broad Mkt Core Alpha Ext - Net			-2.1	10.0	17.3	9.5	-	-	10.5	Feb-19
Russell 1000 Index			-3.1 (91)	13.0 (34)	21.2 (40)	9.5 (88)	-	-	12.0	Feb-19
eV Extended US Equity Median			-1.3	10.4	18.3	14.2	9.8	12.6	-	
Large Cap Active - Gross	333,354,238	2.7	0.7	26.5	36.9	14.1	10.4	11.3	11.1	Oct-08
Large Cap Active - Net			0.5	25.9	35.9	13.3	9.6	10.5	10.4	Oct-08
Russell 1000			-3.1	13.0	21.2	9.5	10.0	10.4	9.9	
Eagle Capital - Gross	333,333,954	2.7	0.7 (1)	26.5 (1)	36.9 (1)	14.1 (3)	10.4 (25)	12.3 (20)	13.4	Mar-12
Eagle Capital - Net			0.5	25.9	35.9	13.3	9.6	11.4	12.6	Mar-12
Russell 1000 Index			-3.1 (56)	13.0 (28)	21.2 (36)	9.5 (56)	9.6 (42)	11.6 (45)	12.4	Mar-12
eV US Large Cap Core Equity Median			-3.1	9.7	19.8	9.7	9.3	11.5	-	
Small Cap - Gross	207,529,006	1.7	-6.0	3.0	10.8	4.3	3.8	7.9	11.1	Jan-91
Small Cap - Net			-6.2	2.3	9.9	3.6	3.1	7.2	10.4	Jan-91
Russell 2000 Index			-5.1	2.5	8.9	7.2	2.4	6.6	9.8	
Small Cap - Growth - Gross	90,065,228	0.7	-8.3	0.8	4.2	-4.6	3.0	8.4	10.2	Oct-08
Small Cap - Growth - Net			-8.3	0.0	3.3	-5.3	2.3	7.7	9.5	Oct-08
Russell 2000 Growth Index			-7.3	5.2	9.6	1.1	1.6	6.7	8.8	
Weatherbie - Gross	90,065,228	0.7	-8.3 (74)	0.8 (82)	4.2 (82)	-4.6 (92)	3.0 (77)	10.0 (31)	11.5	Jan-03
Weatherbie - Net			-8.3	0.0	3.3	-5.3	2.3	9.3	10.7	Jan-03
Russell 2000 Growth Index			-7.3 (64)	5.2 (52)	9.6 (58)	1.1 (64)	1.6 (89)	6.7 (95)	9.4	Jan-03
eV US Small Cap Growth Equity Median			-6.6	5.7	10.7	2.9	5.2	9.2	-	

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Small Cap - Value - Gross	117,463,778	1.0	-4.2	4.7	16.5	14.7	3.2	6.7	8.1	Oct-08
Small Cap - Value - Net			-4.4	4.0	15.6	13.9	2.6	6.0	7.3	Oct-08
Russell 2000 Value Index			-3.0	-0.5	7.8	13.3	2.6	6.2	7.2	
Snyder Capital Management - Gross	117,463,778	1.0	-4.2 (77)	4.7 (43)	16.5 (42)	-	-	-	3.9	Feb-21
Snyder Capital Management - Net			-4.4	4.0	15.6	-	-	-	3.2	Feb-21
Russell 2000 Value Index - Net			-3.0 (56)	-0.5 (86)	7.8 (93)	-	-	-	1.4	Feb-21
eV US Small Cap Value Equity Median			-2.5	3.6	15.3	16.2	5.3	7.9	-	
International Equity - Gross	1,992,685,452	16.1	-4.6 (67)	6.6 (51)	22.1 (52)	3.0 (79)	3.4 (57)	4.4 (45)	6.1	Jan-88
International Equity - Net			-4.7 (69)	6.2 (55)	21.6 (57)	2.5 (83)	2.8 (81)	3.9 (70)	5.7	Jan-88
MSCI AC World ex USA Index			-3.7 (38)	5.8 (60)	21.0 (65)	4.2 (54)	3.1 (69)	3.8 (73)	5.7	Jan-88
InvMetrics All DB Global ex-US Equity Median			-4.0	6.7	22.3	4.6	3.7	4.3	-	
International - Developed - Gross	1,434,379,184	11.6	-4.8 (61)	7.9 (25)	25.2 (20)	4.7 (48)	4.1 (41)	5.2 (29)	4.7	Apr-98
International - Developed - Net			-4.9 (64)	7.5 (26)	24.6 (23)	4.1 (49)	3.4 (61)	4.6 (53)	4.2	Apr-98
MSCI World ex U.S.			-4.0 (39)	7.3 (34)	24.7 (22)	6.6 (21)	4.0 (42)	4.4 (59)	4.7	Apr-98
InvMetrics All DB Developed Market ex-US Equity Median			-4.4	5.7	22.4	3.8	3.5	4.7	-	
Large Cap - Gross	1,245,803,258	10.1	-4.8 (59)	8.3 (39)	25.6 (47)	5.5 (55)	4.5 (42)	5.3 (31)	5.0	Jan-05
Large Cap - Net			-4.9 (60)	7.8 (45)	25.0 (53)	5.0 (59)	3.8 (60)	4.8 (50)	4.5	Jan-05
MSCI World ex U.S.			-4.0 (48)	7.3 (54)	24.7 (55)	6.6 (43)	4.0 (58)	4.4 (66)	5.0	Jan-05
eV EAFE Large Cap Equity Median			-4.1	7.4	25.3	5.9	4.2	4.8	-	
Lazard - Gross	309,930,418	2.5	-5.6 (62)	7.4 (35)	23.3 (35)	4.7 (40)	3.3 (61)	4.8 (55)	6.9	Jul-12
Lazard - Net			-5.7	7.0	22.7	4.3	2.9	4.5	6.6	Jul-12
MSCI World ex US Gross			-4.0 (44)	7.3 (36)	24.7 (27)	5.2 (36)	3.6 (52)	4.1 (74)	5.8	Jul-12
eV All ACWI ex-US Equity Median			-4.8	5.8	21.2	3.9	3.7	5.0	-	
Walter Scott & Partners Limited - Gross	449,975,336	3.6	-10.0 (79)	5.3 (23)	20.4 (35)	1.0 (39)	4.9 (34)	-	7.5	Apr-17
Walter Scott & Partners Limited - Net			-10.1	4.6	19.5	0.2	3.7	-	6.5	Apr-17
MSCI World ex U.S Growth			-8.2 (52)	4.7 (29)	19.7 (47)	0.8 (40)	3.7 (66)	-	5.7	Apr-17
eV EAFE Large Cap Growth Median			-8.1	3.7	19.5	0.4	4.4	5.3	-	
LSV - Gross	485,897,504	3.9	1.1 (8)	11.7 (29)	32.7 (31)	12.3 (33)	4.9 (44)	5.5 (18)	5.0	Jan-05
LSV - Net			1.0	11.3	32.2	11.9	4.5	5.0	4.5	Jan-05
MSCI World ex U.S. Value			0.3 (20)	9.9 (56)	29.9 (59)	12.4 (32)	3.8 (68)	3.7 (71)	4.5	Jan-05
eV EAFE Large Cap Value Median			-1.6	10.5	31.0	10.5	4.5	4.4	-	



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Small Cap - Gross	188,575,926	1.5	-4.7 (62)	2.3 (62)	18.4 (62)	-1.9 (82)	0.7 (69)	3.7 (88)	6.9	Oct-08
Small Cap - Net			-4.8	2.0	18.0	-2.6	0.0	3.0	6.0	Oct-08
MSCI World ex U.S. Small Cap Index			-3.4 (41)	2.3 (62)	17.9 (66)	2.3 (56)	1.7 (52)	4.6 (75)	6.8	Oct-08
eV EAFE Small Cap Equity Median			-3.8	3.7	20.3	2.9	2.0	5.5	-	
William Blair Dev Small Cap - Gross	91,056,880	0.7	-7.4 (83)	0.9 (77)	14.9 (74)	-4.3 (90)	1.1 (84)	3.8 (97)	7.1	Oct-08
William Blair Dev Small Cap - Net			-7.6	0.3	13.8	-5.2	0.2	2.9	6.1	Oct-08
MSCI World ex U.S. Small Cap Index			-3.4 (45)	2.3 (73)	17.9 (59)	2.3 (49)	1.7 (74)	4.6 (80)	6.8	Oct-08
eV ACWI ex-US Small Cap Equity Median			-3.8	4.6	19.5	1.8	3.4	6.0	-	
Acadian Asset Management - Gross	97,519,047	0.8	-2.0 (32)	-	-	-	-	-	-2.4	Apr-23
Acadian Asset Management - Net			-2.0 (33)	-	-	-	-	-	-2.5	Apr-23
MSCI AC World ex USA Small Value			0.5 (13)	7.1 (32)	23.2 (25)	9.0 (27)	3.4 (49)	4.7 (78)	6.7	Jun-94
eV ACWI ex-US Small Cap Equity Median			-4.0	4.2	19.3	0.9	2.6	5.2	-	
International - Emerging - Gross	558,302,276	4.5	-4.0	5.5	15.4	-2.4	1.4	2.1	5.3	Feb-00
International - Emerging - Net			-4.0	5.2	15.1	-2.7	1.1	1.8	4.9	Feb-00
MSCI Emerging Markets Index			-2.8	2.2	12.2	-1.3	0.9	2.5	5.7	
Arga Emg - Gross	186,543,301	1.5	-3.1 (50)	-	-	-	-	-	-0.9	Feb-23
Arga Emg - Net			-3.1	-	-	-	-	-	-1.2	Feb-23
MSCI Emerging Markets Index			-2.8 (45)	-	-	-	-	-	-5.3	Feb-23
eV Emg Mkts Equity Median			-3.1	4.0	14.6	0.4	2.4	3.5	-	
Baillie Gifford Emg All Cap - Gross	197,643,314	1.6	-4.5 (73)	6.2 (35)	18.4 (33)	-3.8 (83)	1.6 (64)	-	6.6	Apr-16
Baillie Gifford Emg All Cap - Net			-4.5	6.2	18.4	-3.8	1.6	-	6.6	Apr-16
MSCI Emerging Markets Index			-2.8 (45)	2.2 (64)	12.2 (65)	-1.3 (64)	0.9 (78)	-	4.7	Apr-16
eV Emg Mkts Equity Median			-3.1	4.0	14.6	0.4	2.4	3.5	-	
Oaktree Emg - Gross	171,439,606	1.4	-5.2 (85)	-	-	-	-	-	-9.4	Feb-23
Oaktree Emg - Net			-5.3	-	-	-	-	-	-9.8	Feb-23
MSCI Emerging Markets Index			-2.8 (45)	-	-	-	-	-	-5.3	Feb-23
eV Emg Mkts Equity Median			-3.1	4.0	14.6	0.4	2.4	3.5	-	



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Global/Unconstrained Equity - Gross	356,619,425	2.9	-4.7	3.8	10.3				-7.3	Apr-22
Global/Unconstrained Equity - Net			-4.7	3.8	10.3	-			-7.3	Apr-22
MSCI AC World IMI			-3.3 (28)	9.8 (26)	20.8 (64)	-	-	-	-3.3	Apr-22
InvMetrics All DB Global Equity Median			-4.0	8.7	21.5	6.6	6.4	5.7	-	
Artisan Partners Global Opp - Gross	120,527,473	1.0	-5.4	9.3	15.2	-	-	-	2.9	Sep-22
Artisan Partners Global Opp - Net			-5.4	9.3	15.2	-	-	-	2.9	Sep-22
MSCI ACWI IMI			-3.3	9.8	20.8	-	-	-	8.4	
Nikko Asset Management - Gross	117,360,000	1.0	-5.6	2.8	12.9	-	-	-	2.8	Sep-22
Nikko Asset Management - Net			-5.6	2.8	12.9	-	-	-	2.8	Sep-22
MSCI ACWI IMI			-3.3	9.8	20.8	-	-	-	8.4	
Third Point Offshore Fund - Gross	46,086,627	0.4	-0.7	-3.2	-2.0	3.3	3.8	5.5	7.4	May-12
Third Point Offshore Fund - Net			-0.7	-3.2	-2.0	3.3	3.8	5.5	7.4	May-12
MSCI ACWI IMI			-3.3	9.8	20.8	7.4	6.6	7.9	8.8	
Allspring Global Investments - Gross	72,645,325	0.6	-	-	-	-	-	-	-0.2	Sep-23
Allspring Global Investments - Net			-	-	-	-	-	-	-0.2	Sep-23
MSCI AC World IMI			-	-	-	-	-	-	0.0	
Private Equity - Gross	1,669,224,305	13.5	0.6 (59)	1.6 (71)	1.2 (68)	20.2 (36)	18.3 (14)	16.9 (19)	7.0	Mar-08
Private Equity - Net			0.6	1.6	1.2	20.2	18.3	16.9	7.2	Mar-08
Cambridge Associates All PE 1 Qtr Lag			1.4 (42)	4.3 (46)	2.6 (58)	19.1 (43)	14.3 (45)	15.0 (31)	11.4	Jan-08
Russell 3000 +3% 1Q Lag			8.2 (2)	26.1 (1)	22.0 (1)	17.0 (63)	14.4 (45)	15.4 (30)	12.4	Mar-08
InvMetrics All DB Private Equity Median			0.9	4.0	3.5	18.7	13.7	13.5	-	
Abbott VI - Gross	25,947,267	0.2	2.4	0.1	-1.7	13.5	12.3	14.3	6.8	Aug-08
Abbott VI - Net			2.4	0.1	-1.7	13.5	12.3	14.3	-	Aug-08
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	12.4	
Accel-KKR V - Gross	26,789,578	0.2	2.2	6.7	7.7	29.6	26.8	-	22.9	Feb-17
Accel-KKR V - Net			2.2	6.7	7.7	29.6	26.8	-	22.9	Feb-17
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.6	
Accel-KKR VI - Gross	21,027,614	0.2	0.0	0.0	0.0	-	-	-	-22.5	Mar-21
Accel-KKR VI - Net			0.0	0.0	0.0	-	-	-	-22.5	Mar-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	18.0	
Accel-KKR Growth Partners II - Gross	10,000,425	0.1	1.1	5.6	4.1	43.6	35.2	-	17.4	Mar-15
Accel-KKR Growth Partners II - Net			1.1	5.6	4.1	43.6	35.2	-	17.4	Mar-15
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.4	



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

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

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Accel-KKR Growth Partners III - Gross	31,011,484	0.3	1.6	6.1	4.9	16.3	-	-	3.9	Aug-19
Accel-KKR Growth Partners III - Net			1.6	6.1	4.9	16.3	-	-	3.9	Aug-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	15.6	
Accel-KKR Growth Partners IV - Gross	9,866,570	0.1	0.9	2.2	-2.5	-	-	-	-24.9	Jul-2
Accel-KKR Growth Partners IV - Net			0.9	2.2	-2.5	-	-	-	-24.9	Jul-2
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	-2.1	
Atalaya Special Opp V - Gross	465,305	0.0	4.7	-12.7	0.3	3.3	3.4	4.2	4.2	Aug-1
talaya Special Opp V - Net			4.7	-12.7	0.3	3.3	3.4	4.2	4.2	Aug-1
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	14.8	
atalaya Special Opp VI - Gross	1,564,992	0.0	-5.6	-4.0	-0.9	9.8	11.6	-	10.1	May-
Atalaya Special Opp VI - Net			-5.6	-4.0	-0.9	9.8	11.6	-	10.1	May-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.9	
Canvas Ventures III - Gross	14,133,839	0.1	0.1	-7.8	1.7	-	-	-	2.0	Dec-
Canvas Ventures III - Net	, ,		0.1	-7.8	1.7	_	-	-	2.0	Dec-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	_	-	20.3	
Cortec Group Fund VII - Gross	26,271,279	0.2	4.1	18.9	18.5	27.1	-	-	26.3	Jan-
Cortec Group Fund VII - Net	, ,		4.1	18.9	18.5	27.1	-	-	26.3	Jan-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	16.2	
Cortec Group Fund VIII - Gross	3,762,148	0.0	-7.3	-	-	-	-	-	-7.3	Apr-
Cortec Group Fund VIII - Net	, ,		-7.3	-	-	_	-	-	-7.3	Apr-
Cambridge Associates All PE 1 Qtr Lag			1.4	-	-	-	-	-	3.4	
CRV Select Fund I - Gross	17,844,539	0.1	3.7	-10.0	-8.8	_	-	-	0.5	Jun-
CRV Select Fund I - Net	,- ,		3.7	-10.0	-8.8	_	-	-	0.5	Jun-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	_	-	12.8	
CRV Select Fund II - Gross	5,249,200	0.0	6.2	-8.2	-0.8	-	-	-	-8.8	Apr-
CRV Select Fund II - Net	·, ·, ·,		6.2	-8.2	-0.8	_	-	-	-8.8	Apr-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	_	-	-2.2	
CRV XVIII LP - Gross	17,190,096	0.1	-2.1	-8.8	-10.2	-	_	_	2.5	Mar-
CRV XVIII LP - Net	11,100,000	V .,	-2.1	-8.8	-10.2	_	_	_	2.5	Mar-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	_	_	_	18.0	ITIO
CRV XIX LP - Gross	5,278,955	0.0	-3.6	-14.6	-20.0	-	-	-	-21.6	Jul-
CRV XIX LP - Net	0,210,000	0.0	-3.6	-14.6	-20.0	_	_	_	-21.6	Jul-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	_	_	_	-2.1	oui-

See Policy Index and Benchmark History

^{**}Cortec Group Fund VIII initial capital call 4/6/23.



^{*} 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: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Davidson Kempner LT Dist Opp IV - Gross	18,165,209	0.1	2.9	10.8	31.5	26.2	17.2	-	17.3	Apr-18
Davidson Kempner LT Dist Opp IV - Net			2.9	10.8	31.5	26.2	17.2	-	17.3	Apr-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.3	
Davidson Kempner LT Dist Opp V - Gross	31,561,881	0.3	1.2	5.9	4.3	16.4	-	-	14.5	Jun-20
Davidson Kempner LT Dist Opp V - Net			1.2	5.9	4.3	16.4	-	-	14.5	Jun-20
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	16.8	
Dyal Capital Partners II - Gross	39,083,192	0.3	5.3	12.0	21.1	30.7	14.1	-	4.8	Jan-15
Dyal Capital Partners II - Net			5.3	12.0	21.1	30.7	14.1	-	4.8	Jan-15
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.8	
Dyal Capital Partners III - Gross	29,858,342	0.2	2.1	15.1	23.2	32.2	23.0	-	24.3	Jan-17
Dyal Capital Partners III - Net			2.1	15.1	23.2	32.2	23.0	-	24.3	Jan-17
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.1	
Garrison Investment Group - Gross	2,025,388	0.0	-2.2	-5.1	94.3	51.2	23.7	11.1	10.6	Jun-12
Garrison Investment Group - Net			-2.2	-5.1	94.3	51.2	23.7	11.1	10.6	Jun-12
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.4	
Golden Capital Co Invest - Gross	14,053,174	0.1	-0.7	-4.5	-	-	-	-	-4.5	Nov-22
Golden Capital Co Invest - Net	, ,		-0.7	-4.5	-	-	-	-	-4.5	Nov-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	-	-	-	-	2.6	
Gridiron Capital Fund IV - Gross	52,170,306	0.4	1.1	5.5	9.1	35.4	-	-	31.3	Jun-20
Gridiron Capital Fund IV - Net			1.1	5.5	9.1	35.4	-	-	31.3	Jun-20
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	16.8	
Gridiron Capital Fund V - Gross	5,064,718	0.0	39.7	-	-	-	-	-	16.5	Feb-23
Gridiron Capital Fund V - Net	, ,		39.7	-	-	-	-	-	16.5	Feb-23
Cambridge Associates All PE 1 Qtr Lag			1.4	-	-	-	-	-	4.3	
Harbourvest VIII - Gross	2,835,019	0.0	-41.0	-43.0	-44.3	-5.0	-1.2	7.1	6.4	Jan-08
Harbourvest VIII - Net	, ,		-41.0	-43.0	-44.3	-5.0	-1.2	7.1	-	Jan-08
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	11.4	
Harbourvest Intl VI - Gross	5,711,429	0.0	-61.4	-60.2	-61.2	-20.2	-9.9	2.7	-8.7	Apr-09
Harbourvest Intl VI - Net	·, ··, ·=•		-61.4	-60.2	-61.2	-20.2	-9.9	2.7	-	Apr-09
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	16.1	r /·
H.I.G. Bayside Loan III - Gross	3,811,813	0.0	-3.1	-4.0	-11.2	2.9	-1.3	4.5	2.9	Feb-13
H.I.G. Bayside Loan III - Net	2,271,010		-3.1	-4.0	-11.2	2.9	-1.3	4.5	2.9	Feb-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.7	. 32 10



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
H.I.G. Capital V - Gross	10,914,706	0.1	4.2	12.4	20.5	28.6	21.1	14.9	14.7	Aug-13
H.I.G. Capital V - Net			4.2	12.4	20.5	28.6	21.1	14.9	14.7	Aug-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	14.8	
H.I.G. Europe Capital II - Gross	10,055,848	0.1	-2.2	9.6	7.6	14.4	10.1	-	-15.7	Feb-14
H.I.G. Europe Capital II - Net			-2.2	9.6	7.6	14.4	10.1	-	-15.7	Feb-14
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.2	
Khosla IV - Gross	15,067,018	0.1	2.1	-7.0	-7.5	21.0	19.5	21.4	18.3	Aug-11
Khosla IV - Net			2.1	-7.0	-7.5	21.0	19.5	21.4	18.3	Aug-11
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	14.6	
Khosla V - Gross	39,247,134	0.3	2.7	-0.7	0.6	36.1	24.6	-	17.2	Dec-14
Khosla V - Net			2.7	-0.7	0.6	36.1	24.6	-	17.2	Dec-14
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.5	
Khosla VI - Gross	60,522,649	0.5	1.6	0.4	11.2	24.8	12.7	-	12.5	Sep-18
Khosla VI - Net			1.6	0.4	11.2	24.8	12.7	-	12.5	Sep-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.9	
Khosla VII - Gross	15,923,582	0.1	2.0	8.0	8.7	-	-	-	0.4	Feb-21
Khosla VII - Net			2.0	8.0	8.7	-	-	-	0.4	Feb-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	17.4	
Linden Capital III - Gross	26,047,924	0.2	-14.7	-27.1	-28.2	13.5	19.1	-	15.7	Jul-16
Linden Capital III - Net			-14.7	-27.1	-28.2	13.5	19.1	-	15.7	Jul-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.2	
Linden Capital Partners IV - Gross	49,250,367	0.4	2.0	7.7	10.0	25.7	15.4	-	15.4	Oct-18
Linden Capital Partners IV - Net			2.0	7.7	10.0	25.7	15.4	-	15.4	Oct-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.3	
Linden Capital Partners V - Gross	16,683,888	0.1	4.1	9.1	5.7	-	-	-	4.9	Aug-22
Linden Capital Partners V - Net			4.1	9.1	5.7	-	-	-	4.9	Aug-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	-2.2	J
Marlin Equity IV - Gross	10,297,882	0.1	-3.1	0.7	-10.5	4.9	8.7	-	5.0	Dec-13
Marlin Equity IV - Net	,,		-3.1	0.7	-10.5	4.9	8.7	-	5.0	Dec-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.9	
Marlin Equity V - Gross	33,769,275	0.3	2.3	8.5	8.2	24.2	23.7	-	19.3	Mar-18
Marlin Equity V - Net	23,: 33,210		2.3	8.5	8.2	24.2	23.7		19.3	Mar-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.1	

See Policy Index and Benchmark History

^{*} Unable to calculate since inception returns due to system limitations when HIG Capital II experienced 2 quarters of negative fund values in 2016.



	Market Value	% of Portfolio	3 Мо	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Marlin Heritage - Gross	4,002,592	0.0	-10.6	-24.7	-28.3	-5.6	8.6	-	14.0	Aug-14
Marlin Heritage - Net			-10.6	-24.7	-28.3	-5.6	8.6	-	14.0	Aug-14
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.9	
Marlin Heritage II - Gross	10,929,855	0.1	-5.7	-8.8	-7.9	13.1	11.1	-	6.0	Nov-17
Marlin Heritage II - Net			-5.7	-8.8	-7.9	13.1	11.1	-	6.0	Nov-17
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.9	
Marlin Heritage III - Gross	3,671,457	0.0	0.2	-56.1	-	-	-	-	-56.1	Jan-23
Marlin Heritage III - Net			0.2	-56.1	-	-	-	-	-56.1	Jan-23
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	-	-	-	-	4.3	
Marlin Heritage Europe - Gross	19,223,046	0.2	3.8	19.0	16.4	27.9	29.6	-	22.7	Sep-17
Marlin Heritage Europe - Net			3.8	19.0	16.4	27.9	29.6	-	22.7	Sep-17
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.3	
New Enterprise 14 - Gross	36,100,481	0.3	2.2	-6.5	-5.4	11.2	11.2	15.4	12.6	Jun-12
New Enterprise 14 - Net			2.2	-6.5	-5.4	11.2	11.2	15.4	12.6	Jun-12
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.4	
New Enterprise 15 - Gross	28,873,767	0.2	-1.0	-7.0	-11.2	-0.7	3.3	-	8.2	May-15
New Enterprise 15 - Net			-1.0	-7.0	-11.2	-0.7	3.3	-	8.2	May-15
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.1	
New Enterprise 16 - Gross	38,188,668	0.3	2.4	-0.7	-2.4	6.5	10.2	-	6.5	Jun-17
New Enterprise 16 - Net			2.4	-0.7	-2.4	6.5	10.2	-	6.5	Jun-17
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.3	
New Enterprise 17 - Gross	20,581,977	0.2	-0.8	-5.3	-5.7	12.3	-	-	8.9	Aug-19
New Enterprise 17 - Net			-0.8	-5.3	-5.7	12.3	-	-	8.9	Aug-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	15.6	
Oaktree Power Opp Fund VI - Gross	14,980,626	0.1	9.7	15.8	12.4	-	-	-	3.5	Jun-22
Oaktree Power Opp Fund VI - Net			9.7	15.8	12.4	-	-	-	3.5	Jun-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	-2.5	
OrbiMed Private Investments VIII - Gross	9,760,874	0.1	10.9	10.7	16.9	-	-	-	3.2	Jan-21
OrbiMed Private Investments VIII - Net	. ,		10.9	10.7	16.9	-	-	-	3.2	Jan-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	16.8	
OrbiMed Private Investments IX - Gross	1,074,394	0.0	13.7	-27.2	-	-	-	-	-27.2	Dec-22
OrbiMed Private Investments IX - Net	,,	,	13.7	-27.2	-	-	-	-	-27.2	Dec-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	-	-	-	-	2.6	



Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Private Equity X - Gross	5,600,072	0.0	-56.2	-56.6	-57.9	-16.6	-10.7	0.7	-4.6	Jul-08
Private Equity X - Net			-56.2	-56.6	-57.9	-16.6	-10.7	0.7	-	Jul-08
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	12.7	
CP Multi-Fund Feeder - Gross	82,194,278	0.7	2.5	9.1	12.6	24.5	-	-	11.3	Dec-18
CP Multi-Fund Feeder - Net			2.5	9.1	12.6	24.5	-	-	11.3	Dec-1
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	14.8	
RJ Capital Master Fund II - Gross	5,688,331	0.0	9.3	-15.1	-24.3	6.0	0.7	5.3	6.9	Jun-1
RJ Capital Master Fund II - Net			9.3	-15.1	-24.3	6.0	0.7	5.3	6.9	Jun-1
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.3	
RJ Capital Master Fund III - Gross	8,261,078	0.1	-17.2	-7.2	-3.9	-11.0	-6.4	-	-10.7	Jan-1
RJ Capital Master Fund III - Net			-17.2	-7.2	-3.9	-11.0	-6.4	-	-10.7	Jan-1
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.4	
hamrock Capital II - Gross	13,497,475	0.1	3.1	7.3	10.2	-75.5	-	-	-73.6	Aug-2
namrock Capital II - Net			3.1	7.3	10.2	-75.5	-	-	-73.6	Aug-2
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	21.2	
namrock Capital III - Gross	161,527	0.0	-99.9	-100.0	-	-	-	-	-100.0	Jan-
namrock Capital III - Net			-99.9	-100.0	-	-	-	-	-100.0	Jan-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	-	-	-	-	4.3	
namrock Capital Growth Fund V - Gross	8,722,792	0.1	0.9	-2.1	-4.5	-	-	-	-31.9	Aug-2
namrock Capital Growth Fund V - Net			0.9	-2.1	-4.5	-	-	-	-31.9	Aug-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	8.9	
ixth Street Opp Partners V - Gross	11,051,735	0.1	2.9	0.0	-2.2	-	-	-	-6.4	Jul-
xth Street Opp Partners V - Net			2.9	0.0	-2.2	-	-	-	-6.4	Jul-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	-2.1	
pectrum Equity VII - Gross	38,542,820	0.3	1.8	-0.1	-6.6	16.7	29.3	-	18.4	Jan-
pectrum Equity VII - Net			1.8	-0.1	-6.6	16.7	29.3	-	18.4	Jan-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.8	
pectrum Equity Fund VIII - Gross	24,729,294	0.2	1.9	0.8	-5.0	41.7	0.9	-	-13.5	Jul-
pectrum Equity Fund VIII - Net			1.9	0.8	-5.0	41.7	0.9	-	-13.5	Jul-
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.4	
pectrum Equity Fund IX - Gross	20,198,955	0.2	0.2	-4.0	-6.9	-10.1	=	-	-10.1	Oct-
pectrum Equity Fund IX - Net	. ,		0.2	-4.0	-6.9	-10.1	-	-	-10.1	Oct-2
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	19.1	



Sacramento County Employees' Retirement System Period Ending: September 30, 2023

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Strategic Value Spl Fund V - Gross	17,407,994	0.1	4.8	13.4	7.5	-	-	-	8.8	Sep-21
Strategic Value Spl Fund V - Net			4.8	13.4	7.5	-	-	-	8.8	Sep-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	9.3	
Summit EUR Growth Equity II - Gross	44,354,688	0.4	7.9	21.5	32.6	56.7	47.4	-	71.5	Feb-18
Summit EUR Growth Equity II - Net			7.9	21.5	32.6	56.7	47.4	-	71.5	Feb-18
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.8	
Summit EUR Growth Equity III - Gross	18,403,566	0.1	8.9	12.4	1.6	-	-	-	-8.5	Feb-21
Summit EUR Growth Equity III - Net			8.9	12.4	1.6	-	-	-	-8.5	Feb-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	17.4	
Summit Ventures III - Gross	3,608,513	0.0	-1.6	13.6	19.3	12.3	14.4	15.8	13.4	Jul-12
Summit Ventures III - Net			-1.6	13.6	19.3	12.3	14.4	15.8	13.4	Jul-12
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.2	
Summit Ventures IV - Gross	53,518,377	0.4	0.9	-0.4	4.5	35.2	35.8	-	34.4	Jun-16
Summit Ventures IV - Net			0.9	-0.4	4.5	35.2	35.8	-	34.4	Jun-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	16.1	
Summit Ventures V - Gross	10,670,407	0.1	5.1	6.2	4.2	-	-	-	-2.4	Jun-21
Summit Ventures V - Net			5.1	6.2	4.2	-	-	-	-2.4	Jun-21
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	-	-	-	12.8	
Thoma Bravo XI - Gross	35,567,370	0.3	12.3	33.6	22.2	7.7	25.8	-	22.6	Jul-14
Thoma Bravo XI - Net			12.3	33.6	22.2	7.7	25.8	-	22.6	Jul-14
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.9	
Thoma Bravo XII - Gross	32,445,169	0.3	3.2	9.2	12.5	16.6	17.2	-	11.3	Jun-16
Thoma Bravo XII - Net			3.2	9.2	12.5	16.6	17.2	-	11.3	Jun-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	16.1	
Thoma Bravo XIII - Gross	71,783,661	0.6	6.0	14.0	9.3	22.9	-	-	26.0	Mar-19
Thoma Bravo XIII - Net			6.0	14.0	9.3	22.9	-	-	26.0	Mar-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	14.8	
Threshold Ventures III - Gross	23,016,745	0.2	-11.1	-18.9	-23.9	18.9	-	-	9.6	Nov-19
Threshold Ventures III - Net	.,,.		-11.1	-18.9	-23.9	18.9	-	-	9.6	Nov-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	_	-	15.6	
Threshold Ventures IV - Gross	4,106,562	0.0	-4.7	-23.6	-90.1	-	-	-	-84.2	Jul-22
Threshold Ventures IV - Net	.,.30,002	0.0	-4.7	-23.6	-90.1	_	_	_	-84.2	Jul-22
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	_	_	_	-2.1	Oui ZZ



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
TPG Opp Partners III - Gross	7,055,386	0.1	0.3	-4.1	-4.5	6.0	4.8	-	-6.9	Apr-14
TPG Opp Partners III - Net			0.3	-4.1	-4.5	6.0	4.8	-	-6.9	Apr-14
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.8	
Trinity Ventures XI - Gross	44,481,208	0.4	1.2	-6.7	-16.0	10.7	9.5	8.9	6.7	May-13
Trinity Ventures XI - Net			1.2	-6.7	-16.0	10.7	9.5	8.9	6.7	May-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.3	
Trinity Ventures XII - Gross	49,553,177	0.4	5.6	-18.2	-26.3	16.8	22.8	-	17.9	May-16
Trinity Ventures XII - Net			5.6	-18.2	-26.3	16.8	22.8	-	17.9	May-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	15.9	
TSG7 A LP - Gross	17,491,644	0.1	-8.7	-2.9	-11.9	24.7	17.7	-	-181.5	Apr-16
TSG7 A LP - Net			-8.7	-2.9	-11.9	24.7	17.7	-	-181.5	Apr-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.9	
TSG7 B LP - Gross	4,087,799	0.0	-3.5	-6.2	-4.2	15.9	9.5	-	-4.3	Feb-16
TSG7 B LP - Net			-3.5	-6.2	-4.2	15.9	9.5	-	-4.3	Feb-16
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	14.5	
TSG8 LP - Gross	38,745,323	0.3	1.4	7.9	4.7	10.7	-	-	-64.1	Feb-19
TSG8 LP - Net			1.4	7.9	4.7	10.7	-	-	-64.1	Feb-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	14.6	
TSG9 LP - Gross	5,088,831	0.0	-4.4	-	-	-	-	-	-37.8	Feb-23
TSG9 LP - Net			-4.4	-	-	-	-	-	-37.8	Feb-23
Cambridge Associates All PE 1 Qtr Lag			1.4	-	-	-	-	-	4.3	
TSSP Opportunities Partners IV - Gross	29,937,059	0.2	3.5	6.6	8.3	15.3	-	-	11.7	Feb-19
TSSP Opportunities Partners IV - Net			3.5	6.6	8.3	15.3	-	-	11.7	Feb-19
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	14.6	
Waterland V - Gross	1,038,975	0.0	-0.8	-10.8	-18.3	24.2	22.8	43.6	22.2	Sep-11
Waterland V - Net			-0.8	-10.8	-18.3	24.2	22.8	43.6	22.2	Sep-11
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	14.9	
Waterland VI - Gross	21,980,940	0.2	-1.0	19.0	4.1	22.7	24.4	-	7.2	Aug-15
Waterland VI - Net			-1.0	19.0	4.1	22.7	24.4	-	7.2	Aug-15
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	-	13.7	
Wayzata Opportunities III - Gross	3,513,318	0.0	-2.4	12.7	33.2	10.8	5.1	0.8	-0.8	Mar-13
Wayzata Opportunities III - Net	,		-2.4	12.7	33.2	10.8	5.1	0.8	-0.8	Mar-13
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	14.3	15.0	15.8	



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Wynnchurch Capital Partners V - Gross	16,833,049	0.1	-1.3	0.8	0.5	1.0	-	-	-4.4	May-20
Wynnchurch Capital Partners V - Net	, ,		-1.3	0.8	0.5	1.0	-	-	-4.4	May-20
Cambridge Associates All PE 1 Qtr Lag			1.4	4.3	2.6	19.1	-	-	16.3	•
Public Credit - Gross	216,076,078	1.7	2.1	8.2	7.4	5.9	3.5		4.2	Dec-13
Public Credit - Net			2.1	8.2	7.4	5.9	3.5		4.2	Dec-13
Brigade Custom			1.9	7.9	11.4	3.9	3.6	-	4.1	
Brigade Capital - Gross	216,076,078	1.7	2.1 (3)	8.2 (4)	7.4 (92)	5.9 (2)	3.5 (20)	-	4.2	Dec-13
Brigade Capital - Net			2.1 (3)	8.2 (4)	7.4 (92)	5.9 (2)	3.5 (20)	-	4.2	Dec-13
Brigade Custom			1.9 (5)	7.9 (5)	11.4 (10)	3.9 (11)	3.6 (16)	-	4.1	Dec-13
eV US High Yield Fixed Inc Median			0.6	5.4	9.5	1.9	2.9	3.9	-	
Private Credit - Gross	401,520,991	3.3	2.1	7.7	9.2	10.8	8.5	8.4	7.7	Nov-1
Private Credit - Net			2.1	7.7	9.2	10.8	8.5	8.4	7.7	Nov-1
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	6.2	6.5	
Ares Capital Europe Fund V - Gross	31,210,254	0.3	2.1	9.5	10.8	-	-	-	12.3	Aug-2
Ares Capital Europe Fund V - Net			2.1	9.5	10.8	-	-	-	12.3	Aug-2
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	-	-	-	5.8	Ū
Athyrium Opp II - Gross	6,819,768	0.1	2.8	17.5	16.1	6.5	8.6	-	7.3	Jul-1
Athyrium Opp II - Net			2.8	17.5	16.1	6.5	8.6	-	7.3	Jul-1
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	-	6.2	
Athyrium Opp III - Gross	7,918,509	0.1	4.3	10.9	7.0	-1.0	1.8	-	-0.1	Jun-1
Athyrium Opp III - Net	, ,		4.3	10.9	7.0	-1.0	1.8	-	-0.1	Jun-1
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	-	6.1	
Benefit St Pr Sr Secure Opp - Gross	26,563,670	0.2	2.4	7.5	8.4	9.6	6.1	-	6.0	Feb-1
Benefit St Pr Sr Secure Opp - Net			2.4	7.5	8.4	9.6	6.1	_	6.0	Feb-1
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	-	6.1	
Benefit St Pr Sr Secure Opp II - Gross	36,872,911	0.3	3.2	9.0	11.8	7.2	_	-	8.8	Jan-2
Benefit St Pr Sr Secure Opp II - Net	,-		3.2	9.0	11.8	7.2	_	-	8.8	Jan-2
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	_	-	6.1	
IFM US Infrastructure DB FD LP - Gross	36,927,552	0.3	0.7	7.4	9.2	-	_	_	7.6	Apr-2
IFM US Infrastructure DB FD LP - Net	00,021,002	0.0	0.7	7.4	9.2	_	_	_	7.6	Apr-2
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	_		_	6.3	, .p. 2
MCP Private Capital IV - Gross	25,842,093	0.2	7.1	22.7	23.3	4.9	-	-	5.1	May-2
MCP Private Capital IV - Net	20,012,000	٧.٢	7.1	22.7	23.3	4.9	_	_	5.1	May-2
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	_	_	5.8	Way Z

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



^{**}Private Credit returns are lagged one quarter.

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
OrbiMed Royalty & Credit Opp III - Gross	16,907,604	0.1	2.7	8.1	11.5	25.3	-	-	16.5	Oct-19
OrbiMed Royalty & Credit Opp III - Net			2.7	8.1	11.5	25.3	-	-	16.5	Oct-19
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	-	-	6.1	
OrbiMed Royalty & Credit Opp IV - Gross	7,016,621	0.1	1.3	6.3	8.5	-	-	-	8.5	Oct-22
OrbiMed Royalty & Credit Opp IV - Net			1.3	6.3	8.5	-	-	-	8.5	Oct-22
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	-	-	-	12.3	
Shamrock Capital Debt Fund I - Gross	9,696,067	0.1	1.2	3.0	4.5	-	-	-	-44.5	Aug-21
Shamrock Capital Debt Fund I - Net			1.2	3.0	4.5	-	-	-	-44.5	Aug-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	-	-	-	5.8	
Silver Point Specialty Credit Fund II - Gross	31,162,715	0.3	2.7	9.1	12.7	14.0	-	-	13.3	Aug-20
Silver Point Specialty Credit Fund II - Net			2.7	9.1	12.7	14.0	-	-	13.3	Aug-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	-	-	9.7	
Silver Point Specialty Credit Fund III - Gross	8,957,074	0.1	1.8	-	-	-	-	-	-1.9	Apr-23
Silver Point Specialty Credit Fund III - Net			1.8	-	-	-	-	-	-1.9	Apr-23
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	-	-	-	-	-	7.4	
Summit Credit - Gross	236,935	0.0	-27.8	-5.5	-5.4	4.2	0.5	5.2	5.0	Nov-11
Summit Credit - Net			-27.8	-5.5	-5.4	4.2	0.5	5.2	5.0	Nov-11
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	6.2	6.5	
Summit Credit II - Gross	10,600,986	0.1	-7.5	-5.0	-6.0	3.6	2.8	-	4.6	Dec-14
Summit Credit II - Net			-7.5	-5.0	-6.0	3.6	2.8	-	4.6	Dec-14
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	-	6.0	
Summit Credit III - Gross	16,490,006	0.1	-3.0	-2.1	-0.5	15.1	-	-	13.3	Nov-18
Summit Credit III - Net			-3.0	-2.1	-0.5	15.1	-	-	13.3	Nov-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	-	-	6.0	
Summit Credit IV - Gross	14,630,385	0.1	3.2	13.4	16.2	-	-	-	10.6	Dec-21
Summit Credit IV - Net			3.2	13.4	16.2	-	-	-	10.6	Dec-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	-	-	-	5.6	
TCP Direct Lending VIII - Gross	113,667,840	0.9	2.6	5.7	7.4	10.2	8.2	-	7.3	Mar-18
TCP Direct Lending VIII - Net			2.6	5.7	7.4	10.2	8.2	-	7.3	Mar-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			3.6	10.4	12.3	8.3	6.1	-	6.2	



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Growth Oriented Absolute Return - Gross	7,772,946	0.1	0.4	1.4	1.2	4.5	3.3	4.1	4.6	Sep-04
Growth Oriented Absolute Return - Net			0.4	1.4	1.2	4.5	3.3	4.1	4.6	Sep-04
HFRI FoF Composite Index + 1%			0.8	3.6	5.7	4.8	4.4	4.8	5.7	
Grosvenor SCARF Growth - Gross	7,772,946	0.1	0.4 (37)	1.0 (88)	0.8 (91)	1.7 (93)	1.4 (94)	3.0 (100)	4.3	Dec-11
Grosvenor SCARF Growth - Net			0.4	1.0	8.0	1.7	1.4	3.0	4.3	Dec-11
HFRI FoF Composite Index + 1%			0.8 (29)	3.6 (49)	5.7 (73)	4.8 (67)	4.4 (65)	4.8 (64)	4.9	Dec-11
eV Alt Fund of Funds - Multi-Strategy Median			-0.3	3.4	9.9	7.8	5.7	5.4	-	
Diversifying Asset Category - Gross	2,759,531,529	22.3	-1.5	1.1	2.3	-1.2	1.7		1.7	Apr-17
Diversifying Asset Category - Net			-1.5	1.0	2.2	-1.3	1.6		1.6	Apr-17
Diversifying Custom			-1.6	0.3	1.9	-2.2	1.2	-	1.3	
Fixed Income - Gross	1,693,244,418	13.7	-3.7	-0.8	0.7	-4.9	0.6	1.6	1.9	Jul-11
Fixed Income - Net	1,693,244,418	13.7	-3.7	-1.0	0.6	-5.0	0.4	1.5	1.7	Jul-11
Fixed Income Custom			-2.6	-0.3	1.5	-4.6	0.3	-	-	
Core/Core Plus Fixed Income - Gross	1,295,091,508	10.5	-3.9	-0.7	1.2	-4.5	0.8	1.7	2.0	Jul-11
Core/Core Plus Fixed Income - Net			-3.9	-0.9	1.0	-4.7	0.7	1.6	1.8	Jul-11
Blmbg. U.S. Aggregate Index			-3.2	-1.2	0.6	-5.2	0.1	1.1	1.5	
Prudential - Gross	325,891,537	2.6	-2.3 (15)	0.9 (8)	2.8 (10)	-4.2 (23)	0.9 (29)	-	2.1	Aug-14
Prudential - Net			-2.4	0.7	2.6	-4.4	0.7	-	1.9	Aug-14
Blmbg. U.S. Aggregate Index			-3.2 (76)	-1.2 (86)	0.6 (83)	-5.2 (92)	0.1 (95)	-	0.8	Aug-14
eV US Core Fixed Inc Median			-3.0	-0.6	1.2	-4.7	0.6	1.6	-	
TCW MetWest Fixed - Gross	323,793,116	2.6	-3.6 (95)	-0.9 (73)	1.1 (66)	-4.6 (45)	0.9 (31)	1.7 (38)	4.6	Jan-02
TCW MetWest Fixed - Net			-3.7	-1.1	8.0	-4.8	0.7	1.5	4.4	Jan-02
Blmbg. U.S. Aggregate Index			-3.2 (76)	-1.2 (86)	0.6 (83)	-5.2 (92)	0.1 (95)	1.1 (98)	3.3	Jan-02
eV US Core Fixed Inc Median			-3.0	-0.6	1.2	-4.7	0.6	1.6	-	
Brandywine US FI - Gross	314,583,070	2.5	-5.4 (100)	-2.4 (99)	-2.0 (100)	-	-	-	-5.7	Jun-22
Brandywine US FI - Net			-5.5	-2.7	-2.2	-	-	-	-5.9	Jun-22
Blmbg. U.S. Aggregate Index			-3.2 (80)	-1.2 (94)	0.6 (91)	-	-	-	-4.3	Jun-22
eV US Core Plus Fixed Inc Median			-2.9	-0.4	1.6	-4.4	0.6	1.7	-	
Reams Core Plus FI - Gross	330,823,785	2.7	-4.0 (98)	-0.3 (60)	3.0 (22)	-	-	-	-2.5	Jun-22
Reams Core Plus FI - Net			-4.1	-0.4	2.8	-	-	-	-2.6	Jun-22
Blmbg. U.S. Aggregate Index			-3.2 (80)	-1.2 (94)	0.6 (91)	-	-	-	-4.3	Jun-22
eV US Core Plus Fixed Inc Median			-2.9	-0.1	2.0	-4.1	1.0	2.1	-	



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
U.S. Treasury - Gross	398,152,911	3.2	-3.0	-1.2	-0.8	-5.7	0.0		0.1	Mar-18
U.S. Treasury - Net			-3.0	-1.3	-0.8	-5.7	0.0		0.1	Mar-18
Blmbg. U.S. Treasury Index			-3.1	-1.5	-0.8	-5.8	-0.1	-	0.0	
Neuberger Berman - Gross	398,152,911	3.2	-3.0 (66)	-1.2 (56)	-0.8 (75)	-5.7 (79)	0.0 (73)	1.2 (28)	5.4	Jul-88
Neuberger Berman - Net			-3.0	-1.3	-0.8	-5.7	0.0	1.1	5.4	Jul-88
Blmbg. U.S. Government			-3.0 (66)	-1.4 (61)	-0.7 (75)	-5.7 (80)	0.0 (74)	0.7 (91)	4.9	Jul-88
eV US Government Fixed Inc Median			-2.8	-1.0	-0.1	-4.9	0.3	1.1	-	
Absolute Return - Gross	816,134,556	6.6	2.3	4.5	4.7	5.8	3.7	2.7	2.8	Dec-11
Absolute Return - Net			2.3	4.5	4.7	5.8	3.7	2.7	2.8	Dec-11
HFRI FoF Conservative Index			1.5	3.5	5.0	5.7	4.1	4.5	4.6	
Aristeia Partners LP - Gross	52,145,945	0.4	2.1 (12)	6.1 (5)	5.3 (83)	-	-	-	5.5	Jan-21
Aristeia Partners LP - Net			2.1	6.1	5.3	-	-	-	5.5	Jan-21
HFRI FoF Conservative Index			1.5 (15)	3.5 (19)	5.0 (85)	-	-	-	4.0	Jan-21
eV Alt Relative Value - Multi-Market Arbitrage Median			-0.8	2.8	9.6	3.4	0.9	2.1	-	
BlackRock Event Driven Equity Fund - Gross	54,616,758	0.4	1.5 (35)	1.7 (84)	3.4 (93)	2.4 (83)	-	-	2.7	Mar-20
BlackRock Event Driven Equity Fund - Net			1.5	1.7	3.4	2.4	-	-	2.7	Mar-20
HFRI FoF Conservative Index			1.5 (35)	3.5 (67)	5.0 (86)	5.7 (70)	-	-	5.0	Mar-20
eV Alt All Event Driven Median			0.9	5.1	8.0	7.2	5.7	7.4	-	
Davidson Kempner Instl Partners LP - Gross	60,511,590	0.5	1.5 (33)	3.7 (56)	5.6 (56)	5.0 (51)	-	-	4.6	May-19
Davidson Kempner Instl Partners LP - Net			1.5	3.7	5.6	5.0	-	-	4.6	May-19
HFRI FoF Conservative Index			1.5 (33)	3.5 (58)	5.0 (57)	5.7 (51)	-	-	4.4	May-19
eV Alt All Multi-Strategy Median			0.4	4.4	6.5	5.7	4.9	4.3	-	
Elliott Associates - Gross	81,857,184	0.7	1.9 (33)	5.0 (52)	4.1 (91)	9.1 (35)	8.6 (7)	7.6 (33)	8.0	May-12
Elliott Associates - Net			1.9	5.0	4.1	9.1	8.6	7.6	8.0	May-12
HFRI FoF Conservative Index			1.5 (35)	3.5 (67)	5.0 (86)	5.7 (70)	4.1 (61)	4.5 (100)	4.6	Jan-11
eV Alt All Event Driven Median			0.9	5.1	8.0	7.2	5.7	7.4	-	
Graham Global Inv II - Gross	51,647,590	0.4	3.8 (18)	3.8 (38)	-1.3 (73)	15.5 (13)	8.5 (31)	-	6.3	Mar-17
Graham Global Inv II - Net			3.8	3.8	-1.3	15.5	8.5	-	6.3	Mar-17
HFRI FoF Conservative Index			1.5 (42)	3.5 (40)	5.0 (53)	5.7 (75)	4.1 (86)	-	4.1	Mar-17
eV Alt All Managed Futures Median			-0.3	1.5	6.1	11.2	5.9	3.4	-	
Grosvenor SCARF Diversifying - Gross	232,699,993	1.9	2.0 (20)	4.9 (40)	6.9 (60)	4.8 (67)	4.4 (65)	2.3 (100)	2.7	Dec-11
Grosvenor SCARF Diversifying - Net			2.0	4.9	6.9	4.8	4.4	2.3	2.7	Dec-11
HFRI FoF Conservative Index			1.5 (25)	3.5 (50)	5.0 (87)	5.7 (63)	4.1 (67)	4.5 (80)	4.6	Dec-11
eV Alt Fund of Funds - Multi-Strategy Median			-0.3	3.4	9.9	7.8	5.7	5.4	-	



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Laurion Capital - Gross	60,689,468	0.5	2.1 (15)	4.9 (59)	5.7 (74)	7.6 (56)	9.2 (35)	-	7.7	Mar-14
Laurion Capital - Net			2.1	4.9	5.7	7.6	9.2	-	7.7	Mar-14
HFRI FoF Conservative Index			1.5 (25)	3.5 (72)	5.0 (76)	5.7 (67)	4.1 (78)	-	4.5	Mar-14
eV Alt Relative Value - Equity Relative Value Median			0.6	5.7	11.9	8.5	7.0	-	-	
LMR Fund LTD - Gross	56,063,713	0.5	3.0 (21)	4.0 (54)	8.1 (42)	11.1 (22)	-	-	5.8	Nov-19
LMR Fund LTD - Net			3.0	4.0	8.1	11.1	-	-	5.8	Nov-19
HFRI FoF Conservative Index			1.5 (33)	3.5 (58)	5.0 (57)	5.7 (51)	-	-	4.9	Nov-19
eV Alt All Multi-Strategy Median			0.4	4.4	6.5	5.7	4.9	4.3	-	
MW Global Opportunities Fund - Gross	58,741,817	0.5	2.3 (22)	6.5 (40)	6.6 (69)	4.6 (65)	-	-	6.1	Jan-19
MW Global Opportunities Fund - Net			2.3	6.5	6.6	4.6	-	-	6.1	Jan-19
HFRI FoF Conservative Index			1.5 (25)	3.5 (56)	5.0 (78)	5.7 (62)	-	-	5.0	Jan-19
eV Alt Fundamental - Long/Short Equity Median			-1.7	4.8	14.0	8.1	7.9	8.1	-	
PSquared Event Driven Opp Fund - Gross	55,029,218	0.4	4.8 (18)	1.0 (89)	-0.3 (100)	3.3 (81)	-	-	3.1	Aug-20
PSquared Event Driven Opp Fund - Net			4.8	1.0	-0.3	3.3	-	-	3.1	Aug-20
HFRI FoF Conservative Index			1.5 (35)	3.5 (67)	5.0 (86)	5.7 (70)	4.1 (61)	4.5 (100)	4.6	Jan-11
eV Alt All Event Driven Median			0.9	5.1	8.0	7.2	5.7	7.4	-	
Sculptor Domestic II - Gross	1,223,787	0.0	0.0 (57)	4.8 (48)	6.4 (53)	1.1 (74)	4.9 (52)	5.1 (36)	6.3	Jan-12
Sculptor Domestic II - Net			0.0	4.8	6.4	1.1	4.9	5.1	6.3	Jan-12
HFRI FoF Conservative Index			1.5 (33)	3.5 (58)	5.0 (57)	5.7 (51)	4.1 (61)	4.5 (41)	4.6	Jan-12
eV Alt All Multi-Strategy Median			0.4	4.4	6.5	5.7	4.9	4.3	-	
Tudor BVI Global Fund - Gross	50,907,493	0.4	1.8	1.8	-	-	-	-	1.8	Jan-23
Tudor BVI Global Fund - Net			1.8	1.8	-	-	-	-	1.8	Jan-23
HFRI FOF Conservative Index			1.5	3.5	-	-	-	-	3.5	

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inceptior Date
Dedicated Cash Allocation - Gross	250,152,555	2.0	1.4	3.8	4.8	1.8	•	•	1.6	Jul-19
Dedicated Cash Allocation - Net			1.4	3.8	4.8	1.8			1.6	Jul-19
Secured Overnight Financing Rate			1.3	3.8	4.7	1.8	-	-	1.7	
Real Return Asset Category - Gross	2,008,894,506	16.3	-0.3	-0.5	-1.9	10.7	7.4		8.5	Apr-17
teal Return Asset Category - Net			-0.3	-0.6	-2.0	10.6	7.2		8.3	Apr-17
Real Return Custom			-0.8	-1.7	-2.6	10.1	6.1	-	6.5	
Real Estate - Gross	940,814,361	7.6	-2.0 (75)	-6.0 (63)	-10.8 (75)	8.4 (50)	7.2 (27)	9.3 (12)	9.9	Jul-1
Real Estate - Net			-2.0	-6.1	-10.9	8.2	7.0	8.8	9.3	Jul-1
Real Estate Custom			-2.2 (80)	-8.0 (78)	-11.3 (77)	7.6 (53)	6.1 (49)	8.0 (55)	8.6	Jul-1
InvMetrics All DB Real Estate Private Median			-1.1	-4.6	-7.6	8.2	5.9	8.2	-	
Core RE - Limited Partnership - Gross	662,285,828	5.4	-0.4	-7.3	-12.4	9.5	8.0	10.0	6.0	Oct-0
Core RE - Limited Partnership - Net			-0.4	-7.4	-12.5	9.3	7.8	9.6	5.5	Oct-0
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	8.2	5.6	,
Brookfield Premier RE Partners - Gross*	114,043,832	0.9	0.0	-8.6	-15.3	8.0	6.8	-	6.8	Oct-
Brookfield Premier RE Partners - Net*			0.0	-8.6	-15.3	8.0	6.8	-	6.8	Oct-
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	-	5.7	
Clarion Lion Properties - Gross*	116,226,485	0.9	0.0	-10.7	-15.3	7.2	6.2	-	6.2	Oct-
Clarion Lion Properties - Net*			0.0	-11.1	-15.9	6.4	5.4	-	5.4	Oct-
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	-	5.7	
Metlife Core Property - Gross	81,032,129	0.7	-0.2	-7.4	-12.3	9.5	7.5	-	9.7	Jan-
Metlife Core Property - Net	. , ,		-0.2	-7.6	-12.6	9.0	7.0	-	9.2	Jan-
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	-	8.0	
Principal US Property - Gross	56,875,140	0.5	-3.9	-8.8	-14.4	5.8	4.7	_	6.3	Nov-
Principal US Property - Net	33,5.3,	0.0	-3.9	-8.8	-14.4	5.8	4.7	_	6.3	Nov-
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	_	6.7	1101
Prologis Targeted Euro Logistics - Gross*	61,842,808	0.5	0.0	-2.0	-8.4	3.8	6.7	_	9.0	Nov-1
Prologis Targeted Euro Logistics - Net*	01,012,000	0.0	0.0	-2.0	-8.4	3.8	6.7	_	9.0	Nov-
NFI-ODCE			-1.9	-7.6	-12.1	7.1	5.7	_	6.7	1107
Prologis Targeted US Logistics - Gross*	79,080,396	0.6	0.0	-4.0	-9.0	19.4	16.4	_	16.7	Aug-
Prologis Targeted US Logistics - Gloss Prologis Targeted US Logistics - Net*	1 3,000,030	0.0	0.0	-4.0 -4.0	-9.0 -9.0	19.4	16.4	<u>-</u>	16.7	Aug-
NFI-ODCE			-1.9	- 4 .0	-9.0 -12.1	7.1	5.7	<u>-</u>	7.0	Aug-
Townsend Real Estate - Gross*	152 105 020	1.2	0.0	-7.0 -7.7	-12.1 -11.1	10.0	7.8	-	8.6	Ann
Townsend Real Estate - Gross Townsend Real Estate - Net*	153,185,039	1.2	0.0	-7.7 -7.7	-11.1 -11.1	10.0	7.8 7.8	-	8.6	Apr-1
NFI-ODCE			-1.9	-7.7 -7.6	-11.1	7.1	7.8 5.7	-	6.5	Apr-

*Value as of 6/30/2023.



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Non-Core RE - Opportunistic - Gross	164,121,800	1.3	-9.3	-6.4	-11.0	5.0	3.2		13.4	Mar-14
Non-Core RE - Opportunistic - Net			-9.3	-6.4	-11.0	5.0	3.2		12.9	Mar-14
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.8	
Carlyle China Realty - Gross	6,873,202	0.1	-14.0	-19.9	-21.5	-5.7	-3.5	-	-4.9	Jul-17
Carlyle China Realty - Net			-14.0	-19.9	-21.5	-5.7	-3.5	-	-4.9	Jul-17
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	7.0	
Carlyle China Rome Logistics - Gross	30,407,867	0.2	-14.2	-19.8	-21.3	-5.3	-4.5	-	-4.4	Jul-17
Carlyle China Rome Logistics - Net			-14.2	-19.8	-21.3	-5.3	-4.5	-	-4.4	Jul-17
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	7.0	
CIM Opportunity VIII - Gross	23,619,508	0.2	-4.3	-18.0	-19.7	-11.3	-8.7	-	-2.4	Mar-15
CIM Opportunity VIII - Net			-4.3	-18.0	-19.7	-11.3	-8.7	-	-3.0	Mar-15
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.4	
Kohlberg Kravis Roberts - Gross	1,583,715	0.0	-0.2	-10.6	-9.7	-7.1	-8.8	-	-0.3	Mar-14
Kohlberg Kravis Roberts - Net			-0.2	-10.6	-9.7	-7.1	-8.8	-	-0.5	Mar-14
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.8	
Lasalle China Logistics Venture LP - Gross	5,536,758	0.0	-3.8	-0.5	-13.7	-	-	-	-25.5	Oct-21
Lasalle China Logistics Venture LP - Net			-3.8	-0.5	-13.7	-	-	-	-25.5	Oct-21
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	-	-	-	8.0	
NREP Nordic Strat II - Gross	16,744,651	0.1	-10.1	13.9	1.6	23.2	17.2	-	17.6	Jul-16
NREP Nordic Strat II - Net			-10.1	13.9	1.6	23.2	17.2	-	17.6	Jul-16
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	7.2	
NREP Nordic Strat III - Gross	33,602,958	0.3	-12.2	4.1	-5.1	12.9	5.3	-	5.1	Aug-18
NREP Nordic Strat III - Net			-12.2	4.1	-5.1	12.9	5.3	-	5.1	Aug-18
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	6.8	
NREP Nordic Strat IV - Gross	18,617,857	0.2	-12.4	-2.0	-9.7	10.3	-	-	9.7	Aug-20
NREP Nordic Strat IV - Net			-12.4	-2.0	-9.7	10.3	-	-	9.7	Aug-20
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	-	-	7.2	
NREP Nordic Strat V - Gross	6,880,843	0.1	-8.1	-25.8	-	-	-	-	-25.8	Nov-22
NREP Nordic Strat V - Net			-8.1	-25.8	-	-	-	-	-25.8	Nov-22
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-	-	-	-	-9.4	
Sculptor Real Estate Fund III - Gross	4,089,913	0.0	1.8	21.7	29.8	41.4	27.8	-	17.6	Oct-14
Sculptor Real Estate Fund III - Net			1.8	21.7	29.8	41.4	27.8	-	15.1	Oct-14
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.3	

See Policy Index and Benchmark History

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



^{*} Non-Core RE returns are lagged one quarter.

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Sculptor Real Estate Fund IV - Gross	16,164,528	0.1	2.6	6.6	7.0	12.0	-	-	5.6	Jul-20
Sculptor Real Estate Fund IV - Net			2.6	6.6	7.0	12.0	-	-	5.6	Jul-20
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	-	-	7.0	
Non-Core RE - Value Added - Gross	114,406,733	0.9	-1.2	5.4	3.0	4.5	7.1	9.1	0.9	Oct-08
Non-Core RE - Value Added - Net			-1.2	5.4	3.0	4.5	7.1	8.7	0.0	Oct-08
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	9.0	7.5	
Asana Partners Fund II - Gross	30,929,903	0.3	-2.5	3.9	2.7	14.5	-	-	-175.2	May-19
Asana Partners Fund II - Net			-2.5	3.9	2.7	14.5	-	-	-175.2	May-19
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	-	-	6.6	
Asana Partners Fund III - Gross	11,541,098	0.1	-8.2	-3.9	-13.7	-	-	-	-18.0	May-22
Asana Partners Fund III - Net			-8.2	-3.9	-13.7	-	-	-	-18.0	May-22
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	-	-	-	1.3	
ECE Euro Prime Shopping II - Gross	34,814,253	0.3	0.3	15.4	8.5	0.3	1.7	-	7.9	Aug-15
ECE Euro Prime Shopping II - Net			0.3	15.4	8.5	0.3	1.7	-	7.4	Aug-15
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.2	
European RE Debt II - Gross*	450,254	0.0	0.0	-55.9	-59.1	-47.4	-31.4	-	-15.2	Dec-13
European RE Debt II - Net*			0.0	-55.9	-59.1	-47.4	-31.4	-	-15.2	Dec-13
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	9.2	
Hammes II - Gross	3,148,951	0.0	3.6	7.3	7.4	145.8	120.9	-	72.0	Aug-15
Hammes II - Net			3.6	7.3	7.4	145.8	120.9	-	70.0	Aug-15
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	6.6	-	8.2	
Hammes III - Gross	20,317,786	0.2	1.9	3.9	5.3	20.3	-	-	-2.5	Nov-18
Hammes III - Net			1.9	3.9	5.3	20.3	-	-	-2.5	Nov-18
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	8.1	-	-	6.8	
Hammes IV - Gross	1,595,123	0.0	0.0	0.0	-	-	-	-	0.0	Dec-22
Hammes IV - Net			0.0	0.0	-	-	-	-	0.0	Dec-22
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-	-	-	-	-9.5	
Seven Seas Japan Opp Fund - Gross	11,609,365	0.1	-4.1	5.9	9.6	-	-	-	-1.1	Apr-22
Seven Seas Japan Opp Fund - Net			-4.1	5.9	9.6	-	-	-	-1.1	Apr-22
NFI-ODCE net +1% 1Q Lag			-2.2	-8.2	-9.7	-	-	-	1.3	

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



See Policy Index and Benchmark History
* Non-Core RE returns are lagged one quarter, European RE Debt II as of 3/31/2023.

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Private Real Assets - Gross	1,057,810,615	8.6	1.3	4.5	6.5	16.3	10.0	14.2	6.9	Feb-13
Private Real Assets - Net			1.3	4.5	6.5	16.3	10.0	14.2	6.9	Feb-13
Private Real Assets Custom			1.3	6.7	7.3	14.3	7.5	7.2	7.2	
ACM II - Gross	14,761,410	0.1	-1.2	-19.3	-18.7	-11.3	-10.0	-	-9.1	Oct-16
ACM II - Net			-1.2	-19.3	-18.7	-11.3	-10.0	-	-9.1	Oct-16
NCREIF Farmland 1 Qtr Lag			0.8	6.3	8.4	7.7	6.5	-	6.5	
ArcLight Energy VI - Gross	14,163,834	0.1	-1.7	-5.4	13.8	9.2	1.0	-	3.8	Sep-15
ArcLight Energy VI - Net			-1.7	-5.4	13.8	9.2	1.0	-	3.8	Sep-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	12.0	
Brookfield Infra III - Gross	42,061,966	0.3	3.1	13.6	14.1	14.6	11.8	-	12.3	Jun-16
Brookfield Infra III - Net			3.1	13.6	14.1	14.6	11.8	-	12.3	Jun-16
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	11.7	
Brookfield Infra IV - Gross	40,345,501	0.3	4.8	12.4	13.6	16.6	-	-	11.0	Oct-19
Brookfield Infra IV - Net			4.8	12.4	13.6	16.6	-	-	11.0	Oct-19
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	-	-	10.4	
Brookfield Infra Debt Fund III - Gross	17,812,020	0.1	1.6	-	-	-	-	-	2.0	Apr-23
Brookfield Infra Debt Fund III - Net			1.6	-	-	-	-	-	2.0	Apr-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	-	-	-	-	-	4.0	
Brookfield Super Core Infra - Gross	102,671,700	0.8	1.6	5.5	6.6	-	-	-	5.7	Aug-22
Brookfield Super Core Infra - Net			1.6	5.5	6.6	-	-	-	5.7	Aug-22
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	-	-	-	7.0	
Carlyle Power II - Gross	39,535,557	0.3	1.1	3.2	19.1	18.8	13.0	-	6.9	Nov-15
Carlyle Power II - Net			1.1	3.2	19.1	18.8	13.0	-	6.9	Nov-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	11.4	
Digital Colony Partners II - Gross	34,257,632	0.3	1.9	6.1	7.9	-	-	-	6.6	Jun-21
Digital Colony Partners II - Net			1.9	6.1	7.9	-	-	-	6.6	Jun-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	-	-	-	11.1	
EnCap Energy IX - Gross	9,994,742	0.1	2.6	17.3	17.9	52.3	8.8	10.7	3.9	Feb-13
EnCap Energy IX - Net			2.6	17.3	17.9	52.3	8.8	10.7	3.9	Feb-13
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	4.4	3.0	3.4	

^{**}Private Real Assets returns are lagged one quarter.



See Policy Index and Benchmark History

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

	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
EnCap Energy X - Gross	22,433,381	0.2	5.5	10.9	7.3	46.1	19.0	-	9.5	May-15
EnCap Energy X - Net			5.5	10.9	7.3	46.1	19.0	-	9.5	May-15
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	4.4	-	3.3	
EnCap Flatrock Midstream III - Gross	11,890,092	0.1	0.1	4.8	18.5	13.4	6.7	-	7.6	Aug-14
EnCap Flatrock Midstream III - Net			0.1	4.8	18.5	13.4	6.7	-	7.6	Aug-14
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	10.9	
EnCap Flatrock Midstream IV - Gross	12,749,360	0.1	1.9	4.2	7.6	8.6	8.4	-	3.8	Mar-18
EnCap Flatrock Midstream IV - Net			1.9	4.2	7.6	8.6	8.4	-	3.8	Mar-18
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	10.7	
EQT Infrastructure Fund IV - Gross	37,919,285	0.3	0.9	9.0	4.4	11.3	-	-	2.5	Jul-19
EQT Infrastructure Fund IV - Net			0.9	9.0	4.4	11.3	-	-	2.5	Jul-19
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	-	-	10.5	
First Reserve - Gross	11,225,090	0.1	-2.5	-9.6	-9.5	-6.2	-1.4	-	-2.4	Jan-15
First Reserve - Net			-2.5	-9.6	-9.5	-6.2	-1.4	-	-2.4	Jan-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	11.0	
Harrison St Social Infra Fd - Gross	108,552,774	0.9	1.8	3.8	5.5	-	-	-	6.7	Aug-21
Harrison St Social Infra Fd - Net			1.8	3.8	5.5	-	-	-	6.7	Aug-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	-	-	-	11.2	
IFM Global Infrastructure US LP - Gross	164,122,992	1.3	2.5	9.4	9.6	12.3	11.5	-	11.7	May-17
IFM Global Infrastructure US LP - Net			2.5	9.4	9.6	12.3	11.5	-	11.7	May-17
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	11.8	
ISQ Global Infrastructure Fund II - Gross	53,582,184	0.4	2.0	8.7	10.2	14.3	-	-	12.5	Nov-18
ISQ Global Infrastructure Fund II - Net			2.0	8.7	10.2	14.3	-	-	12.5	Nov-18
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	-	-	10.6	
ISQ Global Infrastructure Fund III - Gross	14,818,499	0.1	1.4	20.1	23.6	=	-	-	17.5	Jan-22
ISQ Global Infrastructure Fund III - Net			1.4	20.1	23.6	-	-	-	17.5	Jan-22
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	-	-	-	10.2	
Meridiam Infra N America III - Gross	38,828,895	0.3	-0.8	-0.1	-4.7	30.5	-35.2	-	-55.1	Oct-17
Meridiam Infra N America III - Net			-0.8	-0.1	-4.7	30.5	-35.2	-	-55.1	Oct-17
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	10.8	
Meridiam Infra N America IV - Gross	7,566,887	0.1	-	-	-	-	-	-	0.0	Aug-23
Meridiam Infra N America IV - Net	, ,		-	-	-	-	-	-	0.0	Aug-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			_	-	_	-	-	-	1.5	. 3



	Market Value	% of Portfolio	3 Mo	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Meridiam Sa Infra Euro IV - Gross	9,924,561	0.1	-2.0	11.8	-1.0	-	-	-	-53.7	Aug-21
Meridiam Sa Infra Euro IV - Net			-2.0	11.8	-1.0	-	-	-	-53.7	Aug-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	-	-	-	11.2	
NGP Royalty Partners - Gross	29,062,034	0.2	6.0	12.5	25.6	38.2	-	-	37.0	Sep-20
NGP Royalty Partners - Net			6.0	12.5	25.6	38.2	-	-	37.0	Sep-20
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	-	-	21.3	
NGP Royalty Partners II - Gross	20,966,668	0.2	-2.7	-17.3	-	-	-	-	-17.3	Jan-23
NGP Royalty Partners II - Net			-2.7	-17.3	-	-	-	-	-17.3	Jan-23
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	-	-	-	-	3.6	
Paine Schwartz Food Chain V - Gross	35,403,006	0.3	0.7	8.1	13.0	27.9	-	-	11.4	Feb-20
Paine Schwartz Food Chain V - Net			0.7	8.1	13.0	27.9	-	-	11.4	Feb-20
NCREIF Farmland 1 Qtr Lag			0.8	6.3	8.4	7.7	-	-	7.0	
Pantheon Ventures - Gross	37,796,471	0.3	1.1	3.8	0.7	11.3	6.9	-	15.0	Aug-14
Pantheon Ventures - Net			1.1	3.8	0.7	11.3	6.9	-	15.0	Aug-14
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	10.9	
Quantum Energy VI - Gross	25,202,357	0.2	-3.8	-22.9	-23.0	22.0	16.0	-	19.2	Dec-14
Quantum Energy VI - Net			-3.8	-22.9	-23.0	22.0	16.0	-	19.2	Dec-14
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	4.4	-	1.5	
Quantum Energy VII - Gross	40,260,252	0.3	-1.5	-0.3	-0.3	36.3	16.6	-	12.1	Sep-17
Quantum Energy VII - Net			-1.5	-0.3	-0.3	36.3	16.6	-	12.1	Sep-17
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	4.4	-	5.3	
Ridgewood Water & Strategy Infra II - Gross	4,773,404	0.0	3.3	-106.7	-	-	-	-	-106.7	Jan-23
Ridgewood Water & Strategy Infra II - Net			3.3	-106.7	-	-	-	-	-106.7	Jan-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	-	-	-	-	8.3	
Tailwater Energy Fund III - Gross	21,055,863	0.2	-4.3	-1.0	3.1	7.1	2.0	-	2.0	Oct-18
Tailwater Energy Fund III - Net			-4.3	-1.0	3.1	7.1	2.0	-	2.0	Oct-18
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	4.4	-	4.4	
Tailwater Energy IV - Gross	25,494,476	0.2	0.8	20.6	34.9	30.0	-	-	6.5	Nov-19
Tailwater Energy IV - Net			0.8	20.6	34.9	30.0	-	-	6.5	Nov-19
Cambridge Associates Private Energy 1 Qtr Lag			1.0	3.6	5.5	20.4	-	-	7.0	
Wastewater Opportunity - Gross	8,577,721	0.1	0.5	10.5	9.9	16.5	8.5	-	-8.8	Jan-16
Wastewater Opportunity - Net	-,- , -		0.5	10.5	9.9	16.5	8.5	-	-8.8	Jan-16
Cambridge Associates Private Infrastructure 1 Qtr Lag			1.5	8.3	8.0	12.9	10.4	-	11.4	



Total Fund Performance Summary

	Market Value	% of Portfolio	3 Мо	YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Liquid Real Return - Gross	10,269,531	0.1	-1.7	1.6	7.4	6.2			3.6	Jul-19
Liquid Real Return - Net			-3.2	-0.1	5.5	5.3			2.9	Jul-19
SSgA Real Asset			-2.2	-1.7	4.2	5.7	-	-	2.9	
SSgA Passive Real Return Proxy - Gross	9,708,903	0.1	-2.1	0.4	6.5	6.6	4.3	2.9	2.2	Feb-08
SSgA Passive Real Return Proxy - Net			-2.1	0.3	6.3	6.4	4.0	2.6	2.0	Feb-08
SSgA Real Asset			-2.2	-1.7	4.2	5.7	3.6	2.4	-	
Brookfield Liquid Real Return	560,627	0.0								
Cash - Gross	455,237,382	3.7	1.4	4.0	5.1	2.3	2.3	1.8	3.0	Aug-92
Cash - Net			1.4	4.0	5.1	2.3	2.3	1.8		Aug-92
Secured Overnight Financing Rate			1.3	3.8	4.7	1.8	1.8	1.2	2.5	
Cash Account - Gross	455,237,382	3.7	1.4	4.0	5.1	2.4	2.5	1.9	3.1	Jul-92
Cash Account - Net			1.4	4.0	5.1	2.4	2.5	1.9	-	Jul-92
Secured Overnight Financing Rate			1.3	3.8	4.7	1.8	1.8	1.2	2.5	

AD	M4 400 075 470	^ 7
AB	\$1,193,275,170	9.7
AQR US Enhanced Equity	\$336,153,857	2.7
JP Morgan 130/30	\$175,118,153	1.4
DE Shaw Broad Mkt Core Alpha Ext	\$155,558,338	1.3
Eagle Capital	\$333,333,954	2.7
Huber Capital	\$20,284	0.0
Weatherbie	\$90,065,228	0.7
Snyder Capital Management	\$117,463,778	1.0
Lazard	\$309,930,418	2.5
Walter Scott & Partners Limited	\$449,975,336	3.6
LSV	\$485,897,504	3.9
William Blair Dev Small Cap	\$91,056,880	0.7
Acadian Asset Management	\$97,519,047	0.8
Arga Emg	\$186,543,301	1.5
Baillie Gifford Emg All Cap	\$197,643,314	1.6
Oaktree Emg	\$171,439,606	1.4
CBRE Clarion	\$3,992	0.0
Allspring Global Investments	\$72,645,325	0.6
Artisan Partners Global Opp	\$120,527,473	1.0
Nikko Asset Management	\$117,360,000	1.0
Third Point Offshore Fund	\$46,086,627	0.4
Abbott VI	\$25,947,267	0.2
Accel-KKR V	\$26,789,578	0.2
Accel-KKR VI	\$21,027,614	0.2
Accel-KKR Growth Partners II	\$10,000,425	0.1
Accel-KKR Growth Partners III	\$31,011,484	0.3
Accel-KKR Growth Partners IV	\$9,866,570	0.1
Atalaya Special Opp VI	\$1,564,992	0.0
Atalaya Special Opp V	\$465,305	0.0
Canvas Ventures III	\$14,133,839	0.1
Cortec Group Fund VII	\$26,271,279	0.2
Cortec Group Fund VIII	\$3,762,148	0.0
CRV Select Fund I	\$17,844,539	0.1
CRV Select Fund II	\$5,249,200	0.0
CRV XVIII LP	\$17,190,096	0.1
OTT ATTE	ψ11,100,000	V. 1



CRV XIX LP	\$5,278,955	0.0
Davidson Kempner LT Dist Opp IV	\$18,165,209	0.1
Davidson Kempner LT Dist Opp V	\$31,561,881	0.3
Dyal Capital Partners II	\$39,083,192	0.3
Dyal Capital Partners III	\$29,858,342	0.2
Garrison Investment Group	\$2,025,388	0.0
Golden Capital Co Invest	\$14,053,174	0.1
Gridiron Capital Fund IV	\$52,170,306	0.4
Gridiron Capital Fund V	\$5,064,718	0.0
Harbourvest VIII	\$2,835,019	0.0
Harbourvest Intl VI	\$5,711,429	0.0
H.I.G. Bayside Loan III	\$3,811,813	0.0
H.I.G. Capital V	\$10,914,706	0.1
H.I.G. Europe Capital II	\$10,055,848	0.1
Khosla IV	\$15,067,018	0.1
Khosla V	\$39,247,134	0.3
Khosla VI	\$60,522,649	0.5
Khosla VII	\$15,923,582	0.1
Linden Capital III	\$26,047,924	0.2
Linden Capital Partners IV	\$49,250,367	0.4
Linden Capital Partners V	\$16,683,888	0.1
Marlin Equity IV	\$10,297,882	0.1
Marlin Equity V	\$33,769,275	0.3
Marlin Heritage	\$4,002,592	0.0
Marlin Heritage II	\$10,929,855	0.1
Marlin Heritage III	\$3,671,457	0.0
Marlin Heritage Europe	\$19,223,046	0.2
New Enterprise 14	\$36,100,481	0.3
New Enterprise 15	\$28,873,767	0.2
New Enterprise 16	\$38,188,668	0.3
New Enterprise 17	\$20,581,977	0.2
Oaktree Power Opp Fund VI	\$14,980,626	0.1
OrbiMed Private Investments VIII	\$9,760,874	0.1
Orbimed Private Investments IX	\$1,074,394	0.0
Private Equity X	\$5,600,072	0.0



RCP Multi-Fund Feeder	\$82,194,278	0.7
RRJ Capital Master Fund II	\$5,688,331	0.0
RRJ Capital Master Fund III	\$8,261,078	0.1
Shamrock Capital II	\$13,497,475	0.1
Shamrock Capital III	\$161,527	0.0
Shamrock Capital Growth Fund V	\$8,722,792	0.1
Sixth Street Opp Partners V	\$11,051,735	0.1
Spectrum Equity VII	\$38,542,820	0.3
Spectrum Equity Fund VIII	\$24,729,294	0.2
Spectrum Equity Fund IX	\$20,198,955	0.2
Strategic Value Spl Fund V	\$17,407,994	0.1
Summit EUR Growth Equity II	\$44,354,688	0.4
Summit EUR Growth Equity III	\$18,403,566	0.1
Summit Ventures III	\$3,608,513	0.0
Summit Ventures IV	\$53,518,377	0.4
Summit Ventures V	\$10,670,407	0.1
Thoma Bravo XI	\$35,567,370	0.3
Thoma Bravo XII	\$32,445,169	0.3
Thoma Bravo XIII	\$71,783,661	0.6
Threshold Ventures III	\$23,016,745	0.2
Threshold Ventures IV	\$4,106,562	0.0
TPG Opp Partners III	\$7,055,386	0.1
Trinity Ventures XI	\$44,481,208	0.4
Trinity Ventures XII	\$49,553,177	0.4
TSG7 A LP	\$17,491,644	0.1
TSG7 B LP	\$4,087,799	0.0
TSG8 LP	\$38,745,323	0.3
TSG9 LP	\$5,088,831	0.0
TSSP Opportunities Partners IV	\$29,937,059	0.2
Waterland V	\$1,038,975	0.0
Waterland VI	\$21,980,940	0.2
Wayzata Opportunities III	\$3,513,318	0.0
Wynnchurch Capital Partners V	\$16,833,049	0.1
Brigade Capital	\$216,076,078	1.7
Ares Capital Europe Fund V	\$31,210,254	0.3
	. , ,	



Athyrium Opp II	\$6,819,768	0.1
Athyrium Opp III	\$7,918,509	0.1
Benefit St Pr Sr Secure Opp	\$26,563,670	0.2
Benefit St Pr Sr Secure Opp II	\$36,872,911	0.3
IFM US Infrastructure DB FD LP	\$36,927,552	0.3
OrbiMed Royalty & Credit Opp III	\$16,907,604	0.1
Orbimed Royalty & Credit Opp IV	\$7,016,621	0.1
Shamrock Capital Debt Fund I	\$9,696,067	0.1
Silver Point Specialty Credit Fund II	\$31,162,715	0.3
Silver Point Specialty Credit Fund III	\$8,957,074	0.1
Summit Credit	\$236,935	0.0
Summit Credit II	\$10,600,986	0.1
Summit Credit III	\$16,490,006	0.1
Summit Credit IV	\$14,630,385	0.1
TCP Direct Lending VIII	\$113,667,840	0.9
Grosvenor SCARF Growth	\$7,772,946	0.1
Prudential	\$325,891,537	2.6
TCW MetWest Fixed	\$323,793,116	2.6
Brandywine US FI	\$314,583,070	2.5
Reams Core Plus FI	\$330,823,785	2.7
Neuberger Berman	\$398,152,911	3.2
Aristeia Partners LP	\$52,145,945	0.4
BlackRock Event Driven Equity Fund	\$54,616,758	0.4
Davidson Kempner Instl Partners LP	\$60,511,590	0.5
Elliott Associates	\$81,857,184	0.7
Graham Global Inv II	\$51,647,590	0.4
Grosvenor SCARF Diversifying	\$232,699,993	1.9
Laurion Capital	\$60,689,468	0.5
LMR Fund LTD	\$56,063,713	0.5
MW Global Opportunities Fund	\$58,741,817	0.5
PSquared Event Driven Opp Fund	\$55,029,218	0.4
Sculptor Domestic II	\$1,223,787	0.0
Tudor BVI Global Fund	\$50,907,493	0.4
Dedicated Cash Allocation	\$250,152,555	2.0
Brookfield Premier RE Partners	\$114,043,832	0.9



Clarion Lion Properties	\$116,226,485	0.9
Metlife Core Property	\$81,032,129	0.7
Principal US Property	\$56,875,140	0.5
Prologis Targeted Euro Logistics	\$61,842,808	0.5
Prologis Targeted US Logistics	\$79,080,396	0.6
Townsend Real Estate	\$153,185,039	1.2
Carlyle China Realty	\$6,873,202	0.1
Carlyle China Rome Logistics	\$30,407,867	0.2
CIM Opportunity VIII	\$23,619,508	0.2
Kohlberg Kravis Roberts	\$1,583,715	0.0
Lasalle China Logistics Venture LP	\$5,536,758	0.0
NREP Nordic Strat II	\$16,744,651	0.1
NREP Nordic Strat III	\$33,602,958	0.3
NREP Nordic Strat IV	\$18,617,857	0.2
NREP Nordic Strat V	\$6,880,843	0.1
Sculptor Real Estate Fund III	\$4,089,913	0.0
Sculptor Real Estate Fund IV	\$16,164,528	0.1
Asana Partners Fund II	\$30,929,903	0.3
Asana Partners Fund III	\$11,541,098	0.1
ECE Euro Prime Shopping II	\$34,814,253	0.3
European RE Debt II	\$450,254	0.0
Hammes II	\$3,148,951	0.0
Hammes III	\$20,317,786	0.2
Hammes IV	\$1,595,123	0.0
Seven Seas Japan Opp Fund	\$11,609,365	0.1
ACM II	\$14,761,410	0.1
ArcLight Energy VI	\$14,163,834	0.1
Brookfield Infra III	\$42,061,966	0.3
Brookfield Infra IV	\$40,345,501	0.3
Brookfield Infra Debt Fund III	\$17,812,020	0.1
Brookfield Super Core Infra	\$102,671,700	0.8
Carlyle Power II	\$39,535,557	0.3
Digital Colony Partners II	\$34,257,632	0.3
EnCap Energy IX	\$9,994,742	0.1
EnCap Energy X	\$22,433,381	0.2
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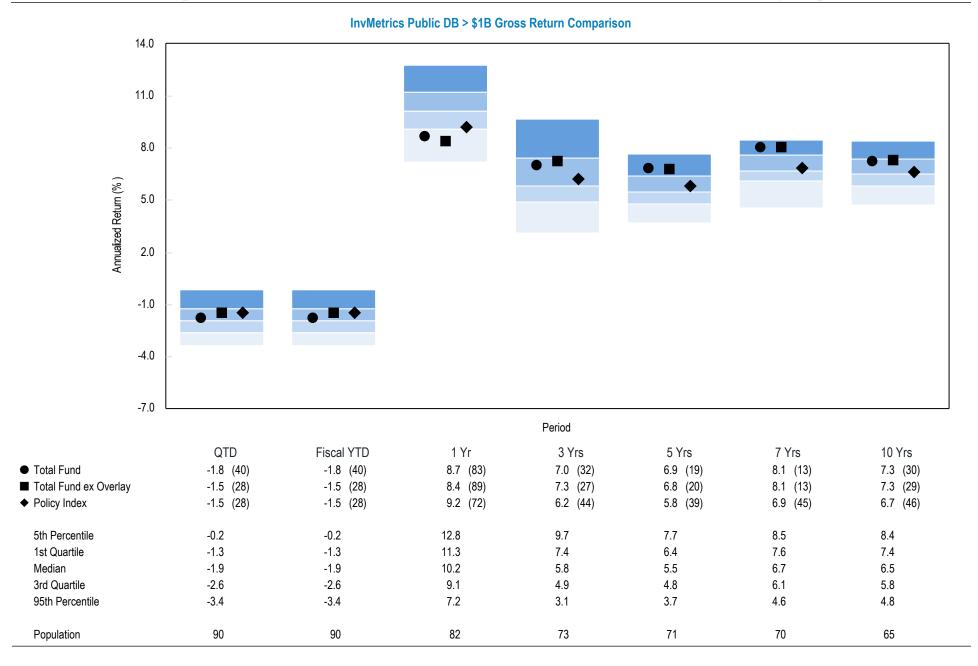
EnCap Flatrock Midstream III	\$11,890,092	0.1
EnCap Flatrock Midstream IV	\$12,749,360	0.1
EQT Infrastructure Fund IV	\$37,919,285	0.3
First Reserve	\$11,225,090	0.1
Harrison St Social Infra Fd	\$108,552,774	0.9
IFM Global Infrastructure US LP	\$164,122,992	1.3
ISQ Global Infrastructure Fund II	\$53,582,184	0.4
ISQ Global Infrastructure Fund III	\$14,818,499	0.1
Meridiam Infra N America III	\$38,828,895	0.3
Meridiam Infra N America IV	\$7,566,887	0.1
Meridiam Sa Infra Euro IV	\$9,924,561	0.1
NGP Royalty Partners	\$29,062,034	0.2
NGP Royalty Partners II	\$20,966,668	0.2
Paine Schwartz Food Chain V	\$35,403,006	0.3
Pantheon Ventures	\$37,796,471	0.3
Quantum Energy VI	\$25,202,357	0.2
Quantum Energy VII	\$40,260,252	0.3
Ridgewood Water & Strategy Infra II	\$4,773,404	0.0
Tailwater Energy IV	\$25,494,476	0.2
Tailwater Energy Fund III	\$21,055,863	0.2
Wastewater Opportunity	\$8,577,721	0.1
Brookfield Liquid Real Return	\$560,627	0.0
SSgA Barclays 1-10 Yrs TIPS Index	\$2,945,363	0.0
SSgA Real Asset	\$6,763,541	0.1
Cash Account	\$455,237,382	3.7
Heitman Adv JMB V	\$8,390	0.0
Transition Account	\$2,676,055	0.0
SSgA Overlay	\$80,408,773	0.7



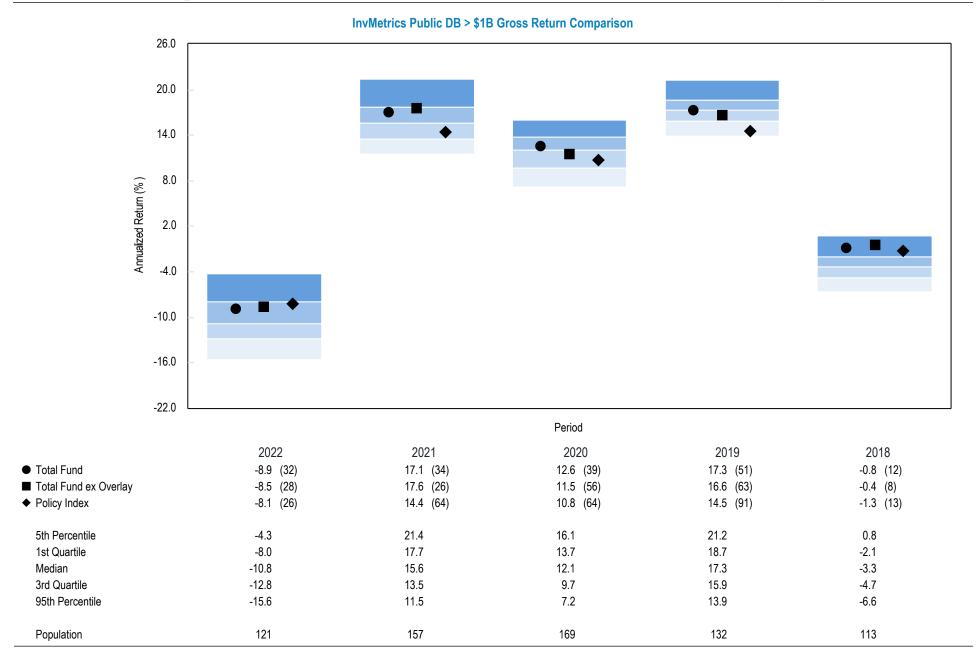
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	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	7.0 (32)	8.3 (18)	0.7 (24)	0.3 (32)	3.0 (45)
Policy Index	6.2 (44)	8.3 (18)	0.6 (35)	-	0.0
Total Fund ex Overlay	7.3 (27)	7.8 (15)	0.7 (18)	0.3 (32)	3.1 (46)
Policy Index	6.2 (44)	8.3 (18)	0.6 (35)	-	0.0

		5 Years	5		
	Anlzd	Anlzd	Sharpe	Information	Tracking
	Return	Standard Deviation	Ratio	Ratio	Error
Total Fund	6.9 (19)	8.7 (14)	0.6 (14)	0.4 (18)	2.8 (24)
Policy Index	5.8 (39)	8.4 (13)	0.5 (27)	-	0.0
Total Fund ex Overlay	6.8 (20)	8.4 (12)	0.6 (13)	0.3 (21)	2.9 (30)
Policy Index	5.8 (39)	8.4 (13)	0.5 (27)	-	0.0

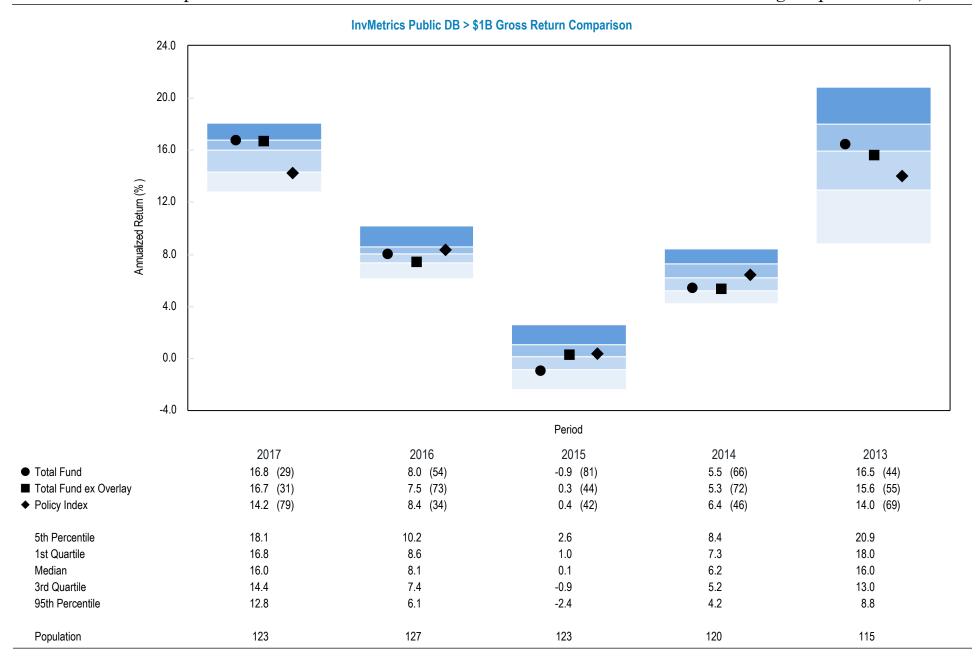
Sacramento County Employees' Retirement System Period Ending: September 30, 2023













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	1/1/00	7/1/86
91-day UST Bill +5% (AR)	4/1/22	111119	111111	10.0%	10.0%	10.0%	5.0%	5.0%	5.0%	1/1/00	111100
Bloomberg Aggregate	12.0%	10.0%	10.0%	10.0%		20.0%		25.0%		30.0%	
Bloomberg US Treasury	4.0%	5.0%	5.0%	5.0%			77,232,344				
ICE BofA ML High Yield II	1.0%	1.0%	1.0%	1.0%	1.0%						
Bloomberg Commodity			2.0%	2.0%			5.0%				
Cambridge Associates Private Energy 1 Qtr Lag	2.1%	2.5%	2.5%								
Cambridge Associates Private Infrastructure 1 Qtr Lag	4.2%	3.2%	3.2%								
FTSE BIG											23.0%
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	16.0%	20.0%	20.0%	20.0%	22.5%	22.5%	20.0%				
MSCI ACWI IMI	4.0%										
MSCI EAFE								15.0%	15.0%	15.0%	15.0%
MSCI Emerging Markets								5.0%	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%	10.0%	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%	35.0%	
Russell 1000 +3% 1QL (PE)					10.0%	10.0%					
Russell 2000								5.0%	5.0%	5.0%	
Russell 3000	20.0%	20.0%	21.0%	21.0%	22.5%	22.5%	30.0%				47.0%
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%	100.0%	100.0%



Growth Benchmark	As of:			
04 D T D:II - F0/	4/1/22	7/1/19	7/1/17	4/1/17
91 Day T-Bill +5% ICE BofA ML High Yield II	1.73%	1.73%	1.70%	5.08% 1.70%
Credit Suisse Leveraged Loans	1.73%	1.73%	1.70%	1.70%
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag	8.62%	6.90%		6.78%
A STATE OF THE STA	0.02%	5.17%	5.08%	0.70%
HFRI FoF Composite Index + 1% MSCI ACWI ex US	27.58%	34.48%	33.90%	33.90%
MSCI ACWI ex dS	6.89%	34.40%	33.90%	33.90%
Russell 3000	34.48%	34.48%	2E E00/	2E E00/
Cambridge Associates All PE 1 Qtr Lag	18.97%	15.52%	35.59% 15.25%	35.59% 15.25%
Cambridge Associates All PE 1 Qtr Lag	100.0%	100.0%	100.0%	94.9%
	100000000000000000000000000000000000000			
Global Public Equity Benchmark	As of:			
	4/1/22	7/1/11		
MSCI ACWI		100.0%		
MSCI ACWI IMI	100.0%			
	100.0%	100.0%		
Domestic Equity Benchmark	As of:			
Domestic Equity Benchmark	1/1/08	9/1/04	1/1/00	7/1/86
Russell 1000	1/1/06	85.71%	87.5%	// 1/00
Russell 2000		14.29%	12.5%	
Russell 3000	100.0%	14.2370	12.570	100.0%
Tuddell 0000	100.0%	100.0%	100.0%	100.0%
Large Cap Active Benchmark	As of:			
	2/1/19	9/1/08		
Russell 1000 Value		100.0%		
Russell 1000	100.0%			
	100.0%	100.0%		
Intermeticanal Facility Development	A = -f.			
International Equity Benchmark	As of:	4/4/00	7/4/00	
MACCUA CIA/I	1/1/08	1/1/00	7/1/86	
MSCI ACWI ex US	100.0%	75.00/	400.00/	
MSCI EAFE		75.0%	100.0%	
MSCI Emerging Markets	100.0%	25.0% 100.0%	100.0%	
	100.070	100.070	100.070	
Private Equity Benchmark	As of:			
	4/1/17	1/1/12	1/1/08	
Russell 1000 +3% 1QL		100.0%		
Russell 1000 +3% 1QL S&P 500 +2% 1QL		100.0%	100.0%	
	100.0%	100.0%	100.0%	

Public Credit Benchmark	As of: 4/1/17		
ICE BofA ML High Yield II	50.0%		
Credit Suisse Leveraged Loans	50.0%		
Credit Suisse Leveraged Loans	100.0%		
	100.076		
Private Credit Benchmark	As of:		
	4/1/17		
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag	100.0%		
	100.0%		
Growth Oriented Absolute Return Benchmark	As of:		
Glowth Offented Absolute Return Benchmark	7/1/17	4/1/17	
91-day UST Bill +5%	77 11 11	100.0%	
HFRI FoF Composite Index + 1%	100.0%	100.076	
THINK OF COMPOSITE MILES 1 1/0	100.0%	100.0%	
	100.070	100.070	
Diversifying Benchmark	As of:		
, ,	4/1/22	7/1/17	4/1/17
91 Day T-Bill +5%			28.00%
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%
HFRI FoF Conservative Index	30.43%	28.00%	
JPM GBI EM Diversified	20//26 BIAS	2.40%	
	100.0%	100.0%	100.0%
D. 71 N. L. D. D. L. L.			
Diversifying Absolute Return Benchmark	As of:	414147	
04 dev. HOT Bill - 50/	7/1/17	4/1/17	
91-day UST Bill +5% HFRI FoF Conservative Index	100.0%	100.0%	
HERT FOR Conservative maex			
	100.0%	100 0%	
	100.0%	100.0%	
Real Return Benchmark		100.0%	
Real Return Benchmark	As of:		4/1/17
Real Return Benchmark		4/1/19 43.75%	
	As of: 4/1/22	4/1/19 43.75%	43.75%
Real Estate Benchmark	As of: 4/1/22 50.00%	4/1/19 43.75%	43.75% 43.75%
Real Estate Benchmark Private Real Assets Benchmark	As of: 4/1/22 50.00%	4/1/19 43.75% 43.75%	43.75% 43.75% 12.50%
Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity	As of: 4/1/22 50.00% 38.89%	4/1/19 43.75% 43.75%	43.75% 43.75% 12.50%
Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity	As of: 4/1/22 50.00% 38.89%	4/1/19 43.75% 43.75% 12.50%	43.75% 43.75% 12.50%
Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity	As of: 4/1/22 50.00% 38.89%	4/1/19 43.75% 43.75% 12.50% 100.0%	43.75% 43.75% 12.50% 100.0%
Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity Liquid Real Return Custom Benchmark	As of: 4/1/22 50.00% 38.89% 11.11% 100.0%	4/1/19 43.75% 43.75% 12.50% 100.0%	43.75% 43.75% 12.50%
Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity Liquid Real Return Custom Benchmark	As of: 4/1/22 50.00% 38.89% 11.11% 100.0% As of: 4/1/22	4/1/19 43.75% 43.75% 12.50% 100.0%	43.75% 43.75% 12.50% 100.0%
Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity Liquid Real Return Custom Benchmark Real Estate Benchmark NCREIF NFI-ODCE	As of: 4/1/22 50.00% 38.89% 11.11% 100.0% As of: 4/1/22	4/1/19 43.75% 43.75% 12.50% 100.0% 7/1/17 65.0%	43.75% 43.75% 12.50% 100.0%
Real Estate Benchmark Private Real Assets Benchmark Bloomberg Commodity Liquid Real Return Custom Benchmark Real Estate Benchmark NCREIF	As of: 4/1/22 50.00% 38.89% 11.11% 100.0% As of: 4/1/22	4/1/19 43.75% 43.75% 12.50% 100.0%	43.75% 43.75% 12.50% 100.0% 71/2011 100.0%



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



Glossary

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

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

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

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

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

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

Correlation: A measure of the relative movement of returns of one security or asset class relative to another over time. A correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in lock step, a correlation of 1 means the returns of two securities move in 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 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 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 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 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 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 lock step, a correlation of 1 means the returns of 1 me

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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