

# **Board of Retirement Regular Meeting**

# Sacramento County Employees' Retirement System

Agenda Item 19

**MEETING DATE:** May 21, 2025

SUBJECT: Total Fund Investment Performance Review Report—

First Quarter 2025

SUBMITTED FOR: \_\_\_ Action \_X\_ Information

# RECOMMENDATION

Receive and file the performance report for the quarter ended March 31, 2025 as presented by Verus.

# **PURPOSE**

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

# SCERS TOTAL FUND RETURNS

This item summarizes SCERS' Total Fund investment returns as presented in Verus' Investment Performance Review for the period ending March 31, 2025. Please note that returns for SCERS' private equity, private credit, non-core real estate, and real assets portfolios are lagged one quarter.

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

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# SCERS TOTAL FUND PERFORMANCE SUMMARY Quarter Reporting Period Ending March 31, 2025

SCERS ASSET CLASS	Quarter	Fiscal YTD	1-Year	3-Year	5-Year	Since Inception	Since Inception Date
SCERS TOTAL FUND Return w/Overlay	0.8%	4.5%	6.1%	4.0%	9.9%	8.1%	Jul-86
Policy Index	0.2%	4.1%	5.6%	4.2%	9.2%	8.3%	
InvestorForce Public DB > \$1B	0.5%	4.5%	5.8%	4.3%	10.0%	-	
SCERS TOTAL FUND Return w/o Overlay	0.8%	4.4%	6.1%	4.1%	10.0%	8.0%	Jul-86
Policy Index	0.2%	4.1%	5.6%	4.2%	9.2%	8.3%	
GROWTH ASSET CATEGORY	0.3%	4.8%	7.2%	5.5%	14.2%	10.5%	Apr-17
Custom Benchmark	0.0%	4.7%	7.0%	6.0%	13.6%	9.8%	
DIVERSIFYING ASSET CATEGORY	2.1%	4.6%	5.0%	1.9%	2.4%	2.6%	Apr-17
Custom Benchmark	2.1%	4.4%	4.8%	1.7%	1.5%	2.3%	
REAL RETURN ASSET CATEGORY	0.7%	3.2%	4.0%	1.0%	6.0%	7.0%	Apr-17
Custom Benchmark	0.8%	2.8%	3.2%	1.4%	5.8%	5.5%	

SCERS' Total Fund return was 0.8% for the quarter, net of fees, outperforming both the Policy Index return of 0.2% and the median public fund return of 0.5%. Fiscal Year-to-date, SCERS' portfolio was up 4.5% compared to the Policy Index return of 4.1%, in line with the median public fund return of 4.5%. SCERS' Total Fund slightly outperformed the Policy Index and median public fund return over the 1-year period but slightly underperformed against the benchmarks over the 3-year period. For the 5-year period, SCERS' portfolio has returned 9.9%, compared to the Policy Index return of 9.2% and median public fund return of 10.0%.

The portfolio's detractors for the quarter were Global Public Equity and Real Estate, with -0.3% and -0.5% returns, respectively. Domestic Equity was down meaningfully during the quarter at -4.1%, while International Equity returns were up 5.3%, helped by a weaker U.S. dollar. Fixed Income and Liquid Real Return were the strongest performing asset classes in the portfolio during the quarter, with returns of 2.9% and 4.4%, respectively.

Economic issues and central bank monetary policy had a significant impact on markets during the first quarter. With the labor market holding up and inflation still persistently high, the Federal Reserve (Fed) maintained rates at 4.25-4.50%, but has communicated the potential for weaker growth and higher inflation as a result of the evolving tariff policies. U.S. inflation measures were mixed during the quarter, with the Consumer Price Index (CPI) approaching the Fed target of 2%, while Core CPI, which excludes food and energy, measured at 2.8%. Annualized quarter-over-quarter Real GDP growth was -0.3%, down from 2.4% in Q4, due to a higher import/export ratio and lower government spending. Spending overall has slowed, and a brief jump in investment activity during the first quarter could be a proactive response to expectations of future tariffs.

Overall, the first quarter of 2025 showed modest positive returns, with less correlated assets providing adequate protection during recent U.S. equity volatility.

# **Growth Asset Category**

SCERS GROWTH Performance Summary for the period ending 3/31/25	Quarter	Fiscal YTD	1-Year	Since Inception	Since Inception Date
SCERS GROWTH ASSET CATEGORY	0.3%	4.8%	7.2%	10.5%	Apr-17
Custom Benchmark	0.0%	4.7%	7.0%	9.8%	
Global Public Equity	-0.3%	4.2%	6.7%	9.0%	Jul-11
MSCI ACWI IMI	-1.6%	3.8%	6.3%	8.5%	
Private Equity (lagged 1 quarter)	1.8%	6.0%	8.2%	7.3%	Mar-08
Cambridge All PE	0.0%	3.6%	4.8%	11.1%	
Public Credit	0.9%	7.6%	8.1%	4.9%	Dec-13
Custom Benchmark	0.8%	5.8%	7.3%	4.8%	
Private Credit (lagged 1 quarter)	1.0%	4.9%	8.4%	7.8%	Nov-11
Credit Suisse Leveraged Loan + 2%	2.8%	8.0%	11.2%	7.1%	

SCERS' Growth asset category was up 0.3% for the quarter, outperforming the category benchmark return of 0.0%. Global Public Equity was the weakest performer within the Growth asset category, with a -0.3% return. International markets generated positive returns during the quarter, with international developed up 5.2% and emerging markets up 5.6%, due in part to a shift in sentiment away from U.S. equities and a weaker U.S. dollar. Domestic Equity was down -4.1% for the quarter, with Large Cap returning -3.5% and Small Cap returning -10.1%.

SCERS' equity portfolio had mixed relative performance during the quarter. Large Cap Passive returned -4.5%, matching the benchmark return, while Large Cap Active outperformed with a return of -2.4% versus the benchmark return of -4.5%. Domestic Small Cap underperformed the benchmark, -10.1% versus -9.5%. International Equity as a whole slightly outperformed, with a return of 5.3% versus 5.2% returns.

Private Equity, which is lagged by one quarter, delivered modest but positive results, and outperformed the benchmark, with SCERS' portfolio up 1.8% versus 0.0% for the benchmark. The first quarter saw mixed performance across the portfolio, with positive returns led by a few high-performing growth funds. Over a 1-year period, SCERS' Private Equity portfolio is up 8.2%, outperforming the benchmark return of 4.8%.

SCERS' Public Credit and Private Credit portfolios delivered muted but positive results for the quarter, up 0.9% and 1.0%, respectively. Over a 1-year period, Public Credit is up 8.1% and Private Credit is up 8.4%.

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# **Diversifying Asset Category**

SCERS DIVERSIFYING Performance Summary for the period ending 3/31/25	Quarter	Fiscal YTD	1-Year	Since Inception	Since Inception Date
SCERS DIVERSIFYING ASSET CATEGORY	2.1%	4.6%	5.0%	2.6%	Apr-17
Custom Benchmark	2.1%	4.4%	4.8%	2.3%	
Fixed Income	2.9%	5.2%	5.3%	2.4%	Jul-11
Custom Benchmark	2.6%	4.8%	5.1%	-	
Core/Core Plus Fixed Income	2.8%	5.4%	5.5%	2.5%	Jul-11
Bloomberg Barclays U.S. Aggregate TR	2.8%	4.8%	4.9%	2.1%	
U.S. Treasury	2.9%	4.5%	4.7%	1.3%	Mar-18
Bloomberg Barclays US Treasury TR	2.9%	4.4%	4.5%	1.3%	
Diversifying Absolute Return	0.7%	3.6%	4.0%	3.1%	Dec-11
HFRI FoF Conservative Index	0.8%	3.7%	4.5%	4.7%	
Dedicated Cash	1.1%	3.6%	4.9%	2.5%	Jul-19
Secured Overnight Financing Rate (SOFR)	1.1%	3.7%	5.1%	2.6%	

SCERS' Diversifying Asset Category delivered positive results during the quarter. The Core/Core Plus and U.S. Treasury segments returned 2.8% and 2.9%, respectively, both in line with their benchmarks. Comparatively, the 10-year Treasury yield ended the quarter at 4.2%, versus 4.6% at the end of Q4. The Dedicated Cash segment returned 1.1%, in line with the benchmark.

The Absolute Return portfolio, which focuses on diversifying strategies with low correlation to equity and bond markets, provided some protection during a time of poor domestic equity performance. SCERS' Absolute Return portfolio was up 0.7% for the quarter, slightly underperforming against the benchmark return of 0.8%. Over a tumultuous 1-year period, SCERS' Absolute Return portfolio was up 4.0%.

SCERS' Dedicated Cash allocation has continued to benefit from higher interest rates and was up 1.1% and 4.9% for the quarter and 1-year returns, respectively.

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# Real Return Asset Category

SCERS REAL RETURN Performance Summary	Quarter	Fiscal YTD	1-Year	Since Inception	Since Inception Date
SCERS REAL RETURN ASSET CATEGORY					
Real Return w/ SSgA Proxy Custom Benchmark	<b>0.7%</b> 0.8%	<b>3.2%</b> 2.8%	<b>4.0%</b> 3.2%	<b>7.0%</b> 5.5%	Apr-17 Apr-17
Real Estate	-0.5%	-0.6%	-1.3%	7.6%	Jul-11
Custom Benchmark	1.1%	1.9%	0.7%	7.1%	
Core Real Estate (as of 3/31/25)					
Commingled Funds NFI-ODCE	0.7% 1.1%	1.7% 2.5%	1.6% 2.0%	4.5% 4.7%	Oct-08 Oct-08
Non-Core Real Estate (as of 12/31/24)					
Opportunistic Value Add NFI-ODCE net +1%	-2.7% -2.9% 1.2%	-9.3% -0.6% 1.1%	-11.3% -2.2% -1.3%	9.0% -0.1% 6.8% 6.2%	Mar-14 Oct-08 Mar-14 Oct-08
Real Assets (as of 12/31/24)	0.7%	5.2%	7.0%	6.9%	Feb-13
Custom Benchmark	-0.1%	3.9%	6.2%	7.2%	
Liquid Real Return (as of 3/31/25)	4.4%	8.1%	9.6%	4.5%	Jul-19
SSgA Real Asset	4.4%	3.4%	4.6%	4.1%	

SCERS' Real Return asset category delivered modest positive returns during the first quarter, with positive contributions from Real Assets and Liquid Real Return and negative returns from Real Estate. The Real Return asset category underperformed on a relative basis, with quarterly returns at 0.7% versus the benchmark return of 0.8%. In a 1-year period, the category returned 4.0% versus the benchmark return of 3.2%.

SCERS' Real Estate portfolio was down -0.5% for the quarter, trailing the benchmark return of 1.1%. SCERS' Real Assets portfolio, where returns are lagged one quarter, returned 0.7% for the quarter, outperforming the benchmark return of -0.1%. In the 1-year period, Real Assets returned 7.0% versus the benchmark return of 6.2%.

SCERS' Liquid Real Return portfolio was up during the quarter, in line with the benchmark return of 4.4%. Over the 1-year period, this segment returned 9.6% versus the benchmark return of 4.6%.

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

SCERS BENCHMARK SUMMARY As of March 31, 2025					
Asset Class	Policy Index Benchmark				
Growth Asset Category	Blended Weighted Average of Asset Class Benchmarks				
Global Equity Private Equity	MSCI ACWI IMI Net Cambridge Associates PE/VC Index				
Public Credit Private Credit	50% (BofA High Yield) + 50% (CS High Yield) CS Leveraged Loan + 2%				
Diversifying Asset Category	Blended Weighted Average of Asset Class Benchmarks				
Fixed Income  Diversifying Absolute Return	75% Bloomberg Barclays Aggregate Index/25% Bloomberg U.S. Treasury Index HFRI FOF Conservative Index				
Cash	Overnight LIBOR/SOFR				
Real Return Asset Category	Blended Weighted Average of Asset Class Benchmarks				
Real Estate  Real Assets	60% (NFI-ODCE) + 40% (NFI-ODCE) +1% 60% (Cambridge Associates Private Infrastructure Index) + 30% (Cambridge Associates Private Energy				
Liquid Real Return	Index) + 10% (NCREIF Farmland Index) SSGA Real Return Overlay Proxy *				

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

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# **ATTACHMENTS**

- Board Order
- Verus' Investment Performance Review for SCERS for the period ending March 31, 2025

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



# Retirement Board Order Sacramento County Employees' Retirement System

# Before the Board of Retirement May 21, 2025

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# Total Fund Investment Performance Review Report— First Quarter 2025

THE BOARD OF RETIREMENT hereby accepts the recommendation of staff to receive and file the performance report for the quarter ended March 31, 2025, as presented by Verus.

I HEREBY CERTIFY that the above order was passed and adopted on May 21, 2025 by the following vote of the Board of Retirement, to wit:

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







PERIOD ENDING: MARCH 31, 2025
Investment Performance Review for

**Sacramento County Employees' Retirement System** 



# Verus business update

# Since our last Investment Landscape webinar:

- Verus hired Jenny Herring as RFP Manager and Dimitri Natsis as Portfolio Manager.
- In March, Evan Benedict and JC Faubion were promoted to Consultants, Lukas Seeley was promoted to Senior Consulting Associate, Colleen Flannery was promoted to Senior Associate Director | Public Markets, Kyle Jangard was promoted to Associate Director | Public Markets, Sneha Pendyala was promoted to Senior Markets Research Analyst, Matt Foppiano was promoted to Senior Private Markets Research Analyst, Phillip Thomas was promoted to Associate Director | Investment Analytics, Lamine Kaba and Cholo Villanueva were promoted to Senior Investment Analysts, and Nico Caballero is being promoted to Private Markets Research Analyst.
- The 2025 Active Management Environment was released.
- Recent research, found at <u>verusinvestments.com/research</u>:
  - LDI for Public Sponsors

This Matters, and This Doesn't

So, What Now?

Driving OCIO Governance Through Risk

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Economic environment			
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# Recent Verus research

# Visit: verusinvestments.com/research

# Thought leadership

### LDI FOR PUBLIC SPONSORS

We explore the dichotomy in LDI adoption between sponsor types. We discuss the characteristics of pension plans that make LDI strategies beneficial. We assess the current environment, to illustrate why LDI may appear relatively attractive today.

# SO, WHAT NOW?

Our CIO examines the current market environment after global tariffs are released by the U.S. government.

## THIS MATTERS, AND THIS DOESN'T

We offer a few perspectives regarding what we watch out for to acknowledge or even avoid biases where possible. Deciding what matters most to the portfolio by ensuring a balanced set of information sources, keeping a watchful eye for biases and carefully thinking about incentives, and also determining what doesn't matter.

### DRIVING OCIO GOVERNANCE THROUGH RISK

We examine active risk, which plays a large role in determining portfolio outcomes and success relative to that policy, and the elements that make up active risk.



# 1st quarter summary

### THE ECONOMY

- The threat and implementation of tariffs by the U.S. administration has been more aggressive than expected. A string of weak economic data, along with these policy decisions, have triggered a greater likelihood of recession. So far, the core aspects of the economy—employment, consumption, wage gains—remain fairly solid, while household and business sentiment has dropped substantially. It is not yet clear how souring sentiment will translate to the real economy. p. 11, 12 & 16
- U.S. inflation drifted lower towards the Federal Reserve 2% target. Inflation was 2.4% YoY in March, and core inflation rose 2.8%. But tariffs implemented by the Trump administration and an escalating trade war with China may push inflation upward. Given recent moves by the U.S. administration, most investors appear to expect weaker economic growth in 2025 and moderately higher inflation. This puts the Fed in a difficult position. p. 9

# **EQUITY**

— A change in tariff policy near the end of Q1 shocked markets and led to severe selloffs across global markets, with U.S. equities taking the worst of the losses. Growth stocks, notably the Magnificent 7, have led the market downward. Small capitalization stocks underperformed large caps. Businesses that have fully embraced globalization and outsourced supply chains may find themselves in a particularly difficult position due to the drastic shift in U.S. trade policy. p. 28 & 30

### **FIXED INCOME**

- The 10-year U.S. Treasury yield fell from 4.55% to 4.23% during the quarter, reflecting somewhat of a reversal of the economic optimism of Q4. p. 22
- Credit spreads widened during the quarter, and lower quality spreads saw larger shifts. High yield bond spreads rose by 41bps to 3.53%, while investment grade spreads rose to 1.0%. Despite recent widening events, credit spreads across all ratings remain below long-term historical averages. p. 23

## **ASSET ALLOCATION ISSUES**

- Sentiment quickly shifted in a negative direction in March as investors witnessed weaker-than-expected economic data in a variety of places and tariff standoffs between the U.S. and our largest trading partners flooded headlines.
   Many S&P 500 price targets have been adjusted lower due to fears of trade policy drag on the economy. p. 27
- Implied bond market volatility showed an extreme jump towards the end of Q1. Competing theories exist as to the cause, with some market participants attributing the move to fluctuations in foreign demand for U.S. dollars due to radical shifts in U.S. trade policy. Other investors believe these moves have been more driven by hedge fund trading and an unwinding of 'basis trades'—a levered trading strategy that tries to take advantage of differences between current Treasury price and the price reflected in futures contracts. p. 27

Tariff
negotiations &
weakness in
certain
economic data
have led to fears
of imminent
recession

For now, core economic dataemployment, spending, wages-are fairly solid



# What drove the market in Q1?

# "Rising fears of tariffs pummel U.S. consumer confidence to four-year low"

University of Michigan Consumer Sentiment									
Oct '24	4 Nov '24 Dec '2		Jan <b>'2</b> 5	Feb '25	Mar '25				
70.5	71.8	74.0	71.7	64.7	57.0				

Article Source: Reuters, March 25th, 2025

# "European stocks rise on defense spending pledge..."

EuroStoxx 50 outperformance over S&P 500 by month									
Oct '24	Nov '24	Dec '24	Jan '25	Feb '25	Mar '25				
-4.8%	-8.1%	0.0%	+4.7%	+4.9%	+5.2%				

Article Source: World Economic Forum, March 6th, 2025

### "Will Tariffs Drive the U.S. Into Recession?"

S&P 500 Price Level									
Oct 31 <sup>st</sup>	Nov 30 <sup>th</sup>	Dec 31 <sup>st</sup>	Jan 31 <sup>st</sup>	Feb 28 <sup>th</sup>	Mar 31 <sup>st</sup>				
5705	6032	5881	6040	5954	5611				

Article Source: Bloomberg, March 31st, 2025

# "Could Trump's New Tariffs Push More Countries to Ditch the Dollar?"

ICE U.S. Dollar Index					
Oct 24	Nov 24	Dec 24	Jan 25	Feb 25	March 25
104.0	105.7	108.5	108.5	107.6	104.2

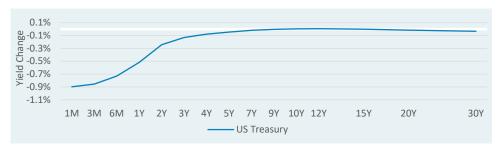
Article Source: Newsweek, April 9th, 2025

### **RELATIVE EQUITY PERFORMANCE**



Source: Bloomberg, as of 3/31/25

# **EXPECTED YIELD CURVE MOVEMENT OVER NEXT 1 YEAR**



Source: Bloomberg, as of 3/31/25

### **U.S. DOLLAR VALUE**



Source: Bloomberg, as of 3/31/25



# Economic environment



# U.S. economics summary

- Real GDP growth was negative during Q1, falling from 2.4% to -0.3% quarter-over-quarter annualized. The slowdown was driven by a substantial increase in imports relative to exports. Less government spending contributed to the weak figure, a notable change from past years where higher spending was an ongoing support. Consumer spending also slowed down.
- Investors witnessed broadly weaker economic data. This, along with the multifront U.S. trade tariff war, casts a shadow over sentiment and may be affecting business behavior due to heightened uncertainty. While fear is high, the core fundamentals of the economy remain relatively good—solid employment, decent spending, and low household debt levels. Investors will be watching closely for the way in which souring sentiment impacts the economy.
- The Federal Reserve kept rates steady, but communicated that weaker economic growth and moderately higher inflation is likely in store, due to U.S. administration tariff and trade policy.

- Lower growth and rising inflation places the Fed in a very difficult position regarding rate policy.
- U.S. inflation fell during Q1 towards the Federal Reserve 2% target. Inflation came in at 2.4% year-over-year in March, and core inflation rose 2.8%. Shelter prices (housing) has been the largest contributor to inflation, but in March showed a lower price rise of 2.5% annualized.
- Labor market conditions were strong in Q1. Unemployment remained low at 4.2%. The reductions in government workforce will likely have an impact on labor data for many months into the future, but the size of planned cuts relative to the total U.S. workforce is not enough to change the overall picture.
- Sentiment reversed abruptly in Q1 as households and businesses expressed substantial fears around tariffs. The University of Michigan Sentiment Index is now -30% below November 2024 levels, while NFIB Small Business Sentiment is nearly back to pre-election levels.

	Most Recent	12 Months Prior
Real GDP (YoY)	2.0% 3/31/25	2.9% 3/31/24
Inflation	2.8%	3.8%
(CPI YoY, Core)	3/31/25	3/31/24
Expected Inflation (5yr-5yr forward)	<b>2.6</b> % 3/31/25	2.4% 3/31/24
Fed Funds Target	4.25–4.50%	5.25–5.50%
Range	3/31/25	3/31/24
10-Year Rate	<b>4.2</b> % 3/31/25	4.3% 3/31/24
U-3	<b>4.2%</b>	3.9%
Unemployment	3/31/25	3/31/24
U-6	7.9%	7.3%
Unemployment	3/31/25	3/31/24

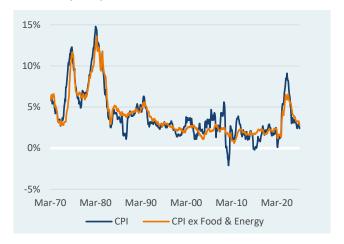


# Inflation

U.S. inflation (CPI) drifted lower during the quarter towards the Federal Reserve 2% target. Inflation was 2.4% year-over-year in March, and core inflation (excluding food & energy) rose 2.8%. Shelter prices (housing) has been the largest contributor to inflation, but in March showed only a 2.5% annualized rise. If this marks a trend towards lower shelter price rises, it could help provide some downward relief. However, tariffs implemented by the Trump administration and an escalating trade war with China will most likely push inflation higher, perhaps materially so.

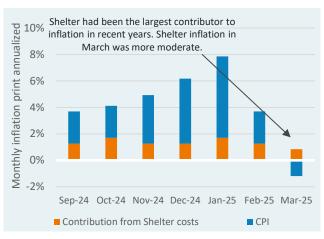
Given the change in environment and recent moves by the U.S. administration, most investors appear to expect weaker economic growth in 2025 and moderately higher inflation. It is difficult to estimate the direction of inflation in the nearterm—a slowdown in the economy generally has a dampening effect on inflation, and the recent drop in energy prices and moderation of housing costs also helps, but substantially higher tariffs will likely push prices higher in a variety of areas. This puts the Federal Reserve in a particularly difficult position regarding rate policy choices.

U.S. CPI (YOY)



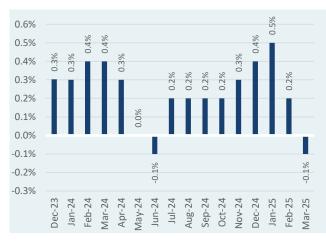
Source: BLS, as of 3/31/25

ANNUALIZED MONTHLY INFLATION



Source: BLS, Verus, of 3/31/25

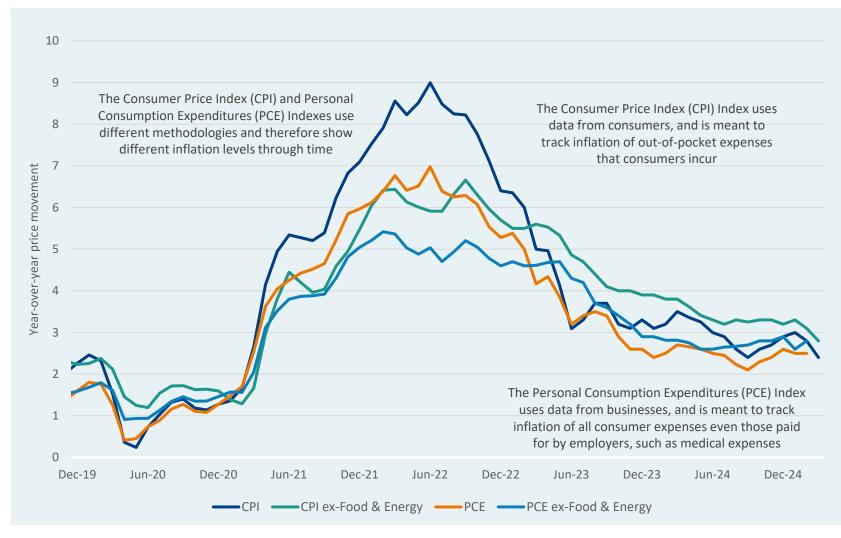
MONTHLY PRICE MOVEMENT (CPI)



Source: BLS, as of 3/31/25



# An (even more) uncertain inflation path



Tariffs pose an upside risk to inflation, but lower economic growth and falling commodity prices could provide dampening effects

Source: FRED, Verus, as of 3/31/25 – or most recent release



# GDP growth

Real GDP growth was negative during Q1, falling from 2.4% to -0.3% quarter-over-quarter annualized (2.0% year-over-year). The slowdown was driven by a substantial increase in imports relative to exports, which means more foreign products were purchased to the detriment of American products. Lower government spending also contributed to the weak figure, a notable change from past years where higher government spending had been an ongoing support. Consumer spending slowed from prior quarters which is a concern. Investment activity jumped, providing a partial offset to negative growth, although this appears to have been affected by a surge in purchases as consumers and businesses rushed spending to avoid future tariffs.

In 2024 investors had already broadly expected the U.S. economy to slow in 2025. However, trade negotiations and tariff fears have led to concerns of a much steeper slowing than initially assumed, possibly recession. But it is important to note that economic conditions remain generally good. Employment is high, wages are rising faster than inflation, household debt service costs are relatively muted, and many households continue to sit on considerable gains in wealth due to the rally in markets and appreciation of residential homes. We believe this helps mitigate the chances of a deeper recession. But policy uncertainty will likely have a larger and larger effect if it persists on an ongoing basis.

U.S. real GDP growth was negative during Q1 due to rising imports, less gov't spending, and slower consumer spending

### U.S. GDP EXPECTATIONS



Source: Bloomberg, median value of economist estimates

# U.S. REAL GDP COMPONENTS (QOQ)



Source: FRED, as of 3/31/25

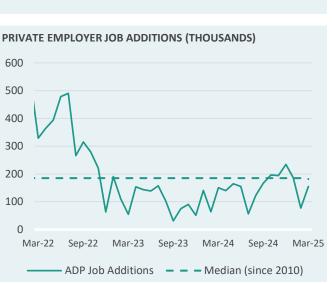


# Signs of economic weakness

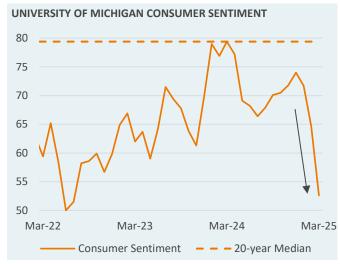
In February and March, economic data in a variety of places was weaker-than-expected. Household spending was strong in November and December but then fell suddenly in January—likely impacted by a cold winter season and California wildfires. Job gains showed a similar slowdown in the first two months of the year. The trade standoff between the U.S. and our largest trading partners, and fear of tariffs, appears to be casting a heavy shadow over consumer sentiment. These concerns may also be impacting business behavior due to uncertainty about future prices and conditions, and general pessimism. The longer that trade uncertainty persists, the larger the negative impact will likely be.

While weakness in the first quarter is concerning and notable, we continue to see the core fundamentals of the economy as relatively good—high levels of employment, decent consumer spending, manageable household debt levels, and the wealth effects from rising equity markets and home prices over the past decade could be supportive of positive economic growth in 2025.









Source: Challenger, ADP, University of Michigan as of 3/31/25, BEA as of 2/28/25



# Labor market

Labor market conditions have remained broadly strong. Unemployment was low at 4.2% in March.

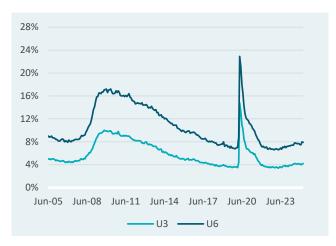
The reductions in government workforce will likely have an impact on labor data for future quarters, but the size of planned cuts relative to the total U.S. workforce is not enough to change the overall picture. We believe a larger risk to the economy would be a shift in business hiring/employment actions if the recent deterioration in business sentiment was to be sustained, though there do not seem to be signs of this so far.

The change in a country's population is a large determinant of the rate of economic growth. This means that a dramatic slowing in unlawful immigration over recent months will impact the labor market and total consumer spending, as well as other aspects of the economy. In specific industries, this shift will likely also affect wages, since undocumented immigrants are paid on average materially less than U.S. citizens. Tighter job markets in specific regions and across specific job types, with less supply of cheap labor, could lift wages for existing workers. Regardless of one's political leanings, we believe these impacts could be notable and will be important to watch and understand.

The job market remains relatively strong

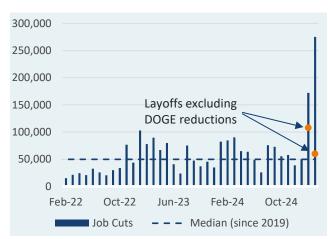
A reduced supply of cheap immigrant labor could lift wages in certain regions

### U.S. UNEMPLOYMENT



Source: FRED, as of 3/31/25

## **U.S. JOB CUT ANNOUNCEMENTS**



Source: Challenger, Gray & Christmas, as of 3/31/25

U.S. BORDER ENCOUNTERS (MONTHLY)



Source: U.S. Customs & Border Protection, as of February 2025

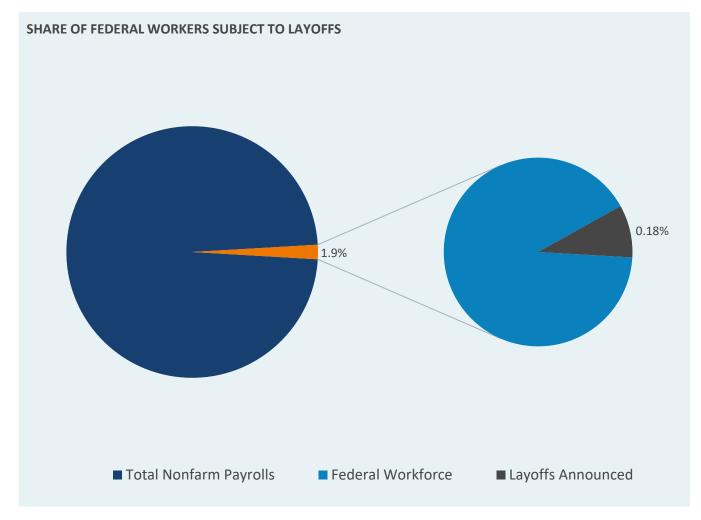


# Impacts of DOGE job reductions

# How might federal workforce reductions impact the labor market?

President Donald Trump and Elon Musk's Department of Government Efficiency (DOGE) has moved quickly to take an aggressive approach to cutting both spending and jobs. Unsurprisingly, given the speed of action and unique tactics, many initiatives are being challenged in court. It appears very likely that the Trump Administration will be at least somewhat successful in eliminating what it sees as wasteful spending, effectively reducing the size and scope of the Federal government.

With federal workers making up less than 2% of the overall labor force, a portion of layoffs within this group is unlikely to make big waves in the labor market and a spike in unemployment, although certain regions will see a bigger impact. DOGE actions led to a total of 280,000 layoffs in February and March (0.18% of the total workforce). While job losses are always unfortunate, the total impact may not be enough to change the direction of the economy.



Source: Verus, BLS, Challenger Survey, as of 3/31/25



# The consumer

Inflation-adjusted personal spending growth was 2.7% yearover-year in February, slower than the latter-half of 2024 but still at a moderately strong level that implies an average rate of overall economic growth. Spending in January was the weakest in nearly four years, although an exceptionally cold winter (which tends to dampen purchases) and California wildfires may have contributed to this effect.

It will be important to monitor whether slow winter spending turns into a sustained downturn, further fueled by a sharp downturn in sentiment and tariff fears. Automobile and

apparel sales often see the greatest drop during an economic downturn, which suggests these sectors may provide a helpful barometer for the overall economy in 2025.

The average household savings rate improved from 3.3% to 4.6% during the quarter. Although weather effects also likely had an impact on these figures, we would assume that broad deterioration in consumer sentiment is contributing to greater savings due to economic uncertainty.

### REAL PERSONAL SPENDING



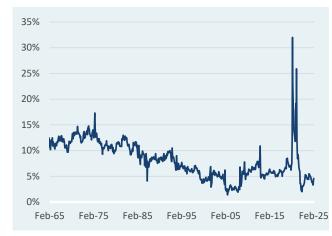
# Source: FRED, as of 2/28/25

### **AUTO & APPAREL SALES**



### Source: FRED, as of 2/28/25

### PERSONAL SAVINGS RATE



Source: FRED, as of 2/28/25



# Sentiment

Sentiment reversed abruptly in Q1, as households and businesses expressed fears around tariff uncertainty. Changes in consumer sentiment became visible in multiple surveys, while imports jumped dramatically because businesses rushed to purchase foreign products to avoid possible future tariffs. Household forecasts of U.S. inflation over the next year rose to 6.7% (interestingly, republican voters expect 2% inflation while democratic voters expect nearly 10% inflation).

The University of Michigan Consumer Sentiment survey fell for four consecutive months. The partisan divide regarding expectations for the economy have reached extreme levels. While those survey respondents who identify as Republican feel

fairly good about economic prospects, those who identify with the Democratic Party feel that conditions are worse than the 2008-2009 Global Financial Crisis. In such a hyperpartisan environment it may be useful to watch for political biases that exist in surveys. The Conference Board Consumer Confidence Index in March reflected a similar downward trend, reaching the poorest sentiment since 2021.

Small business sentiment deteriorated to 97.4 in March, nearly erasing the post-election enthusiasm for Republican probusiness policies. The net percent of business owners expecting better business conditions fell to 21%, the largest monthly decline since late-2020.

Sentiment dropped sharply during Q1 on tariff & inflation fears, as well as a greater chance of recession

# CONSUMER SENTIMENT (UNIV. OF MICHIGAN)



Source: University of Michigan, as of 3/31/25

# CONSUMER CONFIDENCE (CONFERENCE BOARD)



Source: Conference Board, as of 2/28/25

### NFIB SMALL BUSINESS SENTIMENT



Source: NFIB, as of 3/31/25



# Housing

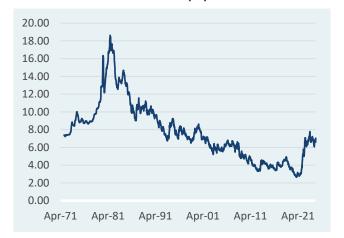
The average 30-year mortgage rate fell from 6.9% to 6.7% during the quarter, as Treasury yields broadly trended lower. Home prices have increased 3.3% year-over-year as of January, according to CoreLogic.

The U.S. residential housing market seems to be rebalancing slightly in terms of supply and demand: rising inventories but very low sales activity. However, there are few indications that home affordability, which is at a record poor level, is set to improve in the near-term. One path to better affordability could result from further increases in inventory coming to market which pressures sellers to reduce prices in order to incentivize buyers who have more inventory to choose from. Another path to

affordability would, of course, be lower mortgage interest rates, although a drop in interest rates historically has tended to result in a jump in home prices, which could counteract affordability gains.

The nationwide average cost to rent continues to be generally flat (+0.3% in February YoY according to Redfin). As average hourly wages are growing at a 4% annual rate, a persistent trend of flat rent costs will help improve rental affordability for those who do not own a home. Substantial increases in multifamily supply have reportedly contributed to downward rent pressure, with the median asking rent price falling to \$1.78 per square foot—the lowest level in nearly 4 years.

### **30-YEAR MORTGAGE RATE (%)**



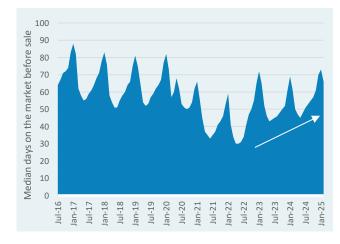
Source: Freddie Mac, as of 3/31/25

### **EXISTING HOME SALES**



Source: National Association of Realtors, as of 2/28/25

### **AVERAGE DAYS ON THE MARKET**



Source: FRED, as of 2/28/24



# International economics summary

- Major economies around the world face acute risks of economic slowdown due to the imposed tariffs of the U.S. administration (this includes the U.S. economy, of course). That risk comes at a time when many countries already struggle with lower growth and structural headwinds. Outcomes of trade negotiations, and the time it takes for conclusions to be reached, will likely have a notable impact on near-term growth. In short, tariff outcomes will be hugely important.
- Eurozone economies grew only 1.2% YoY in Q4. Expectations are for continued very weak growth of 0.9% in 2025, according to ECB staff, as of March. This forecast aligns with the consensus economists forecast. Trade and geopolitical uncertainty may create an additional drag on the region since these forecasts assume U.S./China tariffs but no U.S./EU tariffs. A prolonged trade war between the U.S. and the Eurozone could mean even greater economic drag.

- German elections concluded with a win for the conservative Christian Democratic Union (CDU) and its alliance the Christian Social Union (CSU) with 28.6% of the vote. A two-way coalition with the runner-up Alternative for Germany (AFD) is unlikely to form despite its impressive rise in popularity.
- On February 5th, the Bank of England (BOE) decided with a seven-two vote to cut interest rates by 25bps to 4.5%. This marked the third consecutive cut over the past six months. The BOE cited cooler-than-expected December inflation as a main contributing factor.
- As the U.S. administration appears to be focusing maximum pressure on China regarding trade and business practices, the intense market volatility experienced in early April could be setting the stage for the remainder of 2025. Some estimates put China's economic growth rate this year at perhaps 4% or even 3%, below the 5% stated goal of the Chinese Communist Party.

Area	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United	2.0%	2.4%	<b>4.2%</b> 3/31/25
States	3/31/25	3/31/25	
Eurozone	1.2%	2.2%	6.1%
	12/31/24	3/31/25	2/28/25
Japan	2.8%	3.7%	2.4%
	12/31/24	2/28/25	2/28/25
Canada	1.5%	2.6%	6.7%
	12/31/24	2/28/25	3/31/25
BRICS	5.2%	1.7%	5.4%
Nations	12/31/24	3/31/25	3/31/25
Brazil	3.4%	5.5%	6.8%
	3/31/25	3/31/25	2/28/25
Russia	3.1%	10.3%	2.4%
	9/30/24	3/31/25	2/28/25
India	<b>6.2</b> % 12/31/24	3.3% 3/31/25	7.1% 12/31/24
China	5.4%	(0.1%)	5.4%
	12/31/24	3/31/25	2/28/25

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



# International economics

The Eurozone grew only 1.2% YoY Q4. Expectations are for continued weak growth of 0.9% in 2025. The ECB cut rates for the sixth consecutive time in Q1, citing the weak economic outlook and continued moderation of inflation as the main factors, with additional rate cuts expected in 2025. A prolonged trade war could lead to even greater economic drag and renewed inflationary pressures.

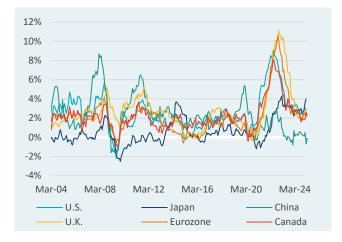
The U.S. announced a series of tariffs in 2025, initially including a 20% tariff on all Chinese imports and a 25% tariffs on certain imports from the EU, Canada, and Mexico. The U.S. followed up with expanded tariffs on "Liberation Day", including a 10% baseline rate and rates of 54% on China, 20% on the EU, and 25% on Canada and Mexico. The U.S. has generally cited goals of business operation onshoring, national defense, improving

the trade deficit / foreign terms of trade, and immigration and drug control as intended outcomes of recent tariff policy.

The EU, Canada, and Mexico initially responded to "Liberation Day" with counter-tariffs on certain U.S. goods. Counter-measures were suspended after the U.S. announced a 90-day pause on tariff increases, bringing the EU, Mexico, and Canada to the baseline rate of 10%. We believe it is likely that the 10% baseline tariff stays in place for the long-term.

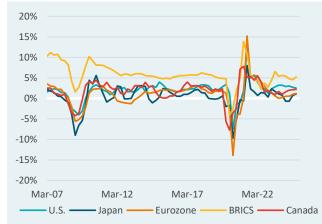
The U.S. China trade war continued to escalate following "Liberation Day", with tariff rates ultimately reaching 145% on Chinese goods and 125% on U.S. goods, halting many aspects of trade between the nations, as of mid-April. The tariff rate on Chinese goods was exempt from the U.S. 90-day pause.

### INFLATION (CPI YEAR-OVER-YEAR)



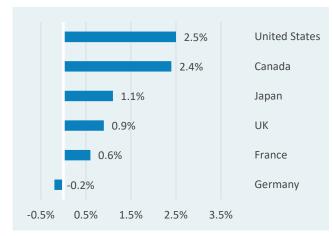
Source: BLS, Verus, as of 3/31/25 or most recent date

# REAL GDP GROWTH (YEAR-OVER-YEAR)



Source: BLS, Verus, as of 3/31/25 or most recent date

# Q3 REAL GDP GROWTH (YOY)



Source: BLS, Verus, as of Q4 2024



# Fixed income rates & credit



# Fixed income environment

- The 10-year U.S. Treasury yield fell slightly from 4.55% to 4.23% during the quarter, reflecting a reversal in the economic optimism of Q4.
- The Federal Reserve kept rates steady but has communicated an expectation of weaker economic growth and moderately higher inflation in 2025, due to U.S. administration tariffs and trade policy. Falling growth but rising inflation would put the Fed in a very difficult position regarding policy decisions. At the beginning of Q1 investors were expecting two rate cuts in 2025. This has since jumped to 4.
- The yield premium of U.S. Treasuries over that of European debt—German bunds in particular—shrunk materially during the quarter. The dual narratives of weaker-than-expected U.S. growth in 2025, and debt limit easing in Germany which could boost growth, has sent yields of those countries closer to parity.
- Longer duration credit slightly outperformed shorter duration. This behavior likely reflected a shift in

- market sentiment from year end, during which uncertainty in fiscal and monetary policy contributed to a bear steepening of the yield curve. Long duration corporate bonds gained +2.38% while Bank loans added +0.6% and high yield returned +1.0%.
- Credit spreads widened due to risk off movements, and lower quality spreads experienced the largest shifts. High yield bond spreads rose by 41bps to 3.53%, while investment grade spreads rose to 1.0%. Despite recent widening events, credit spreads across all ratings remain below long-term historical averages.
- U.S. Treasury yields showed extreme jumps. Some investors attributed the move to fluctuations in foreign demand for U.S. dollars due to shifts in U.S. trade policy. Others believe these moves have been driven by hedge fund trading and an unwinding of 'basis trades'—a levered trading strategy that tries to take advantage of differences between current Treasury price and prices of futures contracts.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	2.8%	4.9%
Core Plus Fixed Income (Bloomberg U.S. Universal)	2.7%	5.2%
U.S. Treasuries (Bloomberg U.S. Treasury)	2.9%	4.5%
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	4.7%	1.3%
U.S. High Yield (Bloomberg U.S. Corporate HY)	1.0%	7.7%
Bank Loans (S&P/LSTA Leveraged Loan)	0.6%	7.0%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	4.3%	4.0%
Emerging Market Debt Hard (JPM EMBI Global Diversified)	2.2%	6.8%
Mortgage-Backed Securities (Bloomberg MBS)	3.1%	5.4%

Source: Standard & Poor's, J.P. Morgan, Bloomberg, as of 3/31/25



# Yield environment

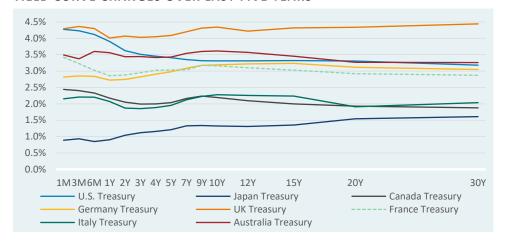
### U.S. YIELD CURVE



### **GLOBAL GOVERNMENT YIELD CURVES**



### YIELD CURVE CHANGES OVER LAST FIVE YEARS



### IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 3/31/25



# Credit environment

During the quarter, longer duration credit slightly outperformed shorter duration despite the Federal Reserve holding rates at previous levels. This behavior likely reflected a shift in market sentiment from year end, during which uncertainty in fiscal and monetary policy had contributed to a sharp bear steepening of the yield curve. During Q1 investors observed a trend towards higher quality credit, as long duration investment grade corporate bonds (Bloomberg U.S. Long Corporate Credit) gained 2.38% while Bank loans added +0.6% (S&P/LSTA Leveraged Loans) and high yield returned +1.0% (Bloomberg U.S. Corporate High Yield).

Returns within the high yield bond market reflected similar slight risk-off movement, with lower quality credits experiencing the worst performance. Bonds rated CCC, including distressed credit, lost -2.31%, compared to

bonds rated B, which returned -1.36% and BB, which returned -0.57%. Similarly, lower quality bank loans underperformed higher quality. CCC-rated loans returned -2.14%, compared to -0.33% and +.02% for B- and BB-rated loans, respectively.

Credit spreads widened due to initial risk off movements, and lower quality spreads experienced largest shifts. High yield bond spreads rose by 41bps to 3.53%, while investment grade spreads rose to 1.0%. Despite recent widening events, credit spreads across all ratings remain below long-term historical averages, suggesting investors are still somewhat confident in the ability of businesses to service debt.

### **SPREADS**



Source: Barclays, Bloomberg, as of 3/31/25

# YIELD TO MATURITY



Source: Bloomberg, J.P. Morgan as of 3/31/25

# CREDIT SPREAD (OAS)

Market	3/31/25	3/31/24	
Long U.S. Corp	1.2%	1.1%	
U.S. Inv Grade Corp	0.9%	0.9%	
U.S. High Yield	3.5%	3.0%	
U.S. Bank Loans*	4.7%	4.9%	

Source: Barclays, Credit Suisse, Bloomberg, as of 3/31/25 \*Discount margin (4-year life)



# Default & issuance

Total default activity remained below the two-year average during Q1, as the economy continued to demonstrate strength and recession forecasts prior to April were relatively muted. During the quarter, seven companies defaulted, totaling more than \$1.2 billion in bonds and \$4.8 billion in loans. Monthly default activity consistently came in at less than half of the monthly average default volume of 2023 and 2024 (\$7.1 billion).

While defaults and distressed activity was subdued across credit, loans surpassed bonds in default and distressed exchange activity. During the quarter, eight companies completed a distressed exchange totaling \$580 million in bonds and \$4.4 billion in loans. This total of less than \$5 billion in total distressed credit volume was significantly lower than the \$19.4 billion seen in Q4 and was the lightest quarterly default/LME volume since Q4 2022.

High yield bond default rates rose slightly to 1.2% but were less than half of the default rate of one year prior. Current figures remain well below the long-term annual average of 3.4%. Loan default rates rose slightly to 3.9%, up 0.3% from one year prior. Notably, this gap in default rates between leveraged loan and high yield (2.7%) is a reduction from the 3% gap five months ago that represented the high-water mark since 2000.

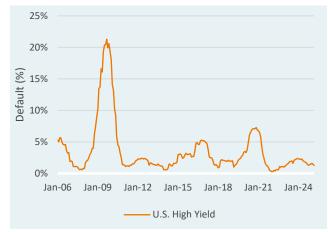
Quarterly issuance volume for high yield bonds was lower, totaling \$68.3 billion, down 22% year over year, which compares to \$87.6 billion in Q1 2024. Bank loans saw significantly higher levels of issuance, totaling \$337 billion, which was 6% greater than one year prior. However, this represented a reduction from the previous record levels of issuance seen in Q4 (\$505 billion). It is possible that changing higher interest rate expectations due to actions of the Trump administration could be affecting issuance decisions.

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



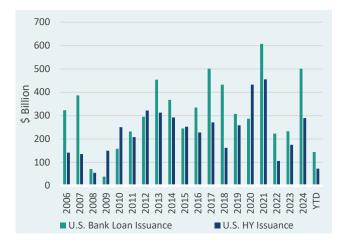
Source: BofA Merrill Lynch, Verus, as of 3/31/25 – par weighted

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



Source: BofA Merrill Lynch, as of 3/31/25 - par weighted

U.S. ISSUANCE (\$ BILLIONS)



Source: BofA Merrill Lynch, as of 3/31/25



# Equity



# Equity environment

- Domestic equities delivered substantial underperformance during Q1 (S&P 500 -4.3%) relative to international developed (MSCI EAFE +6.9%) and emerging market equities (MSCI EM +2.9%)—a notable change in trend from recent years. The S&P 500 entered a technical correction mid-March.
- A sentiment shift away from U.S. stocks and towards foreign markets occurred in recent months, as tariff concerns spooked investors and contributed to recession fears. At the same time, certain European governments have indicated a greater willingness to invest in local economies, possibly generating better economic growth. This contributed to a rotation out of U.S. market and into Europe.
- Growth stocks, notably the Magnificent 7, have led the market downward, although small capitalization stocks still underperformed large caps.

- Businesses that have fully embraced globalization and outsourced supply chains may find themselves in a particularly difficult position due to the drastic shift in U.S. trade policy.
- Chinese markets climbed in February on the heels of the DeepSeek launch in January, when President Xi Jinping reportedly met with tech leadership. Also, signs that the real estate bear market may be easing, and that consumer spending may be turning upward, generating impressive Q1 returns.
- Market-priced volatility jumped in early March as tariff announcements, trade negotiations, and fears of general economic weakness spooked markets, leading to a broad selloff of U.S. assets. As trade fears intensified in the first week of April, global markets saw one of the most sudden drops in modern history which sent the VIX to 52.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	(4.3%)		8.3%	
U.S. Small Cap (Russell 2000)	(9.5%)		(4.0%)	
U.S. Equity (Russell 3000)	(4.7%)		7.2%	
U.S. Large Value (Russell 1000 Value)	2.1%		7.2%	
U.S. Large Growth (Russell 1000 Growth)	(11.1%)		7.8%	
Global Equity (MSCI ACWI)	(1.3%)	(2.2%)	7.2%	14.7%
International Large (MSCI EAFE)	6.9%	3.4%	4.9%	6.8%
Eurozone (EURO STOXX 50)	10.9%	7.8%	5.5%	8.2%
U.K. (FTSE 100)	12.1%	6.0%	6.2%	11.7%
Japan (TOPIX)	1.2%	(2.4%)	(0.6%)	9.2%
Canada (S&P/TSX)	1.5%	2.5%	9.0%	26.7%
Emerging Markets (MSCI Emerging Markets)	2.9%	2.5%	8.1%	11.2%

Source: Standard & Poor's, FTSE, MSCI, STOXX, JPX, as of 3/31/25 – performance quoted from perspective of U.S. dollar investor



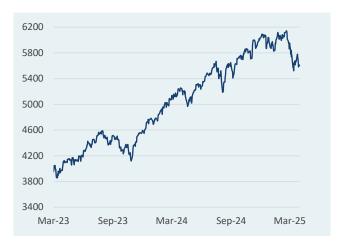
# Domestic equity

U.S. equities performed poorly in Q1 with the S&P 500 down -4.3% (note: this does not include the dramatic global selloff of early April). In a change of pace from 2024, mega-cap stocks in Q1 acted as a drag on the overall index, as these previously high-flyers struggled on growth and tariff concerns. Domestic equities have notably underperformed both international (MSCI EAFE +6.9%) and emerging markets (MSCI EM +2.9%) year-to-date. Domestic businesses that have fully embraced globalization and outsourced supply chains may find themselves in a particularly difficult position due to the drastic shift in U.S. trade policy.

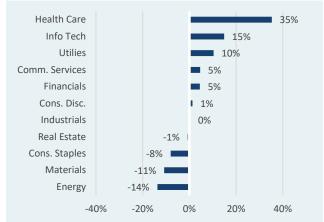
Year-over-year earnings growth of the S&P 500 is expected to be 7.3%, according to FactSet as of April 11<sup>th</sup>. During the quarter, analysts lowered EPS estimates slightly more than normal, by -4.2% which compares to the 5-year average adjustment of -3.3%. Materials and consumer discretionary sectors saw the largest adjustments, suggesting signs of expected economic weakness. It is very likely that future corporate earnings guidance will turn negative to reflect the more difficult trade and growth environment.

U.S. equities underperformed dramatically during Q1, reversing a multi-year trend

### **S&P 500 PRICE INDEX**

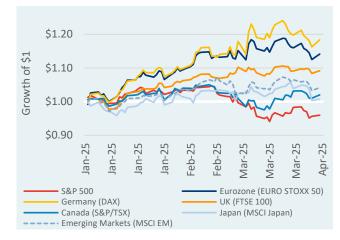


# S&P 500 EPS GROWTH (YEAR-OVER-YEAR)



Source: Factset, as of 4/11/25

# REGIONAL EQUITY PERFORMANCE (YTD)

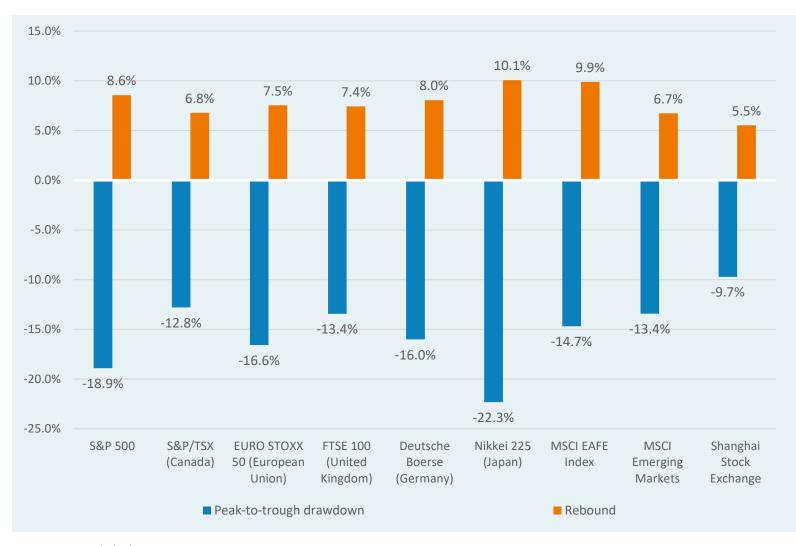


Source: Verus, Bloomberg, Verus, as of 3/31/25



Source: Standard & Poor's, as of 3/31/25

# Tariff-induced selloff



On April 2<sup>nd</sup>,
President Trump
announced widereaching tariffs on
most trading
partners. The level
of tariffs were far
higher than
investors had
expected, resulting
in large risk-off
market moves.

The domestic market has faced the most pain given that it has chosen trade conflict with many trading partners, while other regions face conflict only with the U.S.

Source: Verus, as of 4/14/25



# Domestic equity size & style

Small cap equities underperformed large caps year-to-date (FTSE Russell 2000 -9.5% vs. FTSE Russell 1000 -4.5%), despite a drawdown across mega cap stocks. Value stocks on the other hand outperformed growth stocks substantially (FTSE Russell 1000 Value +2.1% vs FTSE Russell 1000 Growth - 10.0%), as many investors tend to seek safer higher dividend paying stocks during riskier environments and heightened recession risk. These effects could be seen in sector performance disparities during the quarter, with energy, utilities, and financials outperforming materially. Information technology was one of the worst performing sectors.

Ongoing style factor volatility may be a feature of Q2, given the historically sudden global market selloff that occurred in early April, which has hit mega cap growth and tech stocks particularly severely.

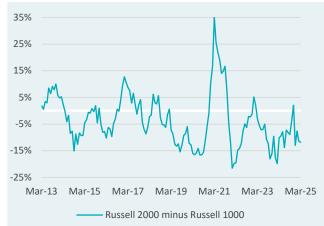
On a one-year lookback basis, large cap value stocks have become the leader among U.S. style groups, and small cap growth the laggards. Small cap & value lagged in Q1 while value outperformed growth substantially (+2.1% vs - 10.0%)

# VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



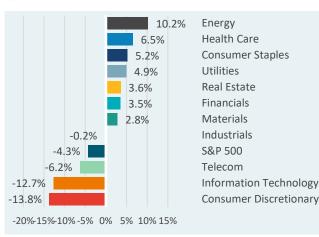
Source: FTSE, as of 3/31/25

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE Russell, as of 3/31/25

Q1 PERFORMANCE



Source: Morningstar, as of 3/31/25



# Less Magnificent 7



The Magnificent 7 suffered large losses during the market selloff

Nearly all members of this group are lagging the S&P 500 YTD

Source: Verus, Bloomberg, as of 4/14/25



# International developed equity

In a sharp reversal from years of U.S. outperformance, domestic stocks entered technical correction territory in March while non-U.S. stocks— European markets in particular—took the lead. Weakening U.S. conditions and the Trump Administration's "Liberation Day" tariff contributed to a dramatic fall in domestic stocks later in March and the first week of April. European stocks have rallied on hopes for stimulus, easing of debt ceilings, and perhaps investments in greater European independence. Depreciation of the U.S. dollar further fueled international stock outperformance for U.S. investors. For the first time in quite some time, many investors are seeking opportunities outside of the U.S. market.

International developed shares (MSCI EAFE +6.9%) and emerging market equities (MSCI EM +2.9%) both outperformed domestic stocks (S&P 500 -4.3%).

President Trump's approach of attempting to negotiate with all of America's trade partners all at once places the U.S. in a uniquely difficult economic position. For example, while China faces a trade war with only a single trading partner (the United States), here at home we face a trade war with multiple trading partners. It could be argued that the negative economic impacts on the U.S. from this trade war could be much larger than the negative economic impacts that many other countries will endure.

## INTERNATIONAL DEVELOPED EQUITY



Source: MSCI, as of 3/31/25

## REGIONAL STOCK PERFORMANCE YTD



Source: Verus, Bloomberg, as of 3/31/25

# REGIONAL RETURNS (PEAK-TO-TROUGH)



Source: Verus, Bloomberg, as of 4/14/25



# Emerging market equity

Emerging market equities (MSCI EM +2.9%) delivered moderately positive returns in Q1, outperforming U.S. equities, fueled by China's equity rally. Chinese markets climbed notably in February on the heels of the DeepSeek launch in January, when President Xi Jinping reportedly met with tech leaders for the first time in several years. This meeting could help to bolster investor confidence in Chinese tech despite ongoing structural challenges across the local investment landscape. Additionally, signs that the bear market in residential real estate may be easing, and that consumer spending may be turning upward, generated market excitement and an impressive Q1 (MSCI China Index +11.3%).

This movement served as a helpful reminder that larger regional markets can have big performance impacts an overall emerging markets allocation.

As the U.S. administration appears to be focusing maximum pressure on China regarding trade and business practices, the intense market volatility experienced in early April seems to set the table for the remainder of 2025. Some estimates put China's economic growth rate this year at perhaps 4% or even 3%, below the 5% target publicized by the Chinese Communist Party.

## **EMERGING MARKET EQUITY**



Source: MSCI, as of 3/31/25

# MSCI EM 2025 Q1 COUNTRY RETURNS (USD)



Source: Verus, Bloomberg, as of 3/31/25

## CHINA'S COMEBACK



Source: MSCI, as of 3/31/25



# Equity valuations

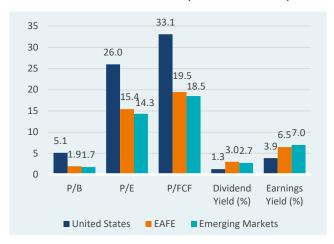
U.S. equity multiples fell materially during the market selloff, while international equities performed moderately well with little valuation movement. This reduced some of the historically wide valuation gap between markets.

Many investors have become more bearish on U.S. stocks due to actions of the U.S. administration. At the same time, certain European governments have indicated a greater willingness to invest in local economies, possibly generating stronger economic growth rates in the future. These trends have fueled some rotation of investment dollars out of the U.S. market and into Europe. As a consequence of the Trump administration foreign policy, conversations have taken place in the investor community

around diversification and the fact that many portfolios have become intensely U.S.-concentrated over time. Additionally, U.S. valuations are historically high relative to other markets.

High valuations are a product of fantastic earnings growth forecasts, and rosy expectations that U.S. exceptionalism will continue. If those expectations begin to show cracks, and investors seek opportunities elsewhere due to a less welcoming U.S. investment environment, valuations could change. However, we feel that this story is a bit overdone—the fundamental justifications for a U.S. equity premium will probably remain intact despite tariff pain that might occur in the near- and medium-term.

## **MSCI VALUATION METRICS (3-MONTH AVG)**



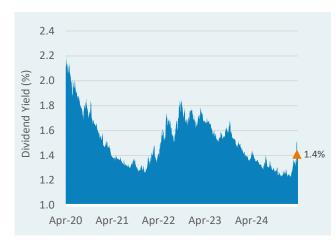
Source: MSCI, Verus, as of 3/31/25 – trailing P/E

# FORWARD P/E



Source: MSCI, as of 3/31/25

## S&P 500 HISTORICAL DIVIDEND YIELD



Source: Standard & Poor's, Verus, as of 3/31/25



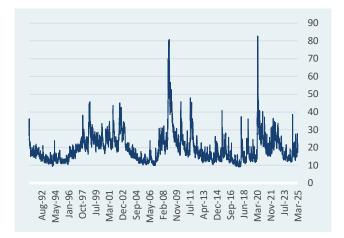
# Market volatility

Market-priced volatility (Cboe VIX Index) jumped to nearly 30% in early March as tariff announcements, trade negotiations, and fears of general economic weakness spooked markets, leading to a broad selloff of U.S. assets. The VIX index suggests the ultra-low volatility environment of 2023 and early 2024 ended in August of 2024 with a historically large volatility spike that occurred that month. Ongoing recession fears and trade disruptions could very likely contribute to greater-than-normal market price fluctuations in the near- and medium-term.

Implied bond market volatility showed an extreme jump in

late March and the first week of April. Competing theories exist as to the cause, with some market participants attributing the move to fluctuations in foreign demand for U.S. dollars due to radical shifts in the trade policy of the Trump administration. Other investors believe these moves have been more driven by hedge fund trading and an unwinding of 'basis trades'—a levered trading strategy that tries to take advantage of differences between current Treasury price and the price reflected in futures contracts. Due to the highly levered nature of this strategy, market volatility spikes can lead to trade losses and unwinding of large positions which can move markets. The true cause of these moves remains unclear.

# U.S. IMPLIED VOLATILITY (VIX)



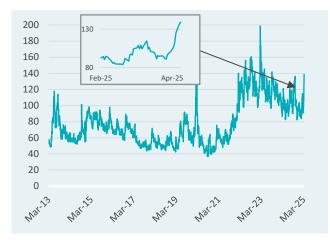
Source: Choe, as of 3/31/25

## **REALIZED VOLATILITY**



Source: Standard & Poor's, MSCI, Verus, as of 3/31/25

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



Source: BofA, as of 4/8/25



# Long-term equity performance



Source: Standard & Poor's, FTSE, MSCI, Verus, as of 3/31/25



# Other assets



# Currency

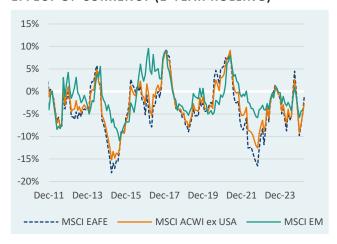
The U.S. dollar fell during Q1 on tariff and trade fears, as well as signs of a weakening economy. This boosted the returns of U.S. investors with unhedged foreign currency exposure. The U.S. Dollar Index was down - 8.5%. Dollar movement is particularly difficult to predict—a slowdown in U.S. economic growth throughout the remainder of the year should have a dampening effect on dollar value, but a global market selloff tends to result in a flight to quality (higher U.S. dollar). A big hike in tariffs imposed by the U.S. should generally push the dollar up as trading partners work to buy dollars, but if this causes a negative shock to the economy and leads to rate cuts from the Federal Reserve then that would be negative for the dollar. The overall net effect of these opposing forces is very complex.

Those without a currency hedging program gained +3.5% from currency moves across international equities (MSCI EAFE) during Q1, but lost -1.9%

over the past year. Currency gains were large across the Euro and British pound, while the Japanese yen moved in the opposite direction.

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

## **EFFECT OF CURRENCY (1-YEAR ROLLING)**



Source: MSCI, Verus, as of 3/31/25

## **U.S. DOLLAR MAJOR CURRENCY INDEX**



Source: FRED, Verus, as of 3/31/25

### EMBEDDED CURRENCY VS CURRENCY FACTORS



Source: MSCI, Verus, as of 3/31/25 "Embedded Currency Exposure" is the currency return impact from not hedging currency risk



# Appendix

# Periodic table of returns

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	YTD	5-Yea	10-Year
Large Cap Growth	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	36.4	38.5	28.3	16.1	42.7	33.4	8.9	20.1	15.1
Large Cap Equity	21.4	26.9	16.2	1.4	37.2	26.9	7.8	18.1	38.8	13.2	5.7	21.3	30.2	1.9	31.4	34.6	27.6	9.4	26.5	24.5	6.9	18.5	12.2
Large Cap Value	20.1	23.5	15.8	-6.5	34.5	24.5	2.6	17.9	34.5	13.0	0.9	17.3	25.0	0.0	28.5	21.0	27.1	1.5	18.7	15.2	2.9	16.1	8.8
Small Cap Growth	14.0	22.2	11.8	-21.4	32.5	19.2	1.5	17.5	33.5	11.8	0.6	12.1	22.2	-1.5	26.5	20.0	26.5	-4.7	18.2	14.4	2.8	15.3	6.3
Emerging Markets Equity	7.5	18.4	11.6	-25.9	28.4	16.8	0.4	16.4	33.1	6.0	0.0	11.8	21.7	-3.5	25.5	18.3	25.2	-7.5	16.9	11.5	2.1	14.5	6.1
Small Cap Equity	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.4	14.0	17.7	-13.0	15.4	9.9	1.0	13.3	6.1
60/40 Global Portfolio	6.3	15.5	10.3	-33.8	23.3	16.1	-2.1	15.3	23.3	4.9	-0.8	11.2	14.6	-6.0	22.0	10.3	14.8	-14.5	14.6	9.5	0.9	11.8	5.7
Small Cap Value	5.3	15.1	7.0	-35.6	20.6	15.5	-2.9	14.6	12.1	4.2	-1.4	8.0	13.7	-8.3	18.6	7.8	11.3	-14.5	11.5	8.1	0.7	10.8	5.4
International Equity	4.7	13.3	7.0	-36.8	19.7	13.1	-4.2	11.5	11.0	3.4	-2.5	7.1	7.8	-9.3	18.4	7.5	8.9	-17.3	9.8	7.5	0.3	8.5	5.3
Hedge Funds of Funds	4.6	10.4	5.8	-37.6	18.9	10.2	-5.5	10.5	9.0	2.8	-3.8	5.7	7.7	-11.0	8.7	4.6	6.5	-19.1	6.3	5.4	-4.5	7.9	3.7
Cash	4.6	9.1	4.4	-38.4	11.5	8.2	-5.7	4.8	0.1	0.0	-4.4	2.6	7.0	-11.2	7.8	2.8	2.8	-20.1	5.5	5.3	-7.7	7.5	3.7
Commodities	4.2	4.8	-0.2	-38.5	5.9	6.5	-11.7	4.2	-2.0	-1.8	-7.5	1.0	3.5	-12.9	7.7	0.5	0.0	-20.4	5.0	3.8	-9.5	3.0	2.8
US Bonds	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-13.8	6.4	0.5	-1.5	-26.4	-7.9	1.3	-10.0	2.5	1.8
Real Estate	2.4	2.1	-9.8	-53.2	-16.9	0.1	-18.2	-1.1	-9.5	-17.0	-24.7	0.3	0.9	-14.6	2.1	-3.1	-2.5	-29.1	-7.9	0.4	-11.1	-0.4	1.5
	Lar	ge Cap	o Equit	у				Small (	Cap Gro	owth			į	Con	nmodit	ties							
	Lar	ge Cap	o Value					Interna	ationa	l Equity	/			Rea	l Estat	e							
	Lar	ge Cap	Grow	th				Emergi	ing Ma	rkets E	quity			Hed	dge Fur	nds of F	unds						
	Sm	all Cap	Equit	y				US Bon	ds					60%	6 MSCI	ACWI/4	40% Bl	oomber	g Glob	al Bond			
	Sm	all Cap	o Value	:				Cash															

Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg U.S. Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 12/31/24.

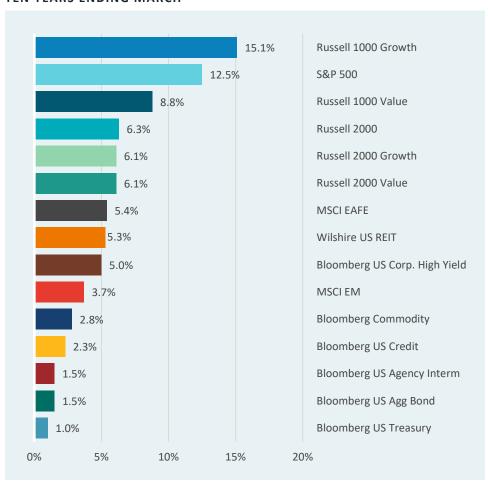


# Major asset class returns

## ONE YEAR ENDING MARCH



## TEN YEARS ENDING MARCH



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

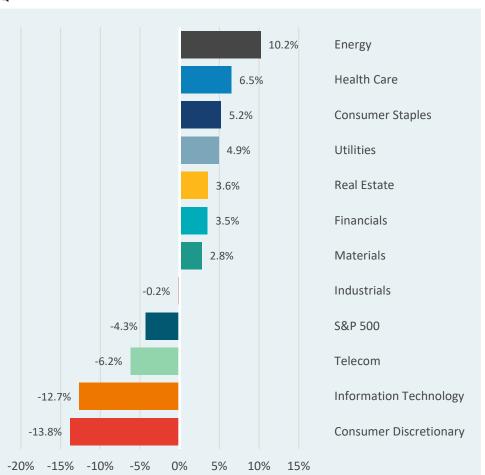
Source: Morningstar, as of 3/31/25

Source: Morningstar, as of 3/31/25

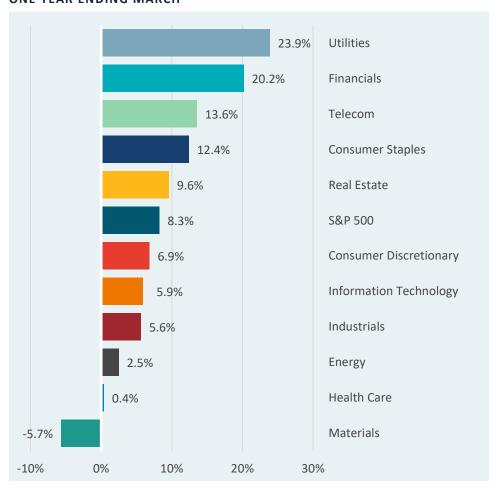


# S&P 500 sector returns

# QTD



# ONE YEAR ENDING MARCH



Source: Morningstar, as of 3/31/25

Source: Morningstar, as of 3/31/25



# Private equity vs. traditional assets performance

# **DIRECT PRIVATE EQUITY FUND INVESTMENTS**



Direct P.E Fund Investments outperformed public equites over the longterm, but have recently underperformed

## "PASSIVE" STRATEGIES



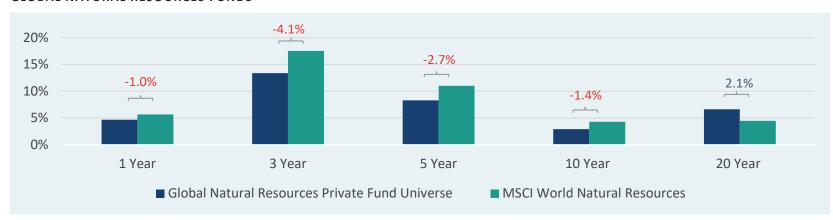
"Passive" strategies have outperformed public markets over the longterm

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



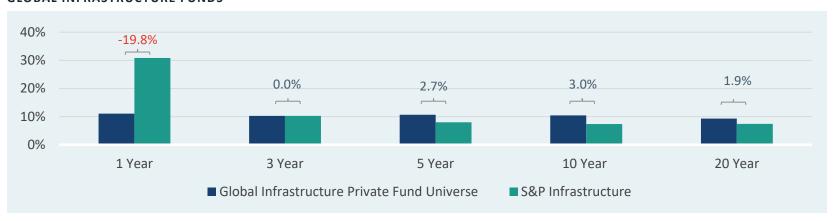
# Private vs. liquid real assets performance

## **GLOBAL NATURAL RESOURCES FUNDS**



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

## GLOBAL INFRASTRUCTURE FUNDS



Infra. funds outperformed the S&P Infra. over the longterm

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



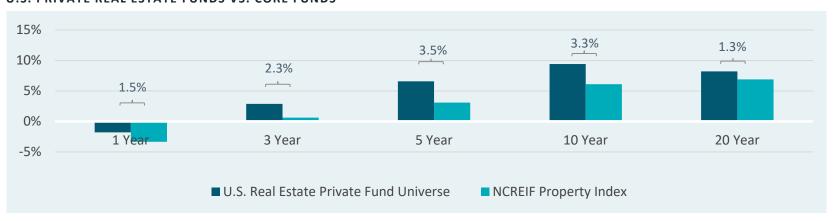
# Private vs. liquid and core real estate performance

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



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

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



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

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



# Detailed index returns

DOMESTIC EQUITY								FIXED INCOME							
	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year		Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index								Broad Index							
S&P 500	(5.6)	(4.3)	(4.3)	8.3	9.1	18.6	12.5	Bloomberg US TIPS	0.6	4.2	4.2	6.2	0.1	2.4	2.5
S&P 500 Equal Weighted	(3.4)	(0.6)	(0.6)	4.1	5.2	17.7	10.0	Bloomberg US Treasury Bills	0.3	1.0	1.0	5.1	4.3	2.6	1.9
DJ Industrial Average	(4.1)	(0.9)	(0.9)	7.4	8.8	16.2	11.4	Bloomberg US Agg Bond	0.0	2.8	2.8	4.9	0.5	(0.4)	1.5
Russell Top 200	(6.1)	(4.8)	(4.8)	9.5	10.0	19.2	13.4	Bloomberg US Universal	(0.0)	2.7	2.7	5.2	1.0	0.3	1.8
Russell 1000	(5.8)	(4.5)	(4.5)	7.8	8.7	18.5	12.2	Duration							
Russell 2000	(6.8)	(9.5)	(9.5)	(4.0)	0.5	13.3	6.3	Bloomberg US Treasury 1-3 Yr	0.5	1.6	1.6	5.4	2.8	1.1	1.5
Russell 3000	(5.8)	(4.7)	(4.7)	7.2	8.2	18.2	11.8	Bloomberg US Treasury Long	(0.9)	4.7	4.7	1.3	(7.2)	(7.9)	(0.6)
Russell Mid Cap	(4.6)	(3.4)	(3.4)	2.6	4.6	16.3	8.8	Bloomberg US Treasury	0.2	2.9	2.9	4.5	(0.0)	(1.7)	1.0
Style Index								Issuer							
Russell 1000 Growth	(8.4)	(10.0)	(10.0)	7.8	10.1	20.1	15.1	Bloomberg US MBS	(0.0)	3.1	3.1	5.4	0.6	(0.7)	1.1
Russell 1000 Value	(2.8)	2.1	2.1	7.2	6.6	16.1	8.8	Bloomberg US Corp. High Yield	(1.0)	1.0	1.0	7.7	5.0	7.3	5.0
Russell 2000 Growth	(7.6)	(11.1)	(11.1)	(4.9)	0.8	10.8	6.1	Bloomberg US Agency Interm	0.4	2.0	2.0	5.4	2.5	0.7	1.5
Russell 2000 Value	(6.0)	(7.7)	(7.7)	(3.1)	0.0	15.3	6.1	Bloomberg US Credit	(0.2)	2.4	2.4	4.9	1.1	1.3	2.3
INTERNATIONAL EQUITY								OTHER							
Broad Index								Index							
MSCI ACWI	(4.0)	(1.3)	(1.3)	7.2	6.9	15.2	8.8	Bloomberg Commodity	3.9	8.9	8.9	12.3	(8.0)	14.5	2.8
MSCI ACWI ex US	(0.2)	5.2	5.2	6.1	4.5	10.9	5.0	Wilshire US REIT	(3.6)	1.0	1.0	10.2	(8.0)	11.2	5.3
MSCI EAFE	(0.4)	6.9	6.9	4.9	6.1	11.8	5.4	S&P UBS Leveraged Loan	(0.3)	0.6	0.6	7.0	7.1	8.9	5.0
MSCI EM	0.6	2.9	2.9	8.1	1.4	7.9	3.7	S&P Global Infrastructure	2.1	4.6	4.6	18.8	6.1	13.8	6.5
MSCI EAFE Small Cap	0.5	3.7	3.7	3.1	0.9	9.9	5.3	Alerian MLP	(0.1)	12.2	12.2	23.9	24.7	39.7	5.0
Style Index								Regional Index							
MSCI EAFE Growth	(3.2)	2.1	2.1	(2.6)	2.4	8.5	5.5	JPM EMBI Global Div	(8.0)	2.2	2.2	6.8	3.4	3.5	3.2
MSCI EAFE Value	2.3	11.6	11.6	12.8	9.7	14.8	5.1	JPM GBI-EM Global Div	1.5	4.3	4.3	4.0	2.7	2.3	1.3
Regional Index								Hedge Funds							
MSCI UK	0.7	9.7	9.7	14.4	7.9	13.8	4.9	HFRI Composite	(1.1)	0.8	0.8	5.1	4.7	9.6	5.0
MSCI Japan	0.1	0.3	0.3	(2.1)	5.3	8.8	5.3	HFRI FOF Composite	(1.0)	0.7	0.7	6.1	4.5	7.5	3.7
MSCI Euro	0.1	11.9	11.9	5.4	10.1	14.7	5.9	Currency (Spot)							
MSCI EM Asia	(0.1)	1.3	1.3	9.8	1.9	7.5	4.4	Euro	3.9	4.3	4.3	1.2	(1.0)	(0.3)	0.1
MSCI EM Latin American	4.8	12.7	12.7	(13.6)	(2.0)	11.8	2.6	Pound Sterling	2.5	3.1	3.1	2.2	(0.7)	0.8	(1.4)
								Yen	0.8	5.1	5.1	0.0	(6.7)	(6.3)	(2.2)

Source: Morningstar, HFRI, as of 3/31/25



# **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. (<a href="http://www.nfib-sbet.org/about/">http://www.nfib-sbet.org/about/</a>)

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

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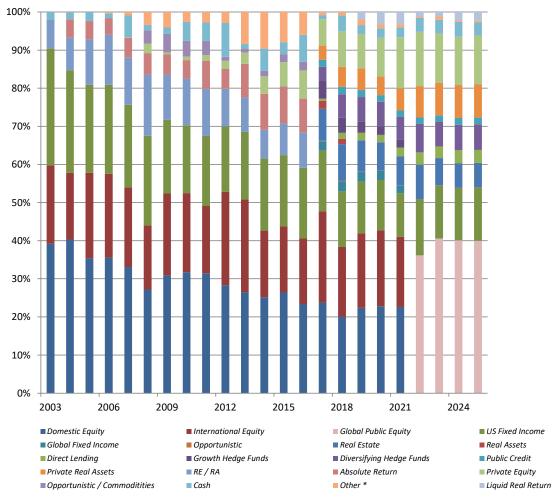


## **SCERS**

# Quarter ending March 31st, 2025

- The Total Fund returned 0.9% in the first quarter of 2025 and ranked in the second quartile among other public funds with assets over \$1 billion. The Total Fund outperformed the Policy Index over the quarter by 70 bps. Over the short term, the one-year return of +6.3% ranks in the top quartile within the large public plan peer group. Similarly, the total fund seven-year return of +7.7% and ten-year return of +7.6% places the fund's performance amongst the top quartile of the same peer group.
- First quarter results (net) were enhanced by the following factors:
  - 1. International equity (+5.3%) is the portfolio's top performing class, with International Emerging (+5.6%) and Large Cap Developed (+5.4%) being two of the top-performing sub-asset classes.
  - 2. Fixed Income outperformed its index and the portfolio, up +2.9% outperforming its Benchmark by 30 bps.
- First quarter results (net) were hindered by the following factors:
  - 1. Real Estate (-0.5%), which detracted from the portfolio's overall performance, with Non-Core Value Add (-2.9%) and Non-Core Opportunistic (-2.0%) being two of the bottom performing sub-asset classes.
  - 2. Private Credit up +1.0% over the quarter, underperforming its Benchmark by 180 bps.

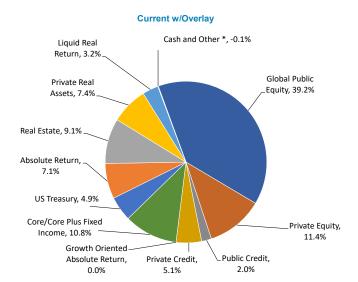
	2003	2004	2005	2006	2007	2008	2009		
US Equity	39.2	40.4	35.4	35.5	33.1	27.2	30.9		
International Equity	20.6	17.5	22.3	22.0	20.9	16.8	21.5		
US Fixed Income	30.6	26.9	23.1	23.3	21.7	23.5	19.3		
Real Estate / Real Assets	7.5	8.5	11.9	13.1	12.4	16.1	11.9		
Absolute Return	-	4.9	4.8	4.4	5.1	5.6	5.3		
Private 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		
Culci	_		_						
	2010	2011	2012	2013	2014	2015	2016		
US Equity	31.7	31.4	28.4	26.5	25.2	26.4	23.4		
International Equity	20.7	17.6	24.5	24.3	17.5	17.3	17.2		
US Fixed Income	17.8	18.4	17.1	17.7	18.9	18.7	18.5		
Real Estate / Real Assets	12.2	12.4	9.9	9.0	7.6	8.3	9.3		
Absolute Return	4.9	7.3	5.2	8.8	9.4	9.7	8.8		
Private Equity	0.9	1.6	2.2	3.0	4.6	6.3	7.4		
Opportunistic / Commodities	4.1	3.7	1.1	1.0	1.4	2.1	2.2		
Cash	5.0	4.9	8.8	1.2	5.9	3.2	7.1		
Other *	2.6	2.7	2.9	8.4	9.6	7.9	6.0		
	2017	2018	2019	2020	2021	2022	2023	2024	2025
Domestic Equity	23.8	20.0	22.4	22.8	22.6	-	-	-	_
International Equity	23.0	18.3	19.6	19.9	18.4	-	-	-	- 1
Global Public Equity	23.9	-	19.0	19.9	-	36.2	40.6	40.1	40.0
US Fixed Income		14.6			11.4	14.8		13.7	
Global Fixed Income	16.0 2.4	2.6	13.6 2.5	13.2 2.5	2.1	14.0	13.9	13.7	14.0
Public Credit	1.8	1.9	1.8	1.7	1.7	1.7	1.7	1.8	1.8
Real Estate / Real Assets	1.0	1.5	1.0	1.7	1.7	1.7	1.7	1.0	1.0
Real Estate	8.4	9.7	8.3	7.3	7.6	9.0	7.1	6.5	6.5
Real Assets	2.1	1.4	0.5	7.5	7.0	5.0	7.1	-	- 0.5
Private Real Assets	3.7	5.2	5.7	4.9	5.8	8.2	8.5	8.6	8.7
Liquid Real Return	-		2.0	3.3	3.2	1.2	1.2	2.2	2.4
Absolute Return			2.0	5.5	- 5.2	1.2	1.2		2.4
Growth Hedge Funds	4.6	3.9	3.0	2.3	2.0	0.1	0.1	0.0	0.0
Diversifying Hedge Funds	3.8	6.2	6.4	6.4	6.0	7.5	6.3	6.6	6.7
Private Equity	6.9	9.3	9.0	10.1	13.4	14.2	13.0	12.6	12.8
Direct Lending	0.5	1.5	2.0	10.1	2.3	3.2	3.1	3.4	3.3
Opportunistic / Commodities	0.5	1.5	2.0	1.9	2.3	3.Z -	3.1	3.4	
		0.4	0.4	- 0.0	- 0.0	-		-	-
Opportunistic Cash	0.1	0.1	0.1	0.0	0.0		-	-	- 2.4
Other *	1.1 0.8	4.3 0.9	2.4 1.4	2.5 1.0	2.6 0.8	3.7 0.4	3.5 0.9	3.9 0.4	3.4 0.4
Onlei	0.6	0.9	1.4	1.0	0.0	0.4	0.9	0.4	0.4





<sup>\*</sup> Allocations without overlay.

<sup>\*</sup> Other includes SSgA Overlay and closing accounts. Prior to Q2 2017 SSgA Real Assets is also included.



ASSET ALLOCATION	MARKET VALUE W/OVERLAY	W/ OVERLAY	W/O OVERLAY
Global Public Equity	5,455,690,618	39.2%	40.0%
Private Equity	1,573,040,124	11.4%	12.8%
Public Credit	273,731,603	2.0%	1.8%
Private Credit	697,121,294	5.1%	3.3%
Growth Oriented Absolute Return	23,289	0.0%	0.0%
Core/Core Plus Fixed Income	1,821,347,079	10.8%	11.0%
US Treasury	416,461,583	4.9%	3.0%
Absolute Return	967,410,134	7.1%	6.7%
Real Estate	1,242,903,549	9.1%	6.5%
Private Real Assets	979,737,298	7.4%	8.7%
Liquid Real Return	479,553,051	3.2%	2.4%
Cash and Other *	-43,511,373	-0.1%	3.8%
TOTAL	13,863,508,250	100.0%	100.0%

	Target
Liquid Real Cas Return 2.0% Private Real	h and Other * 1.0%
Assets 7.0%	Equity 40.0%
Real Estate 9.0%	
Absolute Return 7.0%	
US Treasury 4.0%	
Core/Core Plus	Private Equity 11.0%
Fixed Income	Public Credit
12.0% Growth Oriented Absolute	2.0%
Return	Private Credit
0.0%	5.0%

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

<sup>\*</sup> Other includes Transition Account and SSgA Overlay.

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Total Fund - Gross	13,863,508,250	100.0	0.9 (32)	4.6 (45)	6.3 (22)	4.2 (53)	10.1 (45)	7.6 (16)	8.3	Jul-86
Total Fund - Net			0.8	4.5	6.1	4.0	9.9	7.4	8.1	Jul-86
Policy Index			0.2 (69)	4.1 (65)	5.6 (55)	4.2 (58)	9.2 (88)	6.8 (49)	8.3	Jul-86
InvMetrics Public DB > \$1B Median			0.5	4.5	5.8	4.3	10.0	6.8	-	
Total Fund ex Overlay - Gross	13,803,833,729	99.6	0.8 (37)	4.6 (47)	6.3 (21)	4.3 (49)	10.2 (45)	7.7 (14)	8.2	Jul-86
Total Fund ex Overlay - Net			0.8	4.4	6.1	4.1	10.0	7.4	8.0	Jul-86
Policy Index			0.2 (69)	4.1 (65)	5.6 (55)	4.2 (58)	9.2 (88)	6.8 (49)	8.3	Jul-86
Growth Asset Category - Gross	8,042,120,182	58.0	0.3	5.0	7.4	5.8	14.4		10.8	Apr-17
Growth Asset Category - Net			0.3	4.8	7.2	5.5	14.2		10.5	Apr-17
Growth Custom			0.0	4.7	7.0	6.0	13.6	-	9.8	
Global Public Equity - Gross	5,546,664,826	40.0	-0.2 (52)	4.5 (55)	7.1 (32)	7.0 (46)	15.0 (45)	9.3 (28)	9.4	Jul-11
Global Public Equity - Net			-0.3	4.2	6.7	6.7	14.6	8.9	9.0	Jul-11
MSCI AC World IMI Index (Net)			-1.6	3.8	6.3	6.3	15.0	8.6	8.5	
Domestic Equity - Gross	2,827,756,262	20.4	-4.0 (23)	4.6 (11)	8.7 (2)	9.4 (4)	19.0 (9)	12.1 (13)	10.6	Jul-86
Domestic Equity - Net			-4.1	4.3	8.4	9.1	18.7	11.8	10.4	Jul-86
Russell 3000 Index			-4.7 (57)	3.9 (31)	7.2 (18)	8.2 (29)	18.2 (34)	11.8 (23)	10.5	Jul-86
InvMetrics All DB US Equity Median			-4.7	3.7	6.1	7.7	17.9	11.3	-	
Large Cap - Gross	2,566,492,204	18.5	-3.4	5.4	9.9	10.3	19.7	12.7	8.0	Apr-98
Large Cap - Net			-3.5	5.1	9.5	10.1	19.4	12.4	7.8	Apr-98
Russell 1000 Index			-4.5	4.1	7.8	8.7	18.5	12.2	8.3	
Large Cap Passive - Gross	1,334,137,649	9.6	-4.5	4.1	7.8	8.7	18.4	12.2	12.1	Oct-08
Large Cap Passive - Net			-4.5	4.1	7.8	8.6	18.4	12.1	12.1	Oct-08
Russell 1000 Index			-4.5	4.1	7.8	8.7	18.5	12.2	12.1	
AB - Gross	1,334,137,649	9.6	-4.5 (62)	4.1 (35)	7.8 (58)	8.7 (60)	18.4 (60)	12.2 (63)	10.6	May-89
AB - Net			-4.5	4.1	7.8	8.6	18.4	12.1	10.6	May-89
Russell 1000 Index			-4.5 (64)	4.1 (33)	7.8 (53)	8.7 (63)	18.5 (59)	12.2 (62)	10.7	May-89
eV US Passive Large Cap Equity Median			-4.3	3.8	7.8	8.9	18.5	12.4	-	•
Large Cap Active - Gross	1,232,354,555	8.9	-2.2	6.8	12.2	12.3	21.1	12.9	12.5	Oct-08
Large Cap Active - Net			-2.4	6.3	11.5	11.7	20.5	12.3	11.9	Oct-08
Russell 1000 Index			-4.5	4.1	7.8	8.7	18.5	12.2	12.1	
AQR US Enhanced Equity - Gross	409,799,122	3.0	-3.5 (16)	7.0 (7)	11.0 (2)	11.1 (6)	20.8 (4)	-	13.2	Aug-18
AQR US Enhanced Equity - Net			-3.5	6.8	10.8	10.8	20.5	-	13.0	Aug-18
Russell 1000 Index			-4.5 (43)	4.1 (31)	7.8 (41)	8.7 (59)	18.5 (53)	-	12.5	Aug-18
eV US Enh Equity Median			-4.6	3.5	7.6	8.8	18.6	12.2	-	J



Total Fund and asset class composites are ranked against Investment Metrics universes. Managers are ranked agains 100 is a bottom rating.

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

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

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
JP Morgan 130/30 - Gross	192,201,235	1.4	-5.4 (76)	1.3 (86)	7.9 (33)	12.3 (29)	21.7 (41)	13.9 (30)	13.5	Aug-08
JP Morgan 130/30 - Net			-5.6	0.8	7.3	11.7	21.0	13.2	12.7	Aug-08
Russell 1000 Index			-4.5 (61)	4.1 (50)	7.8 (35)	8.7 (68)	18.5 (74)	12.2 (66)	11.4	Aug-08
eV Extended US Equity Median			-3.9	4.1	6.7	11.1	21.2	13.1	-	
DE Shaw Broad Mkt Core Alpha Ext - Gross	212,491,355	1.5	-2.3 (27)	11.1 (1)	16.9 (1)	11.2 (43)	20.0 (65)	-	14.8	Feb-19
DE Shaw Broad Mkt Core Alpha Ext - Net			-2.8	9.9	15.5	10.5	19.4	-	14.2	Feb-19
Russell 1000 Index			-4.5 (61)	4.1 (50)	7.8 (35)	8.7 (68)	18.5 (74)	-	14.1	Feb-19
eV Extended US Equity Median			-3.9	4.1	6.7	11.1	21.2	13.1	-	
Eagle Capital - Gross	417,842,578	3.0	0.8 (9)	7.4 (11)	13.3 (3)	14.0 (2)	21.7 (3)	13.7 (6)	14.9	Mar-12
Eagle Capital - Net			0.6	6.8	12.4	13.2	20.8	12.8	14.0	Mar-12
Russell 1000 Index			-4.5 (60)	4.1 (39)	7.8 (31)	8.7 (51)	18.5 (41)	12.2 (36)	13.3	Mar-12
eV US Large Cap Core Equity Median			-4.0	3.4	6.5	8.7	17.8	11.9	-	
Small Cap - Gross	261,264,058	1.9	-10.0	-2.4	-1.6	0.3	12.7	8.0	11.1	Jan-91
Small Cap - Net			-10.1	-2.8	-2.1	-0.3	12.1	7.3	10.3	Jan-91
Russell 2000 Index			-9.5	-0.8	-4.0	0.5	13.3	6.3	9.8	
Weatherbie - Gross	122,600,982	0.9	-14.1 (87)	-4.8 (75)	-4.6 (51)	-5.7 (95)	8.2 (92)	10.1 (28)	11.2	Jan-03
Weatherbie - Net			-14.1	-4.9	-4.8	-6.1	7.7	9.5	10.4	Jan-03
Russell 2000 Growth Index			-11.1 (57)	-2.0 (46)	-4.9 (52)	0.8 (49)	10.8 (77)	6.1 (94)	9.5	Jan-03
eV US Small Cap Growth Equity Median			-10.7	-2.4	-4.6	0.5	13.1	8.8	-	
Snyder Capital Management - Gross	138,663,076	1.0	-6.0 (35)	-0.4 (58)	1.1 (25)	5.9 (22)	-	-	7.0	Feb-21
Snyder Capital Management - Net			-6.2	-0.9	0.3	5.0	-	-	6.2	Feb-21
Russell 2000 Value Index - Net			-7.7 (57)	0.5 (52)	-3.1 (62)	0.0 (89)	-	-	4.3	Feb-21
eV US Small Cap Value Equity Median			-7.2	0.8	-1.8	3.4	17.9	7.7	-	

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
International Equity - Gross	2,307,470,041	16.6	5.4 (56)	4.4 (68)	4.9 (71)	4.4 (73)	10.6 (80)	6.0 (33)	6.4	Jan-88
International Equity - Net			5.3 (59)	4.0 (73)	4.4 (78)	3.9 (81)	10.0 (88)	5.4 (57)	6.0	Jan-88
MSCI AC World ex USA (Net)			5.2 (60)	5.1 (55)	6.1 (48)	4.5 (71)	10.9 (74)	5.0 (76)	-	Jan-88
InvMetrics All DB Global ex-US Equity Median			5.5	5.3	6.0	5.0	11.6	5.6	-	
International - Developed - Gross	1,622,337,406	11.7	5.3 (49)	4.0 (81)	3.1 (93)	5.3 (52)	11.4 (59)	6.7 (41)	5.1	Apr-98
International - Developed - Net			5.2 (49)	3.7 (87)	2.6 (93)	4.8 (59)	10.7 (65)	6.1 (56)	4.6	Apr-98
MSCI World ex U.S. (Net)			6.2 (32)	5.9 (31)	5.3 (66)	5.7 (41)	12.2 (46)	5.5 (69)	4.8	Apr-98
InvMetrics All DB Developed Market ex-US Equity Median			5.1	4.8	5.6	5.4	12.1	6.4	-	
Large Cap - Gross	1,384,220,340	10.0	5.5 (71)	3.2 (80)	2.0 (84)	5.4 (69)	11.4 (74)	6.7 (41)	5.5	Jan-05
Large Cap - Net			5.4 (72)	2.9 (82)	1.6 (86)	4.9 (76)	10.8 (80)	6.1 (62)	5.0	Jan-05
MSCI World ex U.S. (Net)			6.2 (63)	5.9 (56)	5.3 (57)	5.7 (62)	12.2 (60)	5.5 (83)	5.2	Jan-05
eV EAFE Large Cap Equity Median			7.3	6.7	6.5	6.5	12.7	6.4	-	
Lazard - Gross	331,904,076	2.4	4.0 (64)	0.8 (82)	-2.4 (91)	4.0 (67)	10.4 (74)	5.3 (83)	7.3	Jul-12
Lazard - Net			3.8	0.4	-2.9	3.5	10.0	4.9	7.0	Jul-12
MSCI World ex U.S. (Net)			6.2 (38)	5.9 (45)	5.3 (58)	5.7 (43)	12.2 (53)	5.5 (78)	6.9	Jul-12
eV All ACWI ex-US Equity Median			5.3	5.4	6.2	5.1	12.4	6.4	-	
Walter Scott & Partners Limited - Gross	461,557,781	3.3	-0.5 (86)	-6.8 (97)	-7.9 (95)	0.7 (84)	6.8 (93)	-	7.2	Apr-17
Walter Scott & Partners Limited - Net			-0.5	-7.0	-8.2	0.1	6.0	-	6.4	Apr-17
MSCI World ex U.S. Growth (Net)			2.1 (66)	-0.9 (75)	-1.8 (80)	2.3 (69)	8.9 (81)	-	6.5	Apr-17
eV EAFE Large Cap Growth Median			3.7	3.2	2.7	4.2	10.5	6.9	-	
LSV - Gross	590,758,483	4.3	11.6 (17)	14.4 (10)	14.5 (17)	10.8 (21)	17.1 (28)	7.6 (10)	6.0	Jan-05
LSV - Net			11.5	14.0	14.1	10.3	16.7	7.2	5.5	Jan-05
MSCI World ex U.S. Value (Net)			10.3 (36)	13.1 (20)	12.9 (37)	9.0 (50)	15.1 (41)	5.3 (80)	4.8	Jan-05
eV EAFE Large Cap Value Median			9.7	11.2	11.2	8.8	14.6	6.5	-	

		Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Small Cap - Gross		238,117,066	1.7	4.1 (58)	9.3 (27)	9.9 (22)	3.3 (50)	10.5 (63)	5.9 (65)	7.8	Oct-08
Small Cap - Net				4.0	8.6	9.1	2.7	9.7	5.1	6.9	Oct-08
MSCI World ex U.S. Small Cap	o Index (Net)			3.4 (69)	5.2 (52)	3.6 (55)	0.8 (64)	10.7 (61)	5.4 (75)	6.8	Oct-08
eV EAFE Small Cap Equity N	ledian e e e e e e e e e e e e e e e e e e e			4.5	5.5	4.7	3.2	12.2	6.8	-	
William Blair Dev Small Cap -	Gross	107,425,932	0.8	0.8 (65)	4.7 (40)	4.0 (48)	-0.6 (73)	8.5 (84)	5.2 (87)	7.5	Oct-08
William Blair Dev Small Cap -	Net			0.6	4.0	3.1	-1.5	7.6	4.3	6.5	Oct-08
MSCI World ex U.S. Small Ca	ap Index (Net)			3.4 (36)	5.2 (36)	3.6 (50)	0.8 (66)	10.7 (63)	5.4 (83)	6.8	Oct-08
eV ACWI ex-US Small Cap	Equity Median			2.1	3.4	3.6	3.0	12.7	7.1	-	
Acadian Asset Management -	Gross	130,691,135	0.9	7.0 (13)	13.3 (5)	15.3 (6)	-	-	-	15.4	Apr-23
Acadian Asset Management -	Net			6.9 (14)	12.7 (6)	14.6 (7)	-	-	-	14.9	Apr-23
MSCI World ex U.S. Small Va	alue (Net)			5.8 (21)	7.8 (21)	5.9 (40)	-	-	-	9.7	Apr-23
eV ACWI ex-US Small Cap	Equity Median			2.1	3.4	3.6	3.0	12.7	7.1	-	
International - Emerging - Gros	s	685,132,635	4.9	5.7 (3)	5.2 (19)	9.4 (28)	2.3 (60)	8.5 (76)	3.9 (36)	5.7	Feb-00
International - Emerging - Net				5.6	4.8	9.0	1.9	8.2	3.6	5.3	Feb-00
MSCI Emerging Markets (Net)				2.9	2.9	8.1	1.4	7.9	3.7	5.7	
Arga Emg - Gross		227,744,669	1.6	5.9 (9)	9.0 (6)	13.2 (8)	-	-	-	9.8	Feb-23
Arga Emg - Net				5.8	8.4	12.4	-	-	-	9.0	Feb-23
MSCI Emerging Markets (Net)				2.9 (45)	2.9 (46)	8.1 (39)	-	-	-	5.6	Feb-23
eV Emg Mkts Equity Mediar	1			2.6	2.4	6.9	2.7	10.0	5.0	-	
Baillie Gifford Emg All Cap - Gro	oss	236,581,570	1.7	4.7 (17)	0.5 (71)	7.3 (46)	2.5 (52)	8.5 (69)	-	7.6	Apr-16
Baillie Gifford Emg All Cap - Ne	t			4.7	0.5	7.3	2.5	8.5	-	7.6	Apr-16
MSCI Emerging Markets (Net)				2.9 (45)	2.9 (46)	8.1 (39)	1.4 (67)	7.9 (76)	-	5.6	Apr-16
eV Emg Mkts Equity Median				2.6	2.4	6.9	2.7	10.0	5.0	-	
Oaktree Emg - Gross		214,457,355	1.5	6.8 (4)	6.7 (12)	6.8 (53)	-	-	-	1.4	Feb-23
Oaktree Emg - Net				6.6	6.3	6.4	-	-	-	0.8	Feb-23
MSCI Emerging Markets (Net)				2.9 (45)	2.9 (46)	8.1 (39)	-	-	-	5.6	Feb-23
eV Emg Mkts Equity Median				2.6	2.4	6.9	2.7	10.0	5.0	-	

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Global/Unconstrained Equity - Gross	411,438,524	3.0	-2.7 (97)	2.5 (90)	5.5 (75)	4.9 (93)			4.9	Apr-22
Global/Unconstrained Equity - Net			-2.7	2.5	5.5	4.9			4.9	Apr-22
MSCI AC World IMI Index (Net)			-1.6 (94)	3.8 (78)	6.3 (53)	6.3 (73)	-	-	6.3	Apr-22
InvMetrics All DB Global Equity Median			-0.1	4.6	6.6	6.9	14.8	8.5	-	
Artisan Partners Global Opp - Gross	149,839,874	1.1	-4.6 (84)	-2.1 (81)	-0.7 (81)	-	-	-	10.1	Sep-22
Artisan Partners Global Opp - Net			-4.6	-2.1	-0.7	-	-	-	10.1	Sep-22
MSCI AC World IMI Index (Net)			-1.6 (57)	3.8 (47)	6.3 (40)	-	-	-	13.3	Sep-22
eV Global All Cap Equity Median			-1.2	3.4	5.0	6.4	15.1	9.0	-	
Nikko Asset Management - Gross	160,200,000	1.2	-1.7 (58)	6.2 (31)	9.5 (21)	-	-	-	14.1	Sep-22
Nikko Asset Management - Net			-1.7	6.2	9.5	-	-	-	14.1	Sep-22
MSCI AC World IMI Index (Net)			-1.6 (57)	3.8 (47)	6.3 (40)	-	-	-	13.3	Sep-22
eV Global All Cap Equity Median			-1.2	3.4	5.0	6.4	15.1	9.0	-	
Third Point Offshore Fund - Gross	4,297,942	0.0	0.0 (40)	0.9 (65)	7.3 (33)	0.6 (89)	10.2 (94)	5.6 (97)	7.9	May-12
Third Point Offshore Fund - Net			0.0	0.9	7.3	0.6	10.2	5.6	7.9	May-12
MSCI AC World IMI Index (Net)			-1.6 (57)	3.8 (47)	6.3 (40)	6.3 (52)	15.0 (51)	8.6 (62)	9.3	May-12
eV Global All Cap Equity Median			-1.2	3.4	5.0	6.4	15.1	9.0	-	
Allspring Global Investments - Gross	97,100,707	0.7	-1.3 (52)	4.4 (43)	8.4 (27)	-	-	-	18.7	Sep-23
Allspring Global Investments - Net			-1.5	4.2	8.2	-	-	-	18.5	Sep-23
MSCI AC World IMI Index (Net)			-1.6 (57)	3.8 (47)	6.3 (40)	-	-	-	14.1	Sep-23
eV Global All Cap Equity Median			-1.2	3.4	5.0	6.4	15.1	9.0	-	
Private Equity - Gross***	1,778,238,589	12.8	1.8 (18)	6.0 (16)	8.2 (17)	2.0 (62)	14.7 (35)	15.1 (7)	7.1	Mar-08
Private Equity - Net***			1.8	6.0	8.2	2.0	14.7	15.1	7.3	Mar-08
Cambridge Associates All PE 1 Qtr Lag			0.0 (49)	3.6 (47)	4.8 (48)	1.2 (70)	12.4 (60)	12.2 (38)	11.1	Mar-08
Russell 3000 +3% 1Q Lag			3.5 (5)	14.5 (1)	26.8 (1)	11.1 (3)	16.9 (13)	15.6 (4)	13.4	Mar-08
InvMetrics All DB Private Equity Median			0.0	3.3	4.6	3.1	13.7	11.2	-	
Abbott VI - Gross	18,382,296	0.1	0.0	-1.2	-2.1	-6.2	7.6	11.6	6.1	Aug-08
Abbott VI - Net			0.0	-1.2	-2.1	-6.2	7.6	11.6	-	Aug-08
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	11.7	
Accel-KKR V - Gross	31,800,048	0.2	7.2	21.1	42.0	19.8	27.0	-	24.6	Feb-17
Accel-KKR V - Net			7.2	21.1	42.0	19.8	27.0	-	24.6	Feb-17
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	13.5	
Accel-KKR VI - Gross	28,146,075	0.2	1.5	13.6	13.6	5.3	-	-	-12.2	Mar-21
Accel-KKR VI - Net			1.5	13.6	13.6	5.3	-	-	-12.2	Mar-21
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	12.9	



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

\*\*\* Returns are one-quarter lag.

+ Returns for private markets are shown on a time-weighted basis and may differ substantially from dollar weighted-returns. \* Account converted to Global/Unconstrained Equity from Growth Oriented Absolute Return in April 2022. Reflects linked historical returns up to March 2022.

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Accel-KKR VII - Gross	489,145	0.0	-	-	-	-	-	-	0.0	Mar-2
Accel-KKR VII - Net			-	-	-	-	-	-	0.0	Mar-2
Cambridge Associates All PE 1 Qtr Lag			-	-	-	-	-	-	0.0	
Accel-KKR Growth Partners II - Gross	8,631,188	0.1	1.3	-0.3	1.9	7.5	28.5	16.9	16.8	Mar-
Accel-KKR Growth Partners II - Net			1.3	-0.3	1.9	7.5	28.5	16.9	16.8	Mar-
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	12.1	
Accel-KKR Growth Partners III - Gross	37,474,525	0.3	3.9	6.8	8.6	4.1	12.6	-	5.2	Aug-
Accel-KKR Growth Partners III - Net			3.9	6.8	8.6	4.1	12.6	-	5.2	Aug-
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.6	
Accel-KKR Growth Partners IV - Gross	15,104,996	0.1	0.0	3.4	2.9	-	-	-	-11.0	Jul-
Accel-KKR Growth Partners IV - Net			0.0	3.4	2.9	-	-	-	-11.0	Jul
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	1.5	
Alchemy Special Opportunities Fund V - Gross	1,708,336	0.0	3.1	-0.4	-	-	-	-	-0.4	Jul
Alchemy Special Opportunities Fund V - Net			3.1	-0.4	-	-	-	-	-0.4	Ju
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	-	-	-	-	3.6	
talaya Special Opp VI - Gross	658,542	0.0	20.8	-4.3	-13.7	-11.3	4.1	-	6.4	May
stalaya Special Opp VI - Net	•		20.8	-4.3	-13.7	-11.3	4.1	-	6.4	May
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	13.9	,
Canvas Ventures III - Gross	14,013,159	0.1	-6.9	-5.6	-6.4	-4.1	-	-	-3.0	Dec
Canvas Ventures III - Net	• •		-6.9	-5.6	-6.4	-4.1	-	_	-3.0	Dec
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	_	14.7	
Cortec Group Fund VII - Gross	28,926,204	0.2	9.7	4.2	3.9	10.6	21.2	-	19.9	Jan
Cortec Group Fund VII - Net	-,,-		9.7	4.2	3.9	10.6	21.2	-	19.9	Jar
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	_	12.8	
Cortec Group Fund VIII - Gross**	9,680,611	0.1	7.2	17.6	6.3	-	-	-	-8.6	Apı
Cortec Group Fund VIII - Net**	-,,-		7.2	17.6	6.3	_	-	-	-8.6	Apı
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	_	5.2	
CRV Select Fund I - Gross	19,471,905	0.1	0.3	4.4	3.9	-3.5	_	_	1.6	Jun
CRV Select Fund I - Net		• • •	0.3	4.4	3.9	-3.5	_	_	1.6	Jur
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	_	_	9.5	001
CRV Select Fund II - Gross	8,514,192	0.1	1.3	7.3	6.7	-3.2	-	_	-3.2	Apı
CRV Select Fund II - Net	0,017,102	0.1	1.3	7.3	6.7	-3.2	_	_	-3.2	Apr
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	_	_	1.2	71/21

See Policy Index and Benchmark History

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



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
CRV XVIII LP - Gross	18,385,244	0.1	0.4	5.0	2.5	-0.7	-	-	1.4	Mar-21
CRV XVIII LP - Net			0.4	5.0	2.5	-0.7	-	-	1.4	Mar-21
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	12.9	
CRV XIX LP - Gross	12,929,678	0.1	6.9	4.9	2.5	-	-	-	-11.2	Jul-22
CRV XIX LP - Net			6.9	4.9	2.5	-	-	-	-11.2	Jul-22
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	1.5	
CVC Capital Partners IX - Gross	4,706,671	0.0	-0.9	-	-	-	-	-	-6.1	Dec-24
CVC Capital Partners IX - Net			-0.9	-	-	-	-	-	-6.1	Dec-24
Cambridge Associates All PE 1 Qtr Lag			0.0	-	-	-	-	-	2.5	
Davidson Kempner LT Dist Opp IV - Gross	18,080,489	0.1	0.5	-5.9	-3.2	14.5	14.0	-	13.6	Apr-18
Davidson Kempner LT Dist Opp IV - Net			0.5	-5.9	-3.2	14.5	14.0	-	13.6	Apr-18
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.2	
Davidson Kempner LT Dist Opp V - Gross	34,142,329	0.2	0.4	10.4	17.9	8.7	-	-	14.5	Jun-20
Davidson Kempner LT Dist Opp V - Net			0.4	10.4	17.9	8.7	-	-	14.5	Jun-20
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	12.9	
Dyal Capital Partners II - Gross	35,824,820	0.3	0.9	1.5	5.2	10.6	19.9	4.4	4.3	Jan-15
Dyal Capital Partners II - Net			0.9	1.5	5.2	10.6	19.9	4.4	4.3	Jan-15
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	12.4	
Dyal Capital Partners III - Gross	31,591,695	0.2	7.1	6.8	14.0	19.2	25.0	-	22.9	Jan-17
Dyal Capital Partners III - Net			7.1	6.8	14.0	19.2	25.0	-	22.9	Jan-17
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	13.1	
Garrison Investment Group - Gross	491,820	0.0	-7.2	-64.7	-64.5	-8.4	-0.5	-1.4	0.4	Jun-12
Garrison Investment Group - Net			-7.2	-64.7	-64.5	-8.4	-0.5	-1.4	0.4	Jun-12
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	14.1	
Golden Capital Co Invest - Gross	65,385,712	0.5	10.4	16.5	20.5	-	-	-	13.2	Nov-22
Golden Capital Co Invest - Net			10.4	16.5	20.5	-	-	-	13.2	Nov-22
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	3.9	
Gridiron Capital Fund IV - Gross	45,778,515	0.3	5.5	4.7	2.6	15.6	-	-	23.3	Jun-20
Gridiron Capital Fund IV - Net	,		5.5	4.7	2.6	15.6	-	-	23.3	Jun-20
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	12.9	
Gridiron Capital Fund V - Gross	23,259,262	0.2	5.2	8.5	8.7	-	-	-	11.5	Feb-23
Gridiron Capital Fund V - Net	-,, <del></del> -		5.2	8.5	8.7	-	-	-	11.5	Feb-23
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	_	5.2	



Sacramento County Employees' Retirement System Period Ending: March 31, 2025

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Harbourvest VIII - Gross	2,515,267	0.0	35.8	98.6	92.1	-5.9	6.5	9.3	8.8	Jan-08
Harbourvest VIII - Net			35.8	98.6	92.1	-5.9	6.5	9.3	-	Jan-08
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	10.8	
H.I.G. Bayside Loan III - Gross	3,429,079	0.0	1.6	-0.1	-1.5	-6.6	-4.2	2.2	1.7	Feb-13
H.I.G. Bayside Loan III - Net			1.6	-0.1	-1.5	-6.6	-4.2	2.2	1.7	Feb-13
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	14.3	
H.I.G. Capital V - Gross	5,560,387	0.0	-2.1	5.8	5.7	2.1	11.7	16.0	11.6	Aug-13
H.I.G. Capital V - Net			-2.1	5.8	5.7	2.1	11.7	16.0	11.6	Aug-13
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	13.5	
H.I.G. Europe Capital II - Gross	7,389,187	0.1	-8.0	-5.9	-7.8	-3.2	7.8	-13.3	-13.8	Feb-14
H.I.G. Europe Capital II - Net			-8.0	-5.9	-7.8	-3.2	7.8	-13.3	-13.8	Feb-14
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	12.9	
JFL Equity Investors VI - Gross	13,688,313	0.1	15.2	-	-	-	-	-	15.2	Nov-24
JFL Equity Investors VI - Net			15.2	-	-	-	-	-	15.2	Nov-24
Cambridge Associates All PE 1 Qtr Lag			0.0	-	-	-	-	-	2.5	
Khosla IV - Gross	10,494,411	0.1	-11.8	-14.6	-12.0	-17.2	10.3	16.3	15.2	Aug-11
Khosla IV - Net			-11.8	-14.6	-12.0	-17.2	10.3	16.3	15.2	Aug-11
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	13.5	•
Khosla V - Gross	25,883,358	0.2	19.3	5.7	0.6	-9.3	19.4	14.9	14.1	Dec-14
Khosla V - Net			19.3	5.7	0.6	-9.3	19.4	14.9	14.1	Dec-14
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	12.2	
Khosla VI - Gross	83,875,986	0.6	3.8	18.9	16.8	20.6	23.1	-	16.1	Sep-18
Khosla VI - Net			3.8	18.9	16.8	20.6	23.1	-	16.1	Sep-18
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.5	
Khosla VII - Gross	18,984,476	0.1	-0.6	-17.9	-7.4	2.5	-	-	1.0	Feb-21
Khosla VII - Net	• •		-0.6	-17.9	-7.4	2.5	-	-	1.0	Feb-21
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	12.7	
Khosla VIII - Gross	16,217,952	0.1	8.3	12.6	18.9	-	-	-	3.7	Jul-23
Khosla VIII - Net	, ,	•	8.3	12.6	18.9	_	-	_	3.7	Jul-23
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	4.8	
Linden Capital III - Gross	18,118,072	0.1	-5.4	-18.6	-10.3	-16.3	7.8	-	13.2	Jul-16
Linden Capital III - Net	.5,5,012	•	-5.4	-18.6	-10.3	-16.3	7.8	_	13.2	Jul-16
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	_	13.3	341 13



Sacramento County Employees' Retirement System Period Ending: March 31, 2025

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Linden Capital Partners IV - Gross	48,326,252	0.3	1.9	32.1	40.2	31.4	26.0	-	21.4	Oct-18
Linden Capital Partners IV - Net			1.9	32.1	40.2	31.4	26.0	-	21.4	Oct-18
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.0	
Linden Capital Partners V - Gross	22,312,707	0.2	0.4	4.0	6.0	-	-	-	7.1	Aug-22
Linden Capital Partners V - Net			0.4	4.0	6.0	-	-	-	7.1	Aug-22
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	1.6	
Marlin Equity IV - Gross	7,054,008	0.1	-7.9	-18.0	-20.4	-13.8	-3.3	2.2	1.2	Dec-13
Marlin Equity IV - Net			-7.9	-18.0	-20.4	-13.8	-3.3	2.2	1.2	Dec-13
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	13.5	
Marlin Equity V - Gross	33,255,513	0.2	2.8	3.7	5.9	9.0	17.7	-	16.5	Mar-18
Marlin Equity V - Net			2.8	3.7	5.9	9.0	17.7	-	16.5	Mar-18
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.8	
Marlin Heritage - Gross	3,074,700	0.0	-8.0	-17.7	-23.5	-26.1	-9.4	10.7	7.9	Aug-14
Marlin Heritage - Net			-8.0	-17.7	-23.5	-26.1	-9.4	10.7	7.9	Aug-14
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	12.6	
Marlin Heritage II - Gross	9,874,889	0.1	-0.2	1.7	-0.7	-2.0	7.8	-	3.9	Nov-17
Marlin Heritage II - Net			-0.2	1.7	-0.7	-2.0	7.8	-	3.9	Nov-17
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.8	
Marlin Heritage III - Gross	10,337,044	0.1	-1.3	2.9	5.6	-	-	-	-28.3	Jan-23
Marlin Heritage III - Net			-1.3	2.9	5.6	-	-	-	-28.3	Jan-23
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	5.0	
Marlin Heritage Europe - Gross	14,489,930	0.1	-6.0	-3.9	-8.6	-3.9	15.9	-	16.6	Sep-17
Marlin Heritage Europe - Net	, ,		-6.0	-3.9	-8.6	-3.9	15.9	-	16.6	Sep-17
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	13.1	
New Enterprise 14 - Gross	34,212,822	0.2	12.9	11.1	9.9	-8.7	9.4	13.8	12.5	Jun-12
New Enterprise 14 - Net	, ,		12.9	11.1	9.9	-8.7	9.4	13.8	12.5	Jun-12
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	14.1	
New Enterprise 15 - Gross	23,325,806	0.2	1.0	-7.2	-10.6	-14.1	-3.8	-	6.0	May-15
New Enterprise 15 - Net	-,,		1.0	-7.2	-10.6	-14.1	-3.8	_	6.0	May-15
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.6	,
New Enterprise 16 - Gross	33,632,885	0.2	-2.8	-5.7	7.6	-3.7	6.0	_	6.0	Jun-17
New Enterprise 16 - Net	33,332,000	V.L	-2.8	-5.7	7.6	-3.7	6.0	_	6.0	Jun-17
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	_	13.2	Juli 17



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
New Enterprise 17 - Gross	22,155,399	0.2	2.0	0.6	1.4	-6.0	8.1	-	7.0	Aug-19
New Enterprise 17 - Net			2.0	0.6	1.4	-6.0	8.1	-	7.0	Aug-19
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.6	
Oaktree Power Opp Fund VI - Gross	31,212,775	0.2	3.3	17.9	24.6	-	-	-	12.3	Jun-22
Oaktree Power Opp Fund VI - Net			3.3	17.9	24.6	-	-	-	12.3	Jun-22
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	1.2	
OrbiMed Private Investments VIII - Gross	11,461,217	0.1	1.3	-0.2	6.8	9.4	-	-	5.2	Jan-21
OrbiMed Private Investments VIII - Net			1.3	-0.2	6.8	9.4	-	-	5.2	Jan-21
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	12.4	
OrbiMed Private Investments IX - Gross	10,498,560	0.1	23.2	32.5	51.6	-	-	-	2.7	Dec-22
OrbiMed Private Investments IX - Net			23.2	32.5	51.6	-	-	-	2.7	Dec-22
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	4.1	
RCP Multi-Fund Feeder - Gross	81,470,287	0.6	0.0	7.0	9.3	11.9	15.9	-	10.8	Dec-18
RCP Multi-Fund Feeder - Net			0.0	7.0	9.3	11.9	15.9	-	10.8	Dec-18
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.3	
Resurgens Tech Partners III - Gross	174,789	0.0	-101.7	-	-	-	-	-	-101.7	Oct-24
Resurgens Tech Partners III - Net			-101.7	-	-	-	-	-	-101.7	Oct-24
Cambridge Associates All PE 1 Qtr Lag			0.0	-	-	-	-	-	2.5	
RRJ Capital Master Fund II - Gross	3,203,530	0.0	-22.4	-3.8	-16.5	-14.8	0.4	3.9	6.5	Jun-13
RRJ Capital Master Fund II - Net			-22.4	-3.8	-16.5	-14.8	0.4	3.9	6.5	Jun-13
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	13.9	
RRJ Capital Master Fund III - Gross	8,523,836	0.1	1.2	4.7	17.3	-16.6	-9.9	-	-8.5	Jan-16
RRJ Capital Master Fund III - Net			1.2	4.7	17.3	-16.6	-9.9	-	-8.5	Jan-16
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	13.6	
Shamrock Capital II - Gross	16,280,811	0.1	15.6	28.3	34.3	18.0	-	-	-56.5	Aug-20
Shamrock Capital II - Net			15.6	28.3	34.3	18.0	-	-	-56.5	Aug-20
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	15.6	
Shamrock Capital III - Gross	8,211,508	0.1	0.2	-4.1	-96.4	-	-	-	-100.0	Jan-23
Shamrock Capital III - Net			0.2	-4.1	-96.4	-	-	-	-100.0	Jan-23
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	5.0	
Shamrock Capital Growth Fund V - Gross	20,125,637	0.1	1.8	4.4	20.5	-0.7	-	-	-15.2	Aug-21
Shamrock Capital Growth Fund V - Net			1.8	4.4	20.5	-0.7	-	-	-15.2	Aug-21
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	7.2	-



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Shamrock Capital Growth Fund VI - Gross	403,892	0.0	0.0	-	-	-	-	-	0.0	Jan-25
Shamrock Capital Growth Fund VI - Net			0.0	-	-	-	-	-	0.0	Jan-25
Cambridge Associates All PE 1 Qtr Lag			0.0	-	-	-	-	-	0.0	
Sixth Street Opp Partners V - Gross	25,188,982	0.2	3.2	10.0	14.6	-	-	-	3.1	Jul-22
Sixth Street Opp Partners V - Net			3.2	10.0	14.6	-	-	-	3.1	Jul-22
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	1.5	
Spectrum Equity VII - Gross	26,563,186	0.2	-0.5	-7.0	-6.2	-15.3	8.8	17.8	14.7	Jan-15
Spectrum Equity VII - Net			-0.5	-7.0	-6.2	-15.3	8.8	17.8	14.7	Jan-15
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	12.4	
Spectrum Equity Fund VIII - Gross	21,530,827	0.2	1.6	18.7	21.8	3.2	31.0	-	-6.2	Jul-18
Spectrum Equity Fund VIII - Net			1.6	18.7	21.8	3.2	31.0	-	-6.2	Jul-18
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.2	
Spectrum Equity Fund IX - Gross	22,119,484	0.2	11.1	17.1	17.0	2.0	-	-	-3.4	Oct-20
Spectrum Equity Fund IX - Net			11.1	17.1	17.0	2.0	-	-	-3.4	Oct-20
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	14.1	
Spectrum Equity Fund X - Gross	5,807,215	0.0	-2.2	-5.3	-7.1	-	-	-	-7.5	Jan-24
Spectrum Equity Fund X - Net			-2.2	-5.3	-7.1	-	-	-	-7.5	Jan-24
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	5.8	
Strategic Value Spl Fund V - Gross	33,360,347	0.2	4.4	16.0	22.4	14.1	-	-	14.0	Sep-21
Strategic Value Spl Fund V - Net			4.4	16.0	22.4	14.1	-	-	14.0	Sep-21
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	7.3	
Strategic Value Spl Fund VI - Gross	2,000,000	0.0	-	-	-	-	-	-	0.0	Mar-25
Strategic Value Spl Fund VI - Net			-	-	-	-	-	-	0.0	Mar-25
Cambridge Associates All PE 1 Qtr Lag			-	-	-	-	-	-	0.0	
Summit EUR Growth Equity II - Gross	48,049,666	0.3	-7.1	11.7	23.1	25.4	40.9	-	60.9	Feb-18
Summit EUR Growth Equity II - Net			-7.1	11.7	23.1	25.4	40.9	-	60.9	Feb-18
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.6	
Summit EUR Growth Equity III - Gross	21,037,553	0.2	-6.3	1.6	11.4	7.4	-	-	0.1	Feb-21
Summit EUR Growth Equity III - Net			-6.3	1.6	11.4	7.4	-	_	0.1	Feb-21
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	12.7	
Summit Ventures III - Gross	4,230,592	0.0	6.0	23.2	23.2	8.7	14.2	16.6	13.1	Jul-12
Summit Ventures III - Net	,		6.0	23.2	23.2	8.7	14.2	16.6	13.1	Jul-12
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	13.9	



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	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Summit Ventures IV - Gross	66,520,606	0.5	1.6	17.7	23.6	5.6	30.5	-	32.2	Jun-16
Summit Ventures IV - Net			1.6	17.7	23.6	5.6	30.5	-	32.2	Jun-16
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	14.1	
Summit Ventures V - Gross	17,772,643	0.1	4.8	8.5	7.2	4.4	-	-	1.4	Jun-21
Summit Ventures V - Net			4.8	8.5	7.2	4.4	-	-	1.4	Jun-21
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	9.5	
Thoma Bravo XI - Gross	24,415,624	0.2	-0.6	2.0	5.3	2.6	13.0	22.3	20.2	Jul-14
Thoma Bravo XI - Net			-0.6	2.0	5.3	2.6	13.0	22.3	20.2	Jul-14
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	12.5	
Thoma Bravo XII - Gross	31,996,481	0.2	0.0	1.8	4.5	10.4	13.2	-	11.4	Jun-16
Thoma Bravo XII - Net			0.0	1.8	4.5	10.4	13.2	-	11.4	Jun-16
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	14.1	
Thoma Bravo XIII - Gross	55,237,616	0.4	1.5	6.5	5.0	6.8	25.1	-	21.5	Mar-19
Thoma Bravo XIII - Net			1.5	6.5	5.0	6.8	25.1	-	21.5	Mar-19
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.2	
Threshold Ventures III - Gross	21,796,804	0.2	-3.1	-2.5	-4.0	-7.0	6.4	-	4.2	Nov-19
Threshold Ventures III - Net			-3.1	-2.5	-4.0	-7.0	6.4	-	4.2	Nov-19
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.5	
Threshold Ventures IV - Gross	13,958,829	0.1	4.6	5.0	1.3	-	-	-	-57.0	Jul-22
Threshold Ventures IV - Net			4.6	5.0	1.3	-	-	-	-57.0	Jul-22
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	1.5	
TPG Opp Partners III - Gross	5,614,729	0.0	2.8	3.7	5.1	-8.0	0.8	5.4	-6.8	Apr-14
TPG Opp Partners III - Net			2.8	3.7	5.1	-8.0	0.8	5.4	-6.8	Apr-14
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	12.5	
Trinity Ventures XI - Gross	444,955	0.0	-96.2	-96.3	-96.4	-70.7	-47.7	-21.5	-20.3	May-13
Trinity Ventures XI - Net	·		-96.2	-96.3	-96.4	-70.7	-47.7	-21.5	-20.3	May-13
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	13.9	,
Trinity Ventures XII - Gross	34,946,983	0.3	6.4	4.8	-3.9	-23.4	3.0	-	10.3	May-16
Trinity Ventures XII - Net	. ,,		6.4	4.8	-3.9	-23.4	3.0	_	10.3	May-16
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	13.9	
TSG7 A LP - Gross	7,666,943	0.1	13.9	11.9	14.0	-5.9	16.9	_	-185.6	Apr-16
TSG7 A LP - Net	. ,550,610	•	13.9	11.9	14.0	-5.9	16.9	_	-185.6	Apr-16
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	_	13.2	, tp: 10



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	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inceptio Date
TSG7 B LP - Gross	4,410,088	0.0	3.0	38.3	40.1	4.1	20.0	-	-0.1	Feb-1
TSG7 B LP - Net			3.0	38.3	40.1	4.1	20.0	-	-0.1	Feb-1
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.8	
TSG8 LP - Gross	36,790,042	0.3	1.1	-3.7	-5.3	-4.9	-6.8	-	-55.2	Feb-1
TSG8 LP - Net			1.1	-3.7	-5.3	-4.9	-6.8	-	-55.2	Feb-
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.1	
TSG9 LP - Gross	10,276,692	0.1	7.2	4.4	0.3	-	-	-	-19.6	Feb-
TSG9 LP - Net			7.2	4.4	0.3	-	-	-	-19.6	Feb-
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	-	-	-	5.2	
TSSP Opportunities Partners IV - Gross	23,417,115	0.2	2.9	5.3	7.0	7.7	11.4	-	10.7	Feb-
TSSP Opportunities Partners IV - Net			2.9	5.3	7.0	7.7	11.4	-	10.7	Feb-
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.1	
Waterland V - Gross	683,409	0.0	27.8	27.7	-3.1	8.1	17.2	29.7	20.7	Sep-
Waterland V - Net			27.8	27.7	-3.1	8.1	17.2	29.7	20.7	Sep-
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	13.7	
Waterland VI - Gross	10,680,148	0.1	-3.6	15.8	18.0	7.5	23.3	-	9.0	Aug-
Waterland VI - Net			-3.6	15.8	18.0	7.5	23.3	-	9.0	Aug-
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	-	12.3	
Wayzata Opportunities III - Gross	522,894	0.0	-24.9	-17.3	-13.6	10.4	6.2	1.7	-1.1	Mar-
Wayzata Opportunities III - Net			-24.9	-17.3	-13.6	10.4	6.2	1.7	-1.1	Mar-
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	12.4	12.2	14.3	
Wynnchurch Capital Partners V - Gross	22,380,229	0.2	0.6	4.4	6.0	10.8	-	-	-1.0	May-
Wynnchurch Capital Partners V - Net			0.6	4.4	6.0	10.8	-	-	-1.0	May-
Cambridge Associates All PE 1 Qtr Lag			0.0	3.6	4.8	1.2	-	-	12.6	,
Wynnchurch Capital Partners VI - Gross	5,263,141	0.0	8.3	-	-	-	-	-	8.3	Aug-
Wynnchurch Capital Partners VI - Net			8.3	-	-	-	-	-	8.3	Aug-
Cambridge Associates All PE 1 Qtr Lag			0.0	-	-	-	-	-	3.6	J
Public Credit - Gross	248,632,145	1.8	0.9	7.6	8.1	4.1	10.0	5.1	4.9	Dec-
Public Credit - Net			0.9	7.6	8.1	4.1	10.0	5.1	4.9	Dec-
Brigade Custom			0.8	5.8	7.3	6.0	8.1	5.0	4.8	
Brigade Capital - Gross	248,632,145	1.8	0.9 (49)	7.6 (4)	8.1 (11)	4.1 (76)	10.0 (5)	5.1 (20)	4.9	Dec-
Brigade Capital - Net	,,		0.9 (49)	7.6 (4)	8.1 (11)	4.1 (76)	10.0 (5)	5.1 (20)	4.9	Dec-
Brigade Custom			0.8 (61)	5.8 (37)	7.3 (25)	6.0 (8)	8.1 (18)	5.0 (25)	4.8	Dec-
eV US High Yield Fixed Inc Median			0.9	5.5	6.8	4.6	6.9	4.6		230



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Private Credit - Gross	463,566,251	3.3	1.0	4.9	8.4	7.3	8.8	8.1	7.8	Nov-11
Private Credit - Net			1.0	4.9	8.4	7.3	8.8	8.1	7.8	Nov-11
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	7.8	7.2	7.1	
Ares Capital Europe Fund V - Gross	31,276,864	0.2	1.7	8.2	11.0	10.9	-	-	12.2	Aug-21
Ares Capital Europe Fund V - Net			1.7	8.2	11.0	10.9	-	-	12.2	Aug-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	-	-	8.5	
Ares Capital Europe Fund VI - Gross	15,708,264	0.1	7.1	-	-	-	-	-	7.1	Dec-24
Ares Capital Europe Fund VI - Net			7.1	-	-	-	-	-	7.1	Dec-24
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	-	-	-	-	-	3.7	
Ares Senior Direct Lending Fund III - Gross	10,870,904	0.1	3.9	-	-	-	-	-	9.9	Aug-24
Ares Senior Direct Lending Fund III - Net			3.9	-	-	-	-	-	9.9	Aug-24
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	-	-	-	-	-	7.1	
Athyrium Opp II - Gross	3,167,752	0.0	46.0	41.6	77.8	33.6	22.4	-	15.1	Jul-15
Athyrium Opp II - Net			46.0	41.6	77.8	33.6	22.4	-	15.1	Jul-15
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	7.8	-	7.1	
Athyrium Opp III - Gross	8,345,449	0.1	2.0	-0.8	-0.7	-4.5	0.1	-	-0.2	Jun-17
Athyrium Opp III - Net			2.0	-0.8	-0.7	-4.5	0.1	-	-0.2	Jun-17
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	7.8	-	7.3	
Benefit St Pr Sr Secure Opp - Gross	9,324,338	0.1	1.5	5.1	6.6	6.4	6.5	-	6.1	Feb-18
Benefit St Pr Sr Secure Opp - Net			1.5	5.1	6.6	6.4	6.5	-	6.1	Feb-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	7.8	-	7.5	
Benefit St Pr Sr Secure Opp II - Gross	45,601,721	0.3	0.9	6.1	8.4	9.7	11.0	-	9.0	Jan-20
Benefit St Pr Sr Secure Opp II - Net			0.6	5.8	8.1	9.6	11.0	-	8.9	Jan-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	7.8	-	7.9	
Brookfield Infra Debt Fund III - Gross	27,033,927	0.2	1.8	5.3	6.9	-	-	-	6.3	Apr-23
Brookfield Infra Debt Fund III - Net			1.8	5.3	6.9	-	-	-	6.3	Apr-23
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	-	-	-	13.2	
IFM US Infrastructure DB FD LP - Gross	64,194,251	0.5	-0.1	3.9	2.0	5.3	-	-	6.3	Apr-21
IFM US Infrastructure DB FD LP - Net			-0.1	3.9	2.0	5.3	-	-	6.3	Apr-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	-	-	8.6	
MCP Private Capital IV - Gross	29,007,298	0.2	-6.3	8.1	7.0	12.5	-	-	7.1	May-20
MCP Private Capital IV - Net			-6.3	8.1	7.0	12.5	-	-	7.1	May-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	-	-	7.8	



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	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
OrbiMed Royalty & Credit Opp III - Gross	11,380,201	0.1	1.1	2.4	4.9	6.4	17.0	-	13.0	Oct-19
OrbiMed Royalty & Credit Opp III - Net			1.1	2.4	4.9	6.4	17.0	-	13.0	Oct-19
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	7.8	-	7.8	
OrbiMed Royalty & Credit Opp IV - Gross	18,840,305	0.1	5.6	10.6	14.6	-	-	-	12.2	Oct-22
OrbiMed Royalty & Credit Opp IV - Net			5.6	10.6	14.6	-	-	-	12.2	Oct-22
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	-	-	-	12.5	
Shamrock Capital Debt Fund I - Gross	6,164,931	0.0	2.5	8.3	11.0	7.7	-	-	-26.4	Aug-21
Shamrock Capital Debt Fund I - Net			2.5	8.3	11.0	7.7	-	-	-26.4	Aug-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	-	-	8.5	
Silver Point Specialty Credit Fund II - Gross	32,355,672	0.2	4.2	10.6	13.6	9.9	-	-	13.1	Aug-20
Silver Point Specialty Credit Fund II - Net			4.2	10.6	13.6	9.9	-	-	13.1	Aug-20
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	-	-	10.6	
Silver Point Specialty Credit Fund III - Gross	15,861,955	0.1	1.5	6.5	11.2	-	-	-	6.5	Apr-23
Silver Point Specialty Credit Fund III - Net			1.5	6.5	11.2	-	-	-	6.5	Apr-23
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	-	-	-	13.2	
Sky Leasing Fund VI - Gross	15,835,113	0.1	2.8	-	-	-	-	-	9.1	Sep-24
Sky Leasing Fund VI - Net			2.8	-	-	-	-	-	9.1	Sep-24
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	-	-	-	-	-	5.9	
Summit Credit II - Gross	6,858,890	0.0	8.0	-5.1	-6.9	-16.1	-7.6	-0.3	-0.4	Dec-14
Summit Credit II - Net			8.0	-5.1	-6.9	-16.1	-7.6	-0.3	-0.4	Dec-14
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	7.8	7.2	7.0	
Summit Credit III - Gross	4,380,214	0.0	-3.1	-9.2	-10.7	-2.4	5.8	-	7.2	Nov-18
Summit Credit III - Net			-3.1	-9.2	-10.7	-2.4	5.8	-	7.2	Nov-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	7.8	-	7.5	
Summit Credit IV - Gross	6,840,272	0.0	6.8	11.0	14.1	13.8	-	-	11.9	Dec-21
Summit Credit IV - Net			6.8	11.0	14.1	13.8	-	-	11.9	Dec-21
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	-	-	8.7	
TCP Direct Lending VIII - Gross	100,517,929	0.7	-2.2	-1.5	-0.4	3.9	6.9	-	6.4	Mar-18
TCP Direct Lending VIII - Net			-2.2	-1.5	-0.4	3.9	6.9	-	6.4	Mar-18
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag			2.8	8.0	11.2	9.0	7.8	-	7.5	



	Market Value	% of Portfolio	3 Мо	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Growth Oriented Absolute Return - Gross	5,018,371	0.0	1.0	1.0	2.1	0.3	6.5	3.2	4.3	Sep-04
Growth Oriented Absolute Return - Net			1.0	1.0	2.1	0.3	6.5	3.2	4.3	Sep-04
HFRI FoF Composite Index + 1%			-0.2	4.4	5.4	5.0	8.2	5.4	6.0	
Grosvenor SCARF Growth - Gross	5,018,371	0.0	1.0 (63)	1.0 (95)	2.1 (88)	0.2 (89)	4.3 (93)	2.3 (93)	4.0	Dec-11
Grosvenor SCARF Growth - Net			1.0	1.0	2.1	0.2	4.3	2.3	4.0	Dec-11
HFRI FoF Composite Index + 1%			-0.2 (82)	4.4 (72)	5.4 (65)	5.0 (68)	8.2 (45)	5.4 (17)	5.3	Dec-11
eV Alt Fund of Funds - Multi-Strategy Median			2.0	4.8	6.6	5.6	7.6	4.3	-	
Diversifying Asset Category - Gross	3,132,977,002	22.6	2.1	4.7	5.1	2.0	2.5		2.7	Apr-17
Diversifying Asset Category - Net			2.1	4.6	5.0	1.9	2.4		2.6	Apr-17
Diversifying Custom			2.1	4.4	4.8	1.7	1.5	-	2.3	
Fixed Income - Gross	1,938,018,782	14.0	2.9	5.3	5.5	0.9	0.3	2.1	2.5	Jul-11
Fixed Income - Net	1,938,018,782	14.0	2.9	5.2	5.3	0.7	0.1	1.9	2.4	Jul-11
Fixed Income Custom			2.6	4.8	5.1	1.0	0.1	1.7	-	
Core/Core Plus Fixed Income - Gross	1,522,993,173	11.0	2.9	5.5	5.7	1.1	1.1	2.3	2.7	Jul-11
Core/Core Plus Fixed Income - Net			2.8	5.4	5.5	0.9	0.9	2.1	2.5	Jul-11
Blmbg. U.S. Aggregate Index			2.8	4.8	4.9	0.5	-0.4	1.5	2.1	
Prudential - Gross	381,690,711	2.8	2.8 (37)	5.5 (5)	6.0 (5)	1.6 (12)	1.8 (6)	2.7 (5)	3.0	Aug-14
Prudential - Net			2.8	5.4	5.9	1.5	1.6	2.5	2.8	Aug-14
Blmbg. U.S. Aggregate Index			2.8 (54)	4.8 (82)	4.9 (92)	0.5 (91)	-0.4 (97)	1.5 (99)	1.7	Aug-14
eV US Core Fixed Inc Median			2.8	5.0	5.3	1.0	0.5	2.0	-	
TCW MetWest Fixed - Gross	377,006,215	2.7	3.2 (6)	5.3 (18)	5.6 (27)	0.9 (61)	0.5 (51)	2.1 (33)	4.8	Jan-02
TCW MetWest Fixed - Net			3.1	5.1	5.3	0.7	0.4	2.0	4.6	Jan-02
Blmbg. U.S. Aggregate Index			2.8 (54)	4.8 (82)	4.9 (92)	0.5 (91)	-0.4 (97)	1.5 (99)	3.5	Jan-02
eV US Core Fixed Inc Median			2.8	5.0	5.3	1.0	0.5	2.0	-	
Brandywine US FI - Gross	370,831,735	2.7	2.5 (82)	6.0 (13)	5.5 (64)	-	-	-	1.5	Jun-22
Brandywine US FI - Net			2.5	5.8	5.3	-	-	-	1.3	Jun-22
Blmbg. U.S. Aggregate Index			2.8 (52)	4.8 (88)	4.9 (93)	-	-	-	1.7	Jun-22
eV US Core Plus Fixed Inc Median			2.7	5.0	5.3	1.1	1.2	2.2	-	
Reams Core Plus FI - Gross	393,464,513	2.8	3.0 (21)	5.3 (53)	5.5 (64)	-	-	-	3.0	Jun-22
Reams Core Plus FI - Net			2.9	5.1	5.4	-	-	-	2.9	Jun-22
Blmbg. U.S. Aggregate Index			2.8 (52)	4.8 (88)	4.9 (93)	-	-	-	1.7	Jun-22
eV US Core Plus Fixed Inc Median			2.8	5.3	5.7	1.5	1.6	2.5	-	

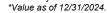


	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
U.S. Treasury - Gross	415,025,608	3.0	2.9	4.5	4.7	0.1	-1.6		1.4	Mar-18
U.S. Treasury - Net			2.9	4.5	4.7	0.0	-1.6		1.3	Mar-18
Blmbg. U.S. Treasury Index			2.9	4.4	4.5	0.0	-1.7	-	1.3	
Neuberger Berman - Gross	415,025,608	3.0	2.9 (53)	4.5 (77)	4.7 (82)	0.1 (82)	-1.6 (81)	1.3 (76)	5.5	Jul-88
Neuberger Berman - Net			2.9	4.5	4.7	0.0	-1.6	1.3	5.4	Jul-88
Blmbg. U.S. Government Index			2.9 (55)	4.4 (80)	4.5 (83)	0.0 (82)	-1.6 (82)	1.0 (87)	4.9	Jul-88
eV US Government Fixed Inc Median			3.0	4.8	5.4	0.6	-0.4	1.4	-	
Absolute Return - Gross	925,447,042	6.7	0.7	3.7	4.1	4.2	6.4	2.9	3.1	Dec-11
Absolute Return - Net			0.7	3.6	4.0	4.2	6.4	2.9	3.1	Dec-11
HFRI FoF Conservative Index			0.8	3.7	4.5	4.2	6.9	4.6	4.7	
Aristeia Partners LP - Gross	56,693,276	0.4	2.7 (42)	5.6 (14)	6.2 (40)	5.4 (28)	-	-	5.6	Jan-21
Aristeia Partners LP - Net			2.7	5.6	6.2	5.4	-	-	5.6	Jan-21
HFRI FoF Conservative Index			0.8 (48)	3.7 (46)	4.5 (49)	4.2 (37)	-	-	4.8	Jan-21
eV Alt Relative Value - Multi-Market Arbitrage Median			0.1	3.4	4.2	2.2	2.2	-	-	
BlackRock Event Driven Equity Fund - Gross	58,720,583	0.4	1.5 (55)	3.5 (85)	3.0 (87)	3.0 (88)	4.5 (89)	-	3.4	Mar-20
BlackRock Event Driven Equity Fund - Net			1.5	3.5	3.0	3.0	4.5	-	3.4	Mar-20
HFRI FoF Conservative Index			0.8 (71)	3.7 (83)	4.5 (81)	4.2 (63)	6.9 (57)	-	5.3	Mar-20
eV Alt All Event Driven Median			1.7	6.1	7.0	4.6	8.5	6.8	-	
Capula Global Relative Value Fund - Gross	41,875,923	0.3	2.7 (42)	-	-	-	-	-	5.2	Oct-24
Capula Global Relative Value Fund - Net			2.2	-	-	-	-	-	4.7	Oct-24
HFRI FOF: Conservative Index			0.8 (48)	3.7 (46)	4.5 (49)	4.2 (37)	6.9 (4)	3.6 (-)	5.5	Jan-90
eV Alt Relative Value - Multi-Market Arbitrage Median			0.1	3.4	4.2	2.2	2.2	-	-	
Capula Volatility Opportunity Fund - Gross	20,844,992	0.2	1.8 (45)	-	-	-	-	-	5.0	Oct-24
Capula Volatility Opportunity Fund - Net			1.4	-	-	-	-	-	4.2	Oct-24
HFRI FOF: Conservative Index			0.8 (48)	3.7 (46)	4.5 (49)	4.2 (37)	6.9 (4)	3.6 (-)	5.5	Jan-90
eV Alt Relative Value - Multi-Market Arbitrage Median			0.1	3.4	4.2	2.2	2.2	-	-	
Elliott Associates - Gross	92,356,205	0.7	0.0 (79)	5.4 (57)	7.5 (47)	5.8 (32)	9.4 (46)	8.1 (43)	8.1	May-12
Elliott Associates - Net			0.0	5.4	7.5	5.8	9.4	8.1	8.1	May-12
HFRI FoF Conservative Index			0.8 (71)	3.7 (83)	4.5 (81)	4.2 (63)	6.9 (57)	4.6 (77)	4.8	Jan-11
eV Alt All Event Driven Median			1.7	6.1	7.0	4.6	8.5	6.8	-	

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Graham Global Inv II - Gross	45,361,214	0.3	-2.8 (85)	-11.1 (94)	-12.1 (94)	-0.5 (75)	6.4 (31)	-	3.4	Mar-17
Graham Global Inv II - Net			-2.8	-11.1	-12.1	-0.5	6.4	-	3.4	Mar-17
HFRI FoF Conservative Index			0.8 (42)	3.7 (37)	4.5 (30)	4.2 (24)	6.9 (22)	-	4.5	Mar-17
eV Alt All Managed Futures Median			-0.8	0.6	-1.3	1.3	4.6	1.7	-	
Grosvenor SCARF Diversifying - Gross	270,596,909	2.0	-0.5 (94)	5.9 (46)	8.0 (31)	7.2 (36)	8.0 (47)	3.2 (88)	3.6	Dec-11
Grosvenor SCARF Diversifying - Net			-0.5	5.9	8.0	7.2	8.0	3.2	3.6	Dec-11
HFRI FoF Conservative Index			0.8 (67)	3.7 (81)	4.5 (78)	4.2 (80)	6.9 (58)	4.6 (44)	4.7	Dec-11
eV Alt Fund of Funds - Multi-Strategy Median			2.0	4.8	6.6	5.6	7.6	4.3	-	
Hudson Bay Fund - Gross	51,885,586	0.4	1.4 (60)	-	-	-	-	-	3.8	Nov-24
Hudson Bay Fund - Net			1.4	-	-	-	-	-	3.8	Nov-24
HFRI FoF Conservative Index			0.8 (67)	3.7 (81)	4.5 (78)	4.2 (80)	6.9 (58)	4.6 (44)	4.8	Jan-11
eV Alt Fund of Funds - Multi-Strategy Median			0.6	5.0	6.1	5.0	8.0	4.8	-	
Junto Capital Partners - Gross	56,266,173	0.4	2.5 (35)	7.9 (36)	9.8 (38)	-	-	-	9.9	Jan-24
Junto Capital Partners - Net			2.5	7.9	9.8	-	-	-	9.9	Jan-24
HFRI FoF Conservative Index			0.8 (43)	3.7 (55)	4.5 (60)	4.2 (73)	6.9 (88)	4.6 (95)	4.8	Jan-11
eV Alt Fundamental - Long/Short Equity Median			-1.9	3.1	3.7	4.4	11.0	6.7	-	
Laurion Capital - Gross	59,950,690	0.4	4.5 (53)	0.2 (100)	-4.0 (100)	1.2 (100)	5.1 (91)	6.2 (-)	6.5	Mar-14
Laurion Capital - Net			4.5	0.2	-4.0	1.2	5.1	6.2	6.5	Mar-14
HFRI FoF Conservative Index			0.8 (78)	3.7 (80)	4.5 (72)	4.2 (88)	6.9 (76)	4.6 (-)	4.7	Mar-14
eV Alt Relative Value - Equity Relative Value Median			4.8	4.6	8.0	8.9	8.3	-	-	
MW Global Opportunities Fund - Gross	63,505,787	0.5	1.6 (42)	-1.0 (78)	1.0 (76)	5.6 (56)	6.0 (92)	-	5.9	Jan-19
MW Global Opportunities Fund - Net			1.6	-1.0	1.0	5.6	6.0	-	5.9	Jan-19
HFRI FoF Conservative Index			0.8 (43)	3.7 (55)	4.5 (60)	4.2 (73)	6.9 (88)	-	5.3	Jan-19
eV Alt Fundamental - Long/Short Equity Median			-0.2	4.0	6.2	5.9	13.4	8.6	-	
PSquared Event Driven Opp Fund - Gross	51,160,488	0.4	-2.1 (85)	-2.9 (97)	-7.9 (98)	-0.7 (100)	-	-	0.5	Aug-20
PSquared Event Driven Opp Fund - Net			-2.1	-2.9	-7.9	-0.7	-	-	0.5	Aug-20
HFRI FoF Conservative Index			0.8 (71)	3.7 (83)	4.5 (81)	4.2 (63)	6.9 (57)	4.6 (77)	4.8	Jan-11
eV Alt All Event Driven Median			1.7	6.1	7.0	4.6	8.5	6.8	-	
Tudor BVI Global Fund - Gross	56,229,215	0.4	2.1 (83)	9.2 (30)	8.4 (52)	-	-	-	5.4	Jan-23
Tudor BVI Global Fund - Net			2.1	9.2	8.4	-	-	-	5.4	Jan-23
HFRI FOF Conservative Index			0.8 (91)	3.7 (82)	4.5 (82)	4.2 (55)	6.9 (60)	3.6 (72)	5.5	Jan-90
eV Alt Macro - Discretionary Median			3.2	6.2	6.8	3.4	7.8	4.6	-	



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inceptior Date
Dedicated Cash Allocation - Gross	269,511,179	1.9	1.1	3.6	4.9	4.4	2.7		2.5	Jul-19
Dedicated Cash Allocation - Net			1.1	3.6	4.9	4.4	2.7		2.5	Jul-19
Secured Overnight Financing Rate			1.1	3.7	5.1	4.4	2.7	-	2.6	
Real Return Asset Category - Gross	2,431,040,242	17.5	0.7	3.3	4.0	1.1	6.1		7.2	Apr-17
Real Return Asset Category - Net			0.7	3.2	4.0	1.0	6.0		7.0	Apr-1
Real Return Custom			0.8	2.8	3.2	1.4	5.8	-	5.5	
Real Estate - Gross	903,015,439	6.5	-0.5 (99)	-0.5 (94)	-1.2 (89)	-5.3 (53)	3.0 (26)	6.2 (12)	8.1	Jul-1
Real Estate - Net			-0.5	-0.6	-1.3	-5.4	2.8	5.9	7.6	Jul-1
Real Estate Custom			1.1 (31)	1.9 (40)	0.7 (57)	-3.4 (26)	3.0 (26)	5.5 (15)	7.1	Jul-1
InvMetrics All DB Real Estate Private Median			0.8	1.5	0.8	-5.3	1.8	3.9	-	
Core RE - Limited Partnership - Gross	594,399,774	4.3	0.8	1.8	1.8	-4.9	4.3	7.3	5.0	Oct-0
Core RE - Limited Partnership - Net			0.7	1.7	1.6	-5.0	4.1	7.1	4.5	Oct-0
NFI-ODCE			1.1	2.5	2.0	-4.3	2.9	5.6	4.7	
Brookfield Premier RE Partners - Gross*	92,078,689	0.7	0.0	0.5	-1.6	-8.1	0.7	-	2.4	Oct-
Brookfield Premier RE Partners - Net*			0.0	0.5	-1.6	-8.1	0.7	-	2.4	Oct-
NFI-ODCE			1.1	2.5	2.0	-4.3	2.9	-	3.5	
Clarion Lion Properties - Gross	102,449,398	0.7	0.9	3.2	1.4	-5.1	2.6	-	3.6	Oct-
Clarion Lion Properties - Net			0.7	2.5	0.5	-5.9	1.7	-	2.8	Oct-1
NFI-ODCE			1.1	2.5	2.0	-4.3	2.9	-	3.5	
FPA Core Plus VI - Gross	25,903,473	0.2	-	-	-	-	-	-	0.0	Mar-
FPA Core Plus VI - Net			-	-	-	-	-	-	0.0	Mar-
NFI-ODCE			-	-	-	-	-	-	0.4	
Metlife Core Property - Gross	70,253,332	0.5	0.5	1.2	0.0	-4.9	3.4	6.5	7.5	Jan-
Metlife Core Property - Net	, ,		0.5	1.1	-0.1	-5.2	3.1	6.0	7.1	Jan-1
NFI-ODCE			1.1	2.5	2.0	-4.3	2.9	5.6	6.4	
Principal US Property - Gross	54,382,630	0.4	-0.1	0.8	-0.1	-5.4	2.2	-	4.8	Nov-
Principal US Property - Net	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		-0.1	0.8	-0.1	-5.4	2.2	-	4.8	Nov-
NFI-ODCE			1.1	2.5	2.0	-4.3	2.9	-	5.0	
Prologis Targeted Euro Logistics - Gross	60,252,935	0.4	6.7	3.2	3.3	-6.4	4.3	-	7.7	Nov-
Prologis Targeted Euro Logistics - Net	33,232,000	•	6.7	3.2	3.3	-6.4	4.3	_	7.7	Nov-
NFI-ODCE			1.1	2.5	2.0	-4.3	2.9	_	5.0	1101
Prologis Targeted US Logistics - Gross*	74,937,381	0.5	0.0	3.4	5.0	-2.2	10.9	-	13.6	Aug-
Prologis Targeted US Logistics - Net*	1 1,001,001	0.0	0.0	3.3	4.6	-2.3	10.8	_	13.6	Aug-
NFI-ODCE			1.1	2.5	2.0	-4.3	2.9	_	5.3	, lug





	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Townsend Real Estate - Gross*	114,141,937	0.8	0.0	1.3	4.8	-4.2	4.6	-	6.4	Apr-16
Townsend Real Estate - Net*			0.0	1.3	4.8	-4.2	4.6	-	6.4	Apr-16
NFI-ODCE			1.1	2.5	2.0	-4.3	2.9	-	4.8	
Non-Core RE - Opportunistic - Gross	92,545,719	0.7	-2.7	-9.3	-11.3	-10.3	-2.4	3.9	9.3	Mar-14
Non-Core RE - Opportunistic - Net			-2.7	-9.3	-11.3	-10.3	-2.4	3.6	9.0	Mar-14
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	5.9	6.8	
Carlyle China Realty - Gross	3,806,216	0.0	-11.4	-18.2	-20.2	-24.3	-15.7	-	-11.0	Jul-17
Carlyle China Realty - Net			-11.4	-18.2	-20.2	-24.3	-15.7	-	-11.0	Jul-17
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	-	4.4	
Carlyle China Rome Logistics - Gross	17,105,475	0.1	-11.3	-17.8	-19.5	-23.8	-15.3	-	-10.5	Jul-17
Carlyle China Rome Logistics - Net			-11.3	-17.8	-19.5	-23.8	-15.3	-	-10.5	Jul-17
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	-	4.4	
CIM Opportunity VIII - Gross	10,332,010	0.1	-2.5	-46.5	-51.3	-29.8	-23.0	-9.8	-9.7	Mar-15
CIM Opportunity VIII - Net			-2.5	-46.5	-51.3	-29.8	-23.0	-10.3	-10.2	Mar-15
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	5.9	6.2	
Kohlberg Kravis Roberts - Gross	154,911	0.0	2.7	-7.8	-9.4	-19.2	-17.8	-10.3	-3.9	Mar-14
Kohlberg Kravis Roberts - Net			2.7	-7.8	-9.4	-19.2	-17.8	-10.3	-4.0	Mar-14
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	5.9	6.8	
Lasalle China Logistics Venture LP - Gross	9,857,151	0.1	-11.2	-15.6	-14.8	-13.7	-	-	-22.3	Oct-21
Lasalle China Logistics Venture LP - Net			-11.2	-15.6	-14.8	-13.7	-	-	-22.3	Oct-21
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	-	-	2.0	
Sculptor Real Estate Fund III - Gross	2,487,012	0.0	10.5	19.0	24.9	38.2	29.3	24.0	17.4	Oct-14
Sculptor Real Estate Fund III - Net			10.5	19.0	24.9	38.2	29.3	21.6	15.2	Oct-14
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	5.9	6.2	
Sculptor Real Estate Fund IV - Gross	18,660,537	0.1	-0.5	5.6	8.3	7.7	-	-	6.7	Jul-20
Sculptor Real Estate Fund IV - Net			-0.5	5.6	8.3	7.7	-	-	6.7	Jul-20
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	-	-	2.9	
Non-Core RE - Value Added - Gross	216,069,946	1.6	-2.9	-0.6	-2.2	0.0	2.1	6.8	0.7	Oct-08
Non-Core RE - Value Added - Net			-2.9	-0.6	-2.2	0.0	2.1	6.5	-0.1	Oct-08
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	6.1	6.2	
Asana Partners Fund II - Gross	33,430,229	0.2	-0.2	-3.7	-8.7	-2.7	-4.4	-	-179.8	May-19
Asana Partners Fund II - Net			-0.2	-3.7	-8.7	-2.7	-4.4	-	-179.8	May-19
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	-	3.4	•

See Policy Index and Benchmark History Non-Core RE returns are lagged one quarter. \*Value as of 12/31/2024.

<sup>\*\*</sup>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: March 31, 2025

	Market Value	% of Portfolio	3 Мо	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Asana Partners Fund III - Gross	20,187,718	0.1	-0.1	1.0	-0.9	-	-	-	-9.2	May-22
Asana Partners Fund III - Net			-0.1	1.0	-0.9	-	-	-	-9.2	May-22
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-	-	-	-2.3	
ECE Euro Prime Shopping II - Gross	33,017,655	0.2	-7.4	-3.0	-0.8	1.6	0.7	-	6.7	Aug-15
ECE Euro Prime Shopping II - Net			-7.4	-3.0	-0.8	1.6	0.7	-	6.2	Aug-15
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	-	5.9	
European RE Debt II - Gross*	269,909	0.0	10.0	-4.8	-8.6	-17.9	-33.9	-16.0	-13.9	Dec-13
European RE Debt II - Net*			10.0	-4.8	-8.6	-17.9	-33.9	-16.0	-13.9	Dec-13
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	6.1	7.1	
Hammes II - Gross	3,094,103	0.0	2.4	6.1	6.9	8.4	77.9	-	60.1	Aug-15
Hammes II - Net			2.4	6.1	6.9	8.4	77.9	-	58.5	Aug-15
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	-	5.9	
Hammes III - Gross	21,891,336	0.2	1.5	6.0	7.5	6.9	13.4	-	-0.6	Nov-18
Hammes III - Net			1.5	6.0	7.5	6.9	13.4	-	-0.6	Nov-18
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	-	3.8	
Hammes IV - Gross	4,273,506	0.0	-0.9	-45.5	-52.7	-	-	-	-45.7	Dec-22
Hammes IV - Net			-0.9	-45.5	-52.7	-	-	-	-45.7	Dec-22
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-	-	-	-7.6	
NREP Nordic Strat II - Gross	12,189,512	0.1	-22.0	-20.0	-21.2	-11.0	6.9	-	10.3	Jul-16
NREP Nordic Strat II - Net			-22.0	-20.0	-21.2	-11.0	6.9	-	10.3	Jul-16
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	-	4.9	
NREP Nordic Strat III - Gross	28,394,622	0.2	-5.0	-8.9	-6.2	-3.8	6.9	-	3.0	Aug-18
NREP Nordic Strat III - Net			-5.0	-8.9	-6.2	-3.8	6.9	-	3.0	Aug-18
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	3.0	-	3.9	
NREP Nordic Strat IV - Gross	25,219,972	0.2	-1.4	0.8	-4.1	-7.0	-	-	4.8	Aug-20
NREP Nordic Strat IV - Net			-1.4	0.8	-4.1	-7.0	-	-	4.8	Aug-20
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	-	-	2.9	J
NREP Nordic Strat V - Gross	18,610,504	0.1	5.3	5.1	-7.3		-	-	-13.3	Nov-22
NREP Nordic Strat V - Net	-,,		5.3	5.1	-7.3	_	_	-	-13.3	Nov-22
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-	-	-	-7.3	
Seven Seas Japan Opp Fund - Gross	15,490,880	0.1	1.6	22.3	13.6	7.0	-	-	7.0	Apr-22
Seven Seas Japan Opp Fund - Net	.5, .50,000	•	1.6	22.3	13.6	7.0	_	_	7.0	Apr-22
NFI-ODCE net +1% 1Q Lag			1.2	1.1	-1.3	-2.2	_	-	-2.2	7 tp: 22

See Policy Index and Benchmark History Non-Core RE returns are lagged one quarter. \*Value as of 12/31/2024.

<sup>\*\*</sup>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: March 31, 2025

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
WCP NewCold III - Gross	30,142,407	0.2	4.4	-	-	-	-	-	4.4	Dec-24
WCP NewCold III - Net			4.4	-	-	-	-	-	4.4	Dec-24
Cambridge Associates All PE 1 Qtr Lag			0.0	-	-	-	-	-	2.5	
Private Real Assets - Gross	1,201,701,611	8.7	0.7	5.2	7.0	8.7	9.5	10.5	6.9	Feb-13
Private Real Assets - Net			0.7	5.2	7.0	8.7	9.5	10.5	6.9	Feb-13
Private Real Assets Custom			-0.1	3.9	6.2	8.2	8.8	7.4	7.2	
ACM II - Gross	10,285,012	0.1	-18.8	-25.2	-26.9	-19.3	-15.0	-	-11.7	Oct-16
ACM II - Net			-18.8	-25.2	-26.9	-19.3	-15.0	-	-11.7	Oct-16
NCREIF Farmland 1 Qtr Lag			-1.3	-1.8	-1.0	4.4	4.8	-	5.4	
ARA Partners Fund III LP - Gross	8,950,501	0.1	-2.4	-10.6	-12.8	-	-	-	-17.6	Oct-23
ARA Partners Fund III LP - Net			-2.4	-10.6	-12.8	-	-	-	-17.6	Oct-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	-	-	-	7.9	
ArcLight Energy VI - Gross	13,179,217	0.1	-3.3	7.5	5.3	6.0	0.2	-	3.1	Sep-15
ArcLight Energy VI - Net			-3.3	7.5	5.3	6.0	0.2	-	3.1	Sep-1
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	-	11.4	·
Brookfield Infra III - Gross	43,085,743	0.3	0.0	5.7	9.7	12.9	11.5	-	12.1	Jun-16
Brookfield Infra III - Net			0.0	5.7	9.7	12.9	11.5	-	12.1	Jun-16
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	-	11.0	
Brookfield Infra IV - Gross	42,550,208	0.3	1.3	7.7	8.9	12.2	12.2	-	10.6	Oct-19
Brookfield Infra IV - Net			1.3	7.7	8.9	12.2	12.2	-	10.6	Oct-19
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	-	9.7	
Brookfield Super Core Infra - Gross	112,509,870	0.8	2.2	6.4	11.3	-	-	-	8.3	Aug-22
Brookfield Super Core Infra - Net	, ,		2.2	6.4	11.3	-	-	-	8.3	Aug-2
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	-	-	-	7.5	J
Carlyle Power II - Gross	689,839	0.0	1.9	-3.8	-5.0	8.7	8.8	-	5.6	Nov-15
Carlyle Power II - Net	,		1.9	-3.8	-5.0	8.7	8.8	-	5.6	Nov-1
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	_	10.8	
Digital Colony Partners II - Gross	38,976,648	0.3	1.3	7.2	8.1	7.1	-	-	7.4	Jun-2
Digital Colony Partners II - Net	22,213,010		1.3	7.2	8.1	7.1	-	_	7.4	Jun-2
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	_	_	9.8	
EnCap Energy IX - Gross	7,763,287	0.1	8.6	6.3	33.9	30.1	22.0	13.8	6.5	Feb-1
EnCap Energy IX - Net	7,700,207	V.,	8.6	6.3	33.9	30.1	22.0	13.8	6.5	Feb-13
Cambridge Associates Private Energy 1 Qtr Lag			0.0	3.2	6.4	9.8	8.7	3.7	3.7	10010

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

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Sacramento County Employees' Retirement System Period Ending: March 31, 2025

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
EnCap Energy X - Gross	19,359,899	0.1	3.1	23.4	33.5	30.7	25.9	-	12.1	May-15
EnCap Energy X - Net			3.1	23.4	33.5	30.7	25.9	-	12.1	May-15
Cambridge Associates Private Energy 1 Qtr Lag			0.0	3.2	6.4	9.8	8.7	-	3.7	
EnCap Flatrock Midstream III - Gross	7,379,134	0.1	-0.2	1.7	0.8	8.4	6.6	11.8	6.6	Aug-14
EnCap Flatrock Midstream III - Net			-0.2	1.7	0.8	8.4	6.6	11.8	6.6	Aug-14
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	10.7	10.4	
EnCap Flatrock Midstream IV - Gross	14,072,550	0.1	1.7	9.5	7.0	8.9	6.1	-	4.4	Mar-18
EnCap Flatrock Midstream IV - Net			1.7	9.5	7.0	8.9	6.1	-	4.4	Mar-18
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	-	10.1	
EQT Infrastructure Fund IV - Gross	42,765,290	0.3	-6.4	-0.4	2.6	6.0	8.9	-	3.3	Jul-19
EQT Infrastructure Fund IV - Net			-6.4	-0.4	2.6	6.0	8.9	-	3.3	Jul-19
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	-	9.8	
First Reserve - Gross	9,992,987	0.1	1.0	13.8	11.7	-7.4	-6.1	3.1	-3.1	Jan-15
First Reserve - Net			1.0	13.8	11.7	-7.4	-6.1	3.1	-3.1	Jan-15
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	10.7	10.6	
Harrison St Social Infra Fd - Gross	112,079,140	0.8	1.1	3.2	5.0	5.7	-	-	5.8	Aug-21
Harrison St Social Infra Fd - Net	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		1.1	3.2	5.0	5.7	-	-	5.8	Aug-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	-	-	9.9	J
IFM Global Infrastructure US LP - Gross	182,260,471	1.3	2.9	8.8	9.9	8.4	9.1	-	11.0	May-17
IFM Global Infrastructure US LP - Net	· , · · · ,		2.9	8.8	9.9	8.4	9.1	-	11.0	May-17
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	_	11.0	. ,
ISQ Global Infrastructure Fund II - Gross	65,614,807	0.5	4.0	12.6	16.1	11.3	13.0	-	12.8	Nov-18
ISQ Global Infrastructure Fund II - Net	, . ,		4.0	12.6	16.1	11.3	13.0	-	12.8	Nov-18
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	-	10.0	
ISQ Global Infrastructure Fund III - Gross	41,184,598	0.3	4.9	11.3	13.7	17.8	-	-	16.8	Jan-22
ISQ Global Infrastructure Fund III - Net	,,		4.9	11.3	13.7	17.8	_	_	16.8	Jan-22
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	_	_	9.1	· · · · · · · · · · · · · · · · · · ·
KKR Asia Pacific Infrastructure Investors II - Gross	26,164,380	0.2	1.8	18.0	10.8	-	-	_	10.0	Mar-24
KKR Asia Pacific Infrastructure Investors II - Net	20,101,000	V.L	1.8	18.0	10.8	_	_	_	10.0	Mar-24
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	_	_	_	10.3	Mai ZT
Meridiam Infra N America III - Gross	52,670,877	0.4	-4.1	5.5	6.1	11.6	16.9		-46.2	Oct-17
Meridiam Infra N America III - Net	02,010,011	0.7	- <del>4</del> .1	5.5	6.1	11.6	16.9	_	-46.2	Oct-17
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	<u>-</u>	10.2	OG-17



Sacramento County Employees' Retirement System Period Ending: March 31, 2025

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Meridiam Infra N America IV - Gross	10,265,631	0.1	-7.0	-6.3	6.2	-	-	-	0.7	Aug-23
Meridiam Infra N America IV - Net			-7.0	-6.3	6.2	-	-	-	0.7	Aug-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	-	-	-	8.1	
Meridiam Sa Infra Euro IV - Gross	17,567,839	0.1	0.0	6.8	8.6	1.5	-	-	-33.7	Aug-21
Meridiam Sa Infra Euro IV - Net			0.0	6.8	8.6	1.5	-	-	-33.7	Aug-21
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	-	-	9.9	
IGP Royalty Partners - Gross	23,064,115	0.2	1.9	22.8	25.2	34.6	-	-	32.1	Sep-20
IGP Royalty Partners - Net			1.9	22.8	25.2	34.6	-	-	32.1	Sep-20
Cambridge Associates Private Energy 1 Qtr Lag			0.0	3.2	6.4	9.8	-	-	16.0	
NGP Royalty Partners II - Gross	65,499,057	0.5	1.4	7.0	8.8	-	-	-	-2.2	Jan-23
NGP Royalty Partners II - Net			1.4	7.0	8.8	-	-	-	-2.2	Jan-23
Cambridge Associates Private Energy 1 Qtr Lag			0.0	3.2	6.4	-	-	-	5.6	
NGP Royalty Partners III - Gross	15,691,630	0.1	-	-	-	-	-	-	0.0	Mar-25
NGP Royalty Partners III - Net			-	-	-	-	-	-	0.0	Mar-25
Cambridge Associates Private Energy 1 Qtr Lag			-	-	-	-	-	-	0.0	
Paine Schwartz Food Chain V - Gross	38,457,908	0.3	3.2	6.7	8.9	10.7	9.9	-	9.6	Feb-20
Paine Schwartz Food Chain V - Net			3.2	6.7	8.9	10.7	9.9	-	9.6	Feb-20
NCREIF Farmland 1 Qtr Lag			-1.3	-1.8	-1.0	4.4	4.8	-	5.1	
Pantheon Ventures - Gross	30,737,014	0.2	-5.4	0.2	-8.7	-1.9	2.2	7.5	11.6	Aug-14
Pantheon Ventures - Net			-5.4	0.2	-8.7	-1.9	2.2	7.5	11.6	Aug-14
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	10.7	10.4	
Quantum Energy VI - Gross	5,551,446	0.0	6.7	-6.7	-4.5	-4.7	7.6	15.3	14.7	Dec-14
Quantum Energy VI - Net			6.7	-6.7	-4.5	-4.7	7.6	15.3	14.7	Dec-14
Cambridge Associates Private Energy 1 Qtr Lag			0.0	3.2	6.4	9.8	8.7	3.7	2.2	
Quantum Energy VII - Gross	27,468,529	0.2	-9.9	-17.8	-14.5	2.7	14.4	-	8.2	Sep-17
Quantum Energy VII - Net	,,.		-9.9	-17.8	-14.5	2.7	14.4	_	8.2	Sep-17
Cambridge Associates Private Energy 1 Qtr Lag			0.0	3.2	6.4	9.8	8.7	_	5.4	
Quantum Energy VIII - Gross	26,310,587	0.2	2.6	-	-	-	-	_	4.2	Sep-24
Quantum Energy VIII - Net	_0,0.0,001	V. <u>L</u>	2.6	<u>-</u>	_	_	_	_	4.2	Sep-24
Cambridge Associates Private Energy 1 Qtr Lag			0.0	_	_	_	_	_	3.2	30p Z-1
Quantum Energy VIII Co-Investment Fund - Gross	4,414,234	0.0	4.0	_	_	_	_	_	17.6	Sep-24
Quantum Energy VIII Co-Investment Fund - Oross  Quantum Energy VIII Co-Investment Fund - Net	7,717,207	0.0	4.0	_		_	_	_	17.6	Sep-24
Cambridge Associates Private Energy 1 Qtr Lag			0.0	_	_	_	_	<u>-</u>	3.2	0 <del>c</del> p-24



	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Inception	Inception Date
Ridgewood Water & Strategy Infra II - Gross	17,791,978	0.1	3.6	7.0	8.3	-	-	-	-130.9	Jan-23
Ridgewood Water & Strategy Infra II - Net			3.6	7.0	8.3	-	-	-	-130.9	Jan-23
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	-	-	-	9.0	
Stonepeak Opportunities Fund - Gross	13,298,441	0.1	-1.3	-	-	-	-	-	-2.4	Oct-24
Stonepeak Opportunities Fund - Net			-1.3	-	-	-	-	-	-2.4	Oct-24
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	-	-	-	-	-	3.7	
Tailwater Energy Fund III - Gross	18,052,090	0.1	1.1	-15.5	-16.7	-1.2	-1.2	-	-0.2	Oct-18
Tailwater Energy Fund III - Net			1.1	-15.5	-16.7	-1.2	-1.2	-	-0.2	Oct-18
Cambridge Associates Private Energy 1 Qtr Lag			0.0	3.2	6.4	9.8	8.7	-	4.8	
Tailwater Energy IV - Gross	35,423,611	0.3	-0.5	7.6	7.9	18.4	12.6	-	8.0	Nov-19
Tailwater Energy IV - Net			-0.5	7.6	7.9	18.4	12.6	-	8.0	Nov-19
Cambridge Associates Private Energy 1 Qtr Lag			0.0	3.2	6.4	9.8	8.7	-	6.7	
Wastewater Opportunity - Gross	573,042	0.0	-41.4	-63.1	-63.8	-35.0	-19.6	-	-20.0	Jan-16
Wastewater Opportunity - Net			-41.4	-63.1	-63.8	-35.0	-19.6	-	-20.0	Jan-16
Cambridge Associates Private Infrastructure 1 Qtr Lag			0.0	5.1	7.4	8.0	9.9	-	10.8	
Liquid Real Return - Gross	326,323,192	2.4	4.5	8.3	9.8	2.0	9.2		5.1	Jul-19
Liquid Real Return - Net			4.4	8.1	9.6	1.3	8.5		4.5	Jul-19
SSgA Real Asset			4.4	3.4	4.6	0.4	8.1	-	4.1	
SSgA Passive Real Return Proxy - Gross	326,246,723	2.4	4.5	8.3	9.8	2.0	9.3	4.1	2.8	Feb-08
SSgA Passive Real Return Proxy - Net			4.4	8.1	9.6	1.8	9.0	3.8	2.6	Feb-08
SSgA Real Asset			4.4	3.4	4.6	0.4	8.1	3.3	-	
Brookfield Liquid Real Return	76,469	0.0								
Cash - Gross	197,696,303	1.4	1.3	3.7	5.2	4.7	3.2	2.6	3.1	Aug-92
Cash - Net			1.3	3.7	5.2	4.7	3.2	2.6		Aug-92
Secured Overnight Financing Rate			1.1	3.7	5.1	4.4	2.7	1.9	2.6	
Cash Account - Gross	197,696,303	1.4	1.3	3.7	5.2	4.7	3.3	2.7	3.2	Jul-92
Cash Account - Net			1.3	3.7	5.2	4.7	3.3	2.7	-	Jul-92
Secured Overnight Financing Rate			1.1	3.7	5.1	4.4	2.7	1.9	2.6	

AB	\$1,334,137,649	9.6
AQR US Enhanced Equity	\$409,799,122	3.0
JP Morgan 130/30	\$192,201,235	1.4
DE Shaw Broad Mkt Core Alpha Ext	\$212,491,355	1.5
Eagle Capital	\$417,842,578	3.0
Huber Capital	\$20,264	0.0
Weatherbie	\$122,600,982	0.9
Snyder Capital Management	\$138,663,076	1.0
Lazard	\$331,904,076	2.4
Walter Scott & Partners Limited	\$461,557,781	3.3
LSV	\$590,758,483	4.3
Acadian Asset Management	\$130,691,135	0.9
William Blair Dev Small Cap	\$107,425,932	0.8
Arga Emg	\$227,744,669	1.6
Baillie Gifford Emg All Cap	\$236,581,570	1.7
Transition Account	\$6,349,040	0.0
Oaktree Emg	\$214,457,355	1.5
Allspring Global Investments	\$97,100,707	0.7
Artisan Partners Global Opp	\$149,839,874	1.1
Nikko Asset Management	\$160,200,000	1.2
Third Point Offshore Fund	\$4,297,942	0.0
Abbott VI	\$18,382,296	0.1
Accel-KKR V	\$31,800,048	0.2
Accel-KKR VI	\$28,146,075	0.2
Accel-KKR VII	\$489,145	0.0
Accel-KKR Growth Partners II	\$8,631,188	0.1
Accel-KKR Growth Partners III	\$37,474,525	0.3
Accel-KKR Growth Partners IV	\$15,104,996	0.1
Alchemy Special Opportunities Fund V	\$1,708,336	0.0
Blue Owl Asset Special Opp VI	\$658,542	0.0
Canvas Ventures III	\$14,013,159	0.1
Cortec Group Fund VII	\$28,926,204	0.2
Cortec Group VIII	\$9,680,611	0.1
CRV Select Fund I	\$19,471,905	0.1
CRV Select Fund II	\$8,514,192	0.1
CRV XVIII LP	\$18,385,244	0.1



CRV XIX LP	\$12,929,678	0.1
CVC Capital Partners IX	\$4,706,671	0.0
Davidson Kempner LT Dist Opp IV	\$18,080,489	0.1
Davidson Kempner LT Dist Opp V	\$34,142,329	0.2
Dyal Capital Partners II	\$35,824,820	0.3
Dyal Capital Partners III	\$31,591,695	0.2
Garrison Investment Group	\$491,820	0.0
Golden Capital Co Invest	\$65,385,712	0.5
Gridiron Capital Fund IV	\$45,778,515	0.3
Gridiron Capital Fund V	\$23,259,262	0.2
Harbourvest VIII	\$2,515,267	0.0
H.I.G. Bayside Loan III	\$3,429,079	0.0
H.I.G. Capital V	\$5,560,387	0.0
H.I.G. Europe Capital II	\$7,389,187	0.1
JFL Equity Investors VI	\$13,688,313	0.1
Khosla IV	\$10,494,411	0.1
Khosla V	\$25,883,358	0.2
Khosla VI	\$83,875,986	0.6
Khosla VII	\$18,984,476	0.1
Khosla VIII	\$16,217,952	0.1
Linden Capital III	\$18,118,072	0.1
Linden Capital Partners IV	\$48,326,252	0.3
Linden Capital Partners V	\$22,312,707	0.2
Marlin Equity IV	\$7,054,008	0.1
Marlin Equity V	\$33,255,513	0.2
Marlin Heritage	\$3,074,700	0.0
Marlin Heritage II	\$9,874,889	0.1
Marlin Heritage III	\$10,337,044	0.1
Marlin Heritage Europe	\$14,489,930	0.1
New Enterprise 14	\$34,212,822	0.2
New Enterprise 15	\$23,325,806	0.2
New Enterprise 16	\$33,632,885	0.2
New Enterprise 17	\$22,155,399	0.2
Oaktree Power Opp Fund VI	\$31,212,775	0.2
OrbiMed Private Investments VIII	\$11,461,217	0.1
Orbimed Private Investments IX	\$10,498,560	0.1



RCP Multi-Fund Feeder	\$81,470,287	2.2
	φ01,470,207	0.6
Resurgens Tech Partners III	\$174,789	0.0
RRJ Capital Master Fund II	\$3,203,530	0.0
RRJ Capital Master Fund III	\$8,523,836	0.1
Shamrock Capital II	\$16,280,811	0.1
Shamrock Capital III	\$8,211,508	0.1
Shamrock Capital Growth Fund V	\$20,125,637	0.1
Shamrock Capital Growth Fund VI	\$403,892	0.0
Sixth Street Opp Partners V	\$25,188,982	0.2
Spectrum Equity VII	\$26,563,186	0.2
Spectrum Equity Fund VIII	\$21,530,827	0.2
Spectrum Equity Fund IX	\$22,119,484	0.2
Spectrum Equity Fund X	\$5,807,215	0.0
Strategic Value Spl Fund V	\$33,360,347	0.2
Strategic Value Spl Fund VI	\$2,000,000	0.0
Summit EUR Growth Equity II	\$48,049,666	0.3
Summit EUR Growth Equity III	\$21,037,553	0.2
Summit Ventures III	\$4,230,592	0.0
Summit Ventures IV	\$66,520,606	0.5
Summit Ventures V	\$17,772,643	0.1
Thoma Bravo XI	\$24,415,624	0.2
Thoma Bravo XII	\$31,996,481	0.2
Thoma Bravo XIII	\$55,237,616	0.4
Threshold Ventures III	\$21,796,804	0.2
Threshold Ventures IV	\$13,958,829	0.1
TPG Opp Partners III	\$5,614,729	0.0
Trinity Ventures XI	\$444,955	0.0
Trinity Ventures XII	\$34,946,983	0.3
TSG7 A LP	\$7,666,943	0.1
TSG7 B LP	\$4,410,088	0.0
TSG8 LP	\$36,790,042	0.3
TSG9 LP	\$10,276,692	0.1
TSSP Opportunities Partners IV	\$23,417,115	0.2
Waterland V	\$683,409	0.0
Waterland VI	\$10,680,148	0.1
Wayzata Opportunities III	\$522,894	0.0



Wynnchurch Capital Partners V	\$22,380,229	0.2
Wynnchurch Capital Partners VI	\$5,263,141	0.0
Brigade Capital	\$248,632,145	1.8
Ares Capital Europe Fund V	\$31,276,864	0.2
Ares Capital Europe Fund VI	\$15,708,264	0.1
Ares Senior Direct Lending Fund III	\$10,870,904	0.1
Athyrium Opp II	\$3,167,752	0.0
Athyrium Opp III	\$8,345,449	0.1
Benefit St Pr Sr Secure Opp	\$9,324,338	0.1
Benefit St Pr Sr Secure Opp II	\$45,601,721	0.3
Brookfield Infra Debt Fund III	\$27,033,927	0.2
IFM US Infrastructure DB FD LP	\$64,194,251	0.5
MCP Private Capital IV	\$29,007,298	0.2
OrbiMed Royalty & Credit Opp III	\$11,380,201	0.1
Orbimed Royalty & Credit Opp IV	\$18,840,305	0.1
Shamrock Capital Debt Fund I	\$6,164,931	0.0
Silver Point Specialty Credit Fund II	\$32,355,672	0.2
Silver Point Specialty Credit Fund III	\$15,861,955	0.1
Sky Leasing Fund VI	\$15,835,113	0.1
Summit Credit II	\$6,858,890	0.0
Summit Credit III	\$4,380,214	0.0
Summit Credit IV	\$6,840,272	0.0
TCP Direct Lending VIII	\$100,517,929	0.7
Grosvenor SCARF Growth	\$5,018,371	0.0
Prudential	\$381,690,711	2.8
TCW MetWest Fixed	\$377,006,215	2.7
Brandywine US FI	\$370,831,735	2.7
Reams Core Plus FI	\$393,464,513	2.8
Neuberger Berman	\$415,025,608	3.0
Aristeia Partners LP	\$56,693,276	0.4
BlackRock Event Driven Equity Fund	\$58,720,583	0.4
Capula Global Relative Value Fund	\$41,875,923	0.3
Capula Volatility Opportunity Fund	\$20,844,992	0.2
Elliott Associates	\$92,356,205	0.7
Graham Global Inv II	\$45,361,214	0.3
Grosvenor SCARF Diversifying	\$270,596,909	2.0



Hudson Bay Fund	\$51,885,586	0.4
Junto Capital Partners	\$56,266,173	0.4
Laurion Capital	\$59,950,690	0.4
MW Global Opportunities Fund	\$63,505,787	0.5
PSquared Event Driven Opp Fund	\$51,160,488	0.4
Tudor BVI Global Fund	\$56,229,215	0.4
Dedicated Cash Allocation	\$269,511,179	1.9
Brookfield Premier RE Partners	\$92,078,689	0.7
Clarion Lion Properties	\$102,449,398	0.7
FPA Core Plus VI	\$25,903,473	0.2
Metlife Core Property	\$70,253,332	0.5
Principal US Property	\$54,382,630	0.4
Prologis Targeted Euro Logistics	\$60,252,935	0.4
Prologis Targeted US Logistics	\$74,937,381	0.5
Townsend Real Estate	\$114,141,937	0.8
Carlyle China Realty	\$3,806,216	0.0
Carlyle China Rome Logistics	\$17,105,475	0.1
CIM Opportunity VIII	\$10,332,010	0.1
Kohlberg Kravis Roberts	\$154,911	0.0
Lasalle China Logistics Venture LP	\$9,857,151	0.1
Sculptor Real Estate Fund III	\$2,487,012	0.0
Sculptor Real Estate Fund IV	\$18,660,537	0.1
Asana Partners Fund II	\$33,430,229	0.2
Asana Partners Fund III	\$20,187,718	0.1
ECE Euro Prime Shopping II	\$33,017,655	0.2
European RE Debt II	\$269,909	0.0
Hammes II	\$3,094,103	0.0
Hammes III	\$21,891,336	0.2
Hammes IV	\$4,273,506	0.0
NREP Nordic Strat II	\$12,189,512	0.1
NREP Nordic Strat III	\$28,394,622	0.2
NREP Nordic Strat IV	\$25,219,972	0.2
NREP Nordic Strat V	\$18,610,504	0.1
Seven Seas Japan Opp Fund	\$15,490,880	0.1
WCP NewCold III	\$30,142,407	0.2
ACM II	\$10,285,012	0.1
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ARA Partners Fund III LP	\$8,950,501	0.1
ArcLight Energy VI	\$13,179,217	0.1
Brookfield Infra III	\$43,085,743	0.3
Brookfield Infra IV	\$42,550,208	0.3
Brookfield Super Core Infra	\$112,509,870	0.8
Carlyle Power II	\$689,839	0.0
Digital Colony Partners II	\$38,976,648	0.3
EnCap Energy IX	\$7,763,287	0.1
EnCap Energy X	\$19,359,899	0.1
EnCap Flatrock Midstream III	\$7,379,134	0.1
EnCap Flatrock Midstream IV	\$14,072,550	0.1
EQT Infrastructure Fund IV	\$42,765,290	0.3
First Reserve	\$9,992,987	0.1
Harrison St Social Infra Fd	\$112,079,140	0.8
IFM Global Infrastructure US LP	\$182,260,471	1.3
ISQ Global Infrastructure Fund II	\$65,614,807	0.5
ISQ Global Infrastructure Fund III	\$41,184,598	0.3
KKR Asia Pacific Infrastructure Investors II	\$26,164,380	0.2
Meridiam Infra N America III	\$52,670,877	0.4
Meridiam Infra N America IV	\$10,265,631	0.1
Meridiam Sa Infra Euro IV	\$17,567,839	0.1
NGP Royalty Partners	\$23,064,115	0.2
NGP Royalty Partners II	\$65,499,057	0.5
NGP Royalty Partners III	\$15,691,630	0.1
Paine Schwartz Food Chain V	\$38,457,908	0.3
Pantheon Ventures	\$30,737,014	0.2
Quantum Energy VI	\$5,551,446	0.0
Quantum Energy VII	\$27,468,529	0.2
Quantum Energy VIII	\$26,310,587	0.2
Quantum Energy VIII Co-Investment Fund	\$4,414,234	0.0
Ridgewood Water & Strategy Infra II	\$17,791,978	0.1
Stonepeak Opportunities Fund	\$13,298,441	0.1
Tailwater Energy Fund III	\$18,052,090	0.1
Tailwater Energy IV	\$35,423,611	0.3
Wastewater Opportunity	\$573,042	0.0
Brookfield Liquid Real Return	\$76,469	0.0



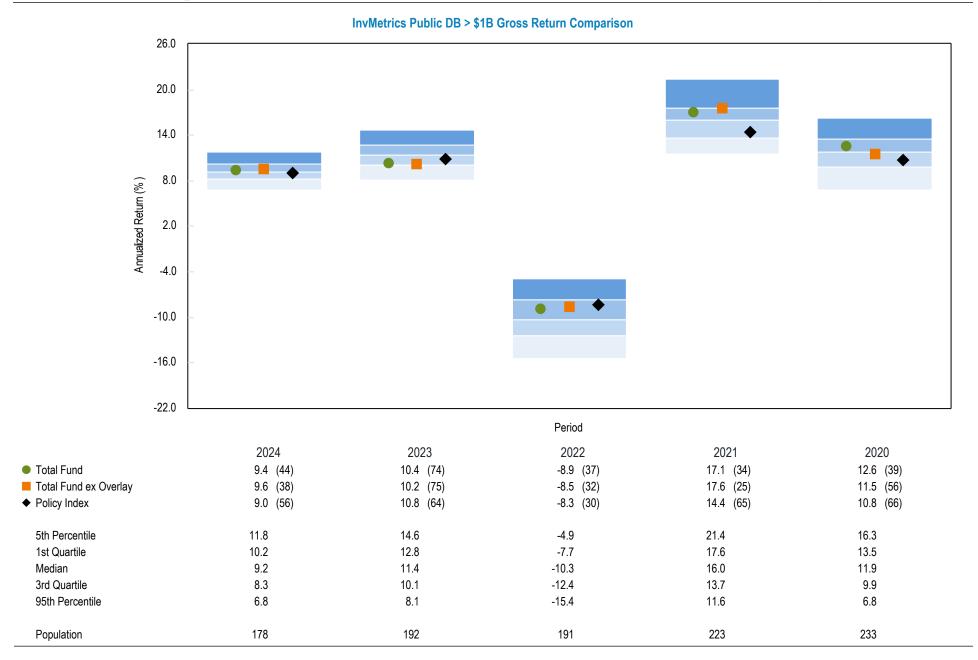
SSgA Barclays 1-10 Yrs TIPS Index	\$97,221,334	0.7
SSgA Real Asset	\$229,025,389	1.7
Cash Account	\$197,696,303	1.4
SSgA Overlay	\$59,674,521	0.4

		3 '	Years		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	4.2 (53)	7.4 (22)	0.0 (59)	0.0 (62)	1.1 (1)
Policy Index	4.2 (58)	7.8 (26)	0.0 (60)	-	0.0
Total Fund ex Overlay	4.3 (49)	6.9 (9)	0.0 (52)	0.1 (56)	1.4 (15)
Policy Index	4.2 (58)	7.8 (26)	0.0 (60)	-	0.0
		5	Years		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	10.1 (45)	7.5 (14)	1.0 (16)	0.3 (48)	2.7 (46)
Policy Index	9.2 (88)	7.5 (18)	0.9 (36)	-	0.0
otal Fund ex Overlay	10.2 (45)	7.1 (10)	1.0 (10)	0.3 (52)	2.8 (51)
Policy Index	9.2 (88)	7.5 (18)	0.9 (36)	<u>-</u>	0.0
		7	Years		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
Total Fund	7.7 (17)	7.8 (15)	0.7 (9)	0.4 (11)	2.5 (24)
Policy Index	6.8 (58)	7.6 (13)	0.6 (21)	- ' '	0.0
otal Fund ex Overlay	7.7 (18)	7.5 (11)	0.7 (8)	0.3 (15)	2.5 (30)
Policy Index	6.8 (58)	7.6 (13)	0.6 (21)	-	0.0
		10	Years		
	Anlzd Return	Anlzd Standard Deviation	Sharpe Ratio	Information Ratio	Tracking Error
otal Fund	7.6 (16)	7.3 (16)	0.8 (8)	0.3 (11)	2.3 (28)
Policy Index	6.8 (49)	6.9 (9)	0.7 (15)	<u>-</u> ` ` `	0.0
otal Fund ex Overlay	7.7 (14)	7.0 (13)	0.8 (4)	0.3 (11)	2.3 (29)
Policy Index	6.8 (49)	6.9 (9)	0.7 (15)	-	0.0

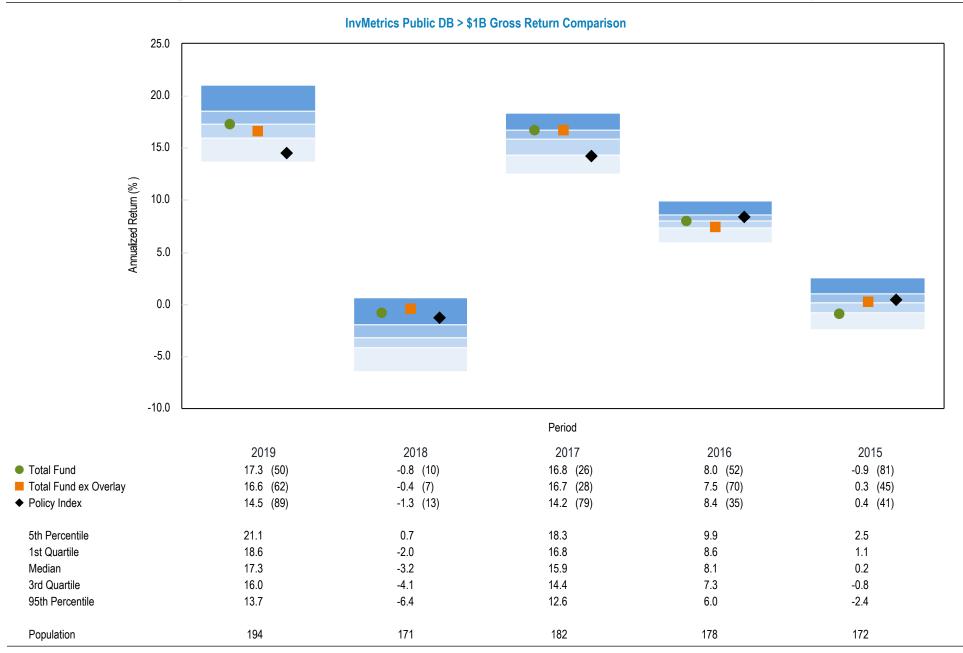


InvMetrics Public DB > \$1B Gross Return Comparison 14.0 12.0 10.0 8.0 Annualized Return (%) 6.0 4.0 2.0 0.0 -2.0 Period QTD Fiscal YTD 1 Yr 3 Yrs 5 Yrs 7 Yrs 10 Yrs Total Fund 0.9 (32) 4.6 (45) 6.3 (22) 4.2 (53) 10.1 (45) 7.7 (17) 7.6 (16) ■ Total Fund ex Overlay 0.8 (37) 4.6 (47) 6.3 (21) 4.3 (49) 10.2 (45) 7.7 (18) 7.7 (14) ◆ Policy Index 0.2 (69) 4.1 (65) 5.6 (55) 4.2 (58) 9.2 (88) 6.8 (58) 6.8 (49) 5th Percentile 1.8 5.7 7.1 5.7 12.0 8.2 8.0 1st Quartile 1.0 5.0 6.2 5.0 11.0 7.3 7.3 Median 0.5 4.5 5.8 4.3 10.0 6.9 6.8 3rd Quartile 0.1 3.8 5.0 3.6 9.5 6.4 6.4 95th Percentile -0.5 3.3 4.0 2.9 8.1 5.7 5.3 Population 81 81 81 79 76 74 74











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



Growth Benchmark	As of:			
	4/1/22	7/1/19	7/1/17	4/1/1
91 Day T-Bill +5%				5.08%
ICE BofA ML High Yield II	1.73%	1.73%	1.70%	1.70%
Credit Suisse Leveraged Loans	1.73%	1.73%	1.70%	1.70%
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag	8.62%	6.90%	6.78%	6.78%
HFRI FoF Composite Index + 1%		5.17%	5.08%	
MSCI ACWI ex US (Net)	27.58%	34.48%	33.90%	33.90%
MSCI ACWI IMI (Net)	6.89%			
Russell 3000	34.48%	34.48%	35.59%	35.59%
Cambridge Associates All PE 1 Qtr Lag	18.97%	15.52%	15.25%	15.25%
	100.0%	100.0%	100.0%	94.9%
Global Public Equity Benchmark	As of:			
	4/1/22	7/1/11		
MSCI ACWI		100.0%		
MSCI ACWI IMI (Net)	100.0%			
	100.0%	100.0%		
Domestic Equity Benchmark	As of:			
Domestic Equity Benchmark	AS 01. 1/1/08	9/1/04	1/1/00	7/1/8
Russell 1000	1/1/00	85.71%	87.5%	//1/0
Russell 2000		14.29%	12.5%	
Russell 3000	100.0%	14.29%	12.5%	100.0%
Russell 3000	100.0%	100.0%	100.0%	100.09
	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%			
144556111555	100.0%	100.0%		
International Equity Benchmark	As of:			
	1/1/08	1/1/00	7/1/86	
MSCI ACWI ex US (Net)	100.0%			
MSCI EAFE		75.0%	100.0%	
MSCI Emerging Markets		25.0%		
	100.0%	100.0%	100.0%	
Private Equity Benchmark	As of:			
	4/1/17	1/1/12	1/1/08	
Russell 1000 +3% 1QL		100.0%		
S&P 500 +2% 1QL			100.0%	
Cambridge Associates All PE 1 Qtr Lag	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%			
Gredit Suisse Leveraged Loans	100.0%			
Private Credit Benchmark	As of:			
0	4/1/17			
Credit Suisse Leveraged Loan + 2% 1 Qtr Lag	100.0% 100.0%			
Growth Oriented Absolute Return Benchmark	As of:			
91-day UST Bill +5%	7/1/17	<b>4/1/17</b> 100.0%		
HFRI FoF Composite Index + 1%	100.0%			
	100.0%	100.0%		
Diversifying Benchmark	As of:			
91 Day T-Bill +5%	7/1/23	4/1/22	7/1/17	<b>4/1/17</b> 28.00%
Bloomberg US Aggregate	48.00%	50.00%	40.00%	40.00%
Bloomberg US Treasury	16.00%	16.67%	20.00%	20.00%
FTSE WGBI ex US Unhedged			9.60%	9.60%
HFRI FoF Conservative Index	28.00%	29.17%	28.00%	
JPM GBI EM Diversified			2.40%	2.40%
ICE LIBOR Spot/Next Overnight USD	8.00%	4.16%		
	100.0%	100.0%	100.0%	100.0%
Diversifying Absolute Return Benchmark	As of:			
91-day UST Bill +5%	7/1/17	<b>4/1/17</b> 100.0%		
HFRI FoF Conservative Index	100.0%	100.070		
	100.0%	100.0%		
Real Return Benchmark	As of:			
	4/1/22	4/1/19	4/1/17	
Real Estate Benchmark	50.00%	43.75%	43.75%	
Private Real Assets Benchmark	38.89%	43.75%	43.75%	
Bloomberg Commodity			12.50%	
Liquid Real Return Custom Benchmark	11.11%	12.50%		
	100.0%	100.0%	100.0%	
Real Estate Benchmark	As of:			
	4/1/22	7/1/17 71		
NCREIF			100.0%	
NFI-ODCE	60.0%	65.0%		
NFI-ODCE net +1% 1Q Lag	40.0%	35.0%	400.00	
	100.0%	100.0%	100.0%	



RE-Value Added Benchmark	As of: 7/1/16	40/4/00			Lazard Benchmark	As of:	7/4/40	
NCREIF +2% 1Q Lag	7/1/10	100.0%			MCCLACIAL ex LICA	4/1/22	<b>7/1/12</b> 100.0%	
NFI-ODCE net +1% 1Q Lag	100.0%	100.0%			MSCI ACWI ex USA MSCI World ex US	100.0%	100.0%	
NET-ODGE flet +1 //6 TQ Lag	5 M (2000)	100.0%			MSCI WORD EX US		100.0%	
Private Real Assets Benchmark	As of:				Brigade Benchmark	As of:		
THREE ROULTSONE BOILDING	4/1/22	7/1/17	4/1/17		Brigade Benchillark	12/1/13		
CPI-U Headline +5%	(IIISTANDER CONTROL	#12 ft 15	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%			Credit Suisse Leveraged Loans	100.0%		
NCREIF Farmland 1 Qtr Lag	10.0%	10.0%				100.076		
NCREIF Timberland Index Lagged		10.0%			Prophiald Deal Return Custom	A a a f		
	100.0%	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:				FTSE EPRA Nareit Developed Index	20.0%		
DI - I - D II O I - I O I'I T I I D I	7/1/19				ICE BofA 7% Constrained REIT Preferred Securities Index	10.0%		
Bloomberg Roll Select Commodity Total Return	10.0%				ICE BofA USD Real Asset High Yield Custom Index	16.0%		
Bloomberg U.S. Floating Rate Note < 5 Yr	10.0%				ICE BofA USD Real Asset Corporate Custom Index	24.0%		
S&P Global LargeMidCap Commodity and Resources	10.0%					100.0%		
S&P Global Infrastructure Index - Net of Tax on Dividend	25.0%							
Bloomberg U.S. Government Inflation-Linked 1-10 Yrs	30.0%				SSgA Real Asset Benchmark	As of:		
FTSE EPRA Nareit Developed Liquid Index	15.0%				oog/t tour/took Donomium	3/2/2018	10/1/15	2/1/08
	100.0%				Bloomberg US Govt Inflation-Linked 1-10 Yrs	0/2/2010	10.0%	2/1/00
A114 A 114 114	1.00				Bloomberg US TIPS		10.0%	20.0%
Cash Benchmark	As of:				Bloomberg 1-10 Yr US TIPS	30.0%	10.070	20.070
	4/1/22	7/1/92			Bloomberg Roll Select Commodity TR	10.0%	20.0%	
91 Day T-Bills		100.0%			Bloomberg USD Floating Rate Note <5yr	10.0%	20.070	
NFI-ODCE net +1% 1Q Lag	100.0%				DJ US Select REIT	10.070		30.0%
	100.0%	100.0%			FTSE EPRA/NAREIT Developed Liquid	15.0%	10.0%	30.070
	7800 SART				MSCI World Natural Resources	13.070	20.0%	25.0%
nceBernstein Benchmark	As of:				S&P Global Large Mid Cap Commodity Resources	10.0%	20.070	23.070
	1/1/01		8	5/1/89	S&P Global Infrastructure	25.0%	20.0%	
sell 1000	100.0%				S&P Global infrastructure S&P GS Commodities	23.0%	20.0%	25.0%
sell 3000		100.0	%				10.00/	23.0%
hire 2500				100.0%	S&P MLP	400.00/	10.0%	400.00/
	100.0%	100.0	%	100.0%		100.0%	100.0%	100.0%
le Capital Benchmark	As of:				Cash Benchmark	As of:		
The state of the s	2/1/19	9/1/0	8			4/1/22	7/1/92	
sell 1000 Value		100.09			91 Day T-Bills		100.0%	
sell 1000	100.0%				Secured Overnight Financing Rate	100.0%		
	100.0%					100.0%	100.0%	



## Glossary

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

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

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

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

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

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

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