Verus



PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

PERIOD ENDING: JUNE 30, 2025

Investment Performance Review for

Kern County Employees' Retirement Association

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3RD QUARTER 2025
Investment Landscape

Verus business update

Since our last Investment Landscape webinar:

- Verus hired Carlos Garcia as Accounting Specialist, and three new employees to join the Investment Analytics Team: Jonathan Verceles, Zander Richens, and Nick Utgard.
- Verus promoted Kelli Barkov to Business Operations Director, Anneke Meulblok to Business Operations Manager, Joe Ratliffe to Consulting Associate, and Nico Caballero to Private Markets Research Analyst.
- The 2025 Real Assets Outlook was released.
- Recent research, found at *verusinvestments.com/research:*
  - ***State of the Core Real Estate Fund Universe***
  - ***LDI for Public Sponsors***
  - ***So, What Now?***
  - ***This Matters, and This Doesn't***

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Recent Verus research

Visit: verusinvestments.com/research

Thought leadership

STATE OF THE CORE REAL ESTATE FUND UNIVERSE

Verus addresses the state of the core real estate fund universe. Discussion includes the mixed fundamental conditions facing the asset class and the heavy redemption queues that continue to challenge certain funds and frustrate investors who are seeking liquidity.

SO, WHAT NOW?

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

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.

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.

2nd quarter summary

THE ECONOMY

— Real GDP growth beat expectations in Q2, coming in at 3.0% quarter-over-quarter annualized (2.0% year-over-year) relative to expectations for a growth number in the mid-2s. This report was welcome news to investors and served as further evidence that the economy is moving along at a moderate pace, rather than slowing abruptly. Calendar year 2025 growth will likely be much milder than the surprising strength shown during 2024.

— U.S. inflation remained sticky and above the Fed's target, rising from 2.4% to 2.7%. There is evidence of price increases across particular items such as televisions, auto parts, and medical equipment, but these rises so far are not large enough to materially lift the overall inflation rate. Some broad inflation categories such as 'apparel' and 'new automobiles' have fallen in price since March.

EQUITY

— If U.S. businesses mostly choose to absorb the cost of tariffs rather than hike prices, that would be good for inflation. But this scenario would be damaging to corporate earnings as tariffs hit profit margins. Year-over-year Q2 S&P 500 earnings growth is expected to be +5.6%, according to FactSet as of July 11th. This would mark the weakest growth rate since Q4 2023. Earnings growth is expected to ramp up in the coming quarters, with +9.3% growth for calendar year 2025, according to FactSet.

FIXED INCOME

— The 10-year U.S. Treasury yield ended Q2 relatively unchanged at 4.23%. Shorter-term bond yields came down slightly, contributing to a positive return on short- and medium-term Treasury bonds.

— Credit spreads widened in April following tariff "Liberation Day", but quickly rebounded after delays, progress regarding negotiations, and muted economic impacts helped improve the outlook. Despite widening by nearly 1% in April, high yield bond spreads ended the quarter tighter by 56bps at 2.96%. Investment grade spreads similarly tightened, ending the quarter at 0.88%. These levels are extremely tight relative to history.

ASSET ALLOCATION ISSUES

— Regional equity markets delivered similar returns. U.S. investors experienced substantial underperformance from domestic equities. However, most of this under-performance was a product of changes in U.S. dollar value, rather than differences in returns between domestic and non-U.S. equity. Depreciation in the dollar resulted in large currency gains for unhedged investors.

— Market-priced volatility spiked above 50 to extreme levels in early April as trade policies shocked markets and led to fears of a trade slowdown and global recession. Bilateral de-escalation of tariffs has eased market volatility, as well as announcements of new trade agreements.

The U.S. job market, household spending, and business investment have remained fairly resilient

Surprisingly strong economic data suggests the likelihood of recession is low

What drove the market in Q2?

"The stock market is on the verge of an all-time record"

S&P 500

Jan 1st	Feb 1st	Mar 1st	Apr 8th	May 1st	June 1st	July 1st
5868	5994	5849	4982	5604	5935	6198

Article Source: CNN, June 25th, 2025 (April 8th shown as this was the market bottom)

"Israel-Iran Ceasefire Holds, Offering Hope…"

WTI Crude Oil

April 1st	April 30th	May 15th	May 30th	June 20th	June 30th
$71.2	$58.2	$61.6	$60.8	$73.8	$65.1

Article Source: CBS News, June 25th, 2025

"Dollar drops on Middle East optimism, Euro highest since 2021"

Euro/USD Exchange Rate

Jan '25	Feb '25	Mar '25	Apr '25	May '25	Jun '25
1.04	1.04	1.08	1.14	1.14	1.18

Article Source: Reuters, June 24th, 2025

"Trump announces sweeping new tariffs to promote U.S. manufacturing, risking inflation and trade wars"

Average U.S. Tariff Rate

2000	2005	2010	2015	2020	2025*
2.1%	1.8%	1.8%	1.7%	1.5%	15.6%

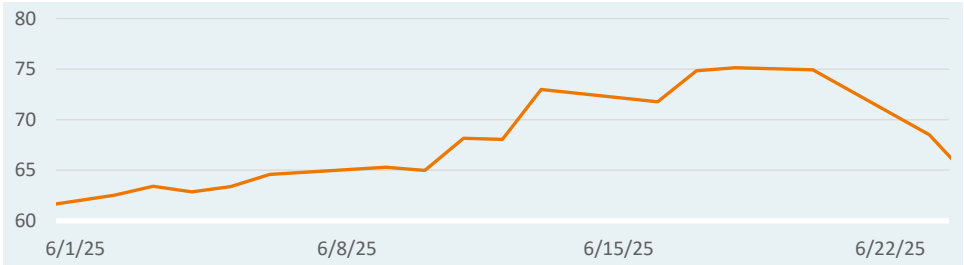
Article Source: Associated Press, April 3rd, 2025
**Yale Budget Lab estimate of tariff rate as of June 1st if tariff policy were to be held perpetually*

U.S. EQUITY PERFORMANCE



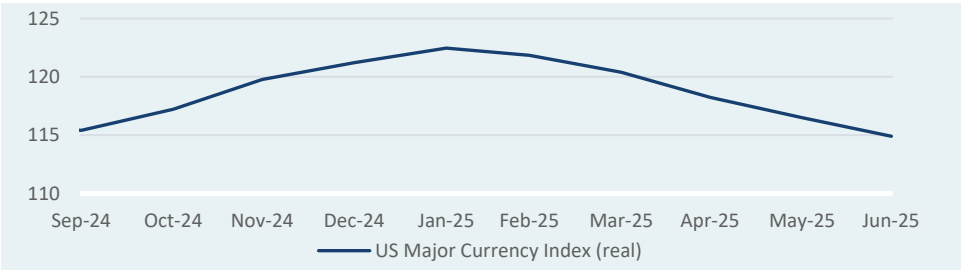
Source: Standard & Poor's, as of 6/30/25

OIL PRICE (WTI CRUDE BBL)



Source: Bloomberg, as of 6/30/25

U.S. DOLLAR VALUE



Source: Bloomberg, as of 6/30/25

Economic environment

U.S. economics summary

— Real GDP growth beat expectations in Q2, coming in at 3.0% QoQ annualized (2.0% YoY) relative to expectations for a growth number in the mid-2s. This report was welcome news to investors and served as further evidence that the economy is moving along at a moderate pace, rather than slowing abruptly. Calendar year 2025 growth will likely be much milder than the surprising strength shown during 2024.

— There has been growing evidence that many worst case scenarios regarding tariffs and trade are unlikely to materialize. U.S. GDP growth rebounded strongly, the job market remains resilient, consumer spending growth is positive, and both business and household sentiment is improving. Inflation levels have fallen rather than risen, although uncertainty exists around how tariffs will impact everyday prices.

— The rate of unemployment fell to 4.1% in June, alongside a jobs report that beat expectations by a wide margin (147,000 vs. 117,500 expected). Weekly jobless claims activity has been very low (the number of individuals who newly filed for unemployment benefits).

— The Federal Reserve kept rates steady again in June at a target range of 4.25%-4.50%, expressing concerns about possible inflationary impacts of tariffs. Chair Jerome Powell at the meeting said that policymakers are "well positioned to wait" and that there are few signs of economic weakening.

— Inflation was sticky and above the Fed's target during Q2, rising from 2.4% to 2.7%. Excluding food and energy prices, inflation held steady at 2.9% in June relative to 2.8% in March. So far, there is some evidence of tariff-driven inflation but not enough to lift the overall inflation rate.

— Poor consumer sentiment has been a key story of 2025, as households became concerned about inflation, slowing growth, and worse job prospects due to tariffs and shifting U.S. trade policy. However, sentiment improved in June according to the U of Michigan survey. One-year inflation expectations dropped significantly, from 6.6% in May to 5.0% in June, as Americans see that tariffs are not yet leading to broad-based price rises.

	Most Recent	12 Months Prior
Real GDP *(YoY)*	2.0% *6/30/2025*	3.0% *6/30/2024*
Inflation *(CPI YoY, Core)*	2.9% *6/30/2025*	3.3% *6/30/2024*
Expected Inflation *(5yr-5yr forward)*	2.3% *6/30/2025*	2.3% *6/30/2024*
Fed Funds Target Range	4.25% - 4.50% *6/30/2025*	5.25% - 5.50% *6/30/2024*
10-Year Rate	4.2% *6/30/2025*	4.4% *6/30/2024*
U-3 Unemployment	4.1% *6/30/2025*	4.1% *6/30/2024*
U-6 Unemployment	7.7% *6/30/2025*	7.4% *6/30/2024*

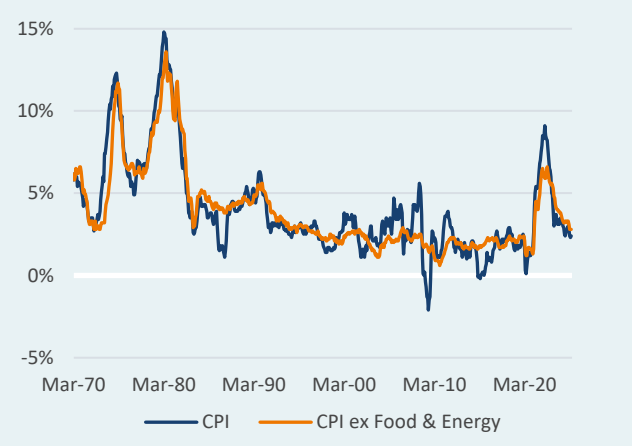
Inflation

U.S. inflation (CPI) remained sticky and above the Fed's target during Q2, rising from 2.4% to 2.7%. Excluding volatile food and energy prices, inflation held steady at 2.9% in June relative to 2.8% in March. We believe there is both some good news and also some bad news around recent inflation trends.

With regard to good news, investors have been watching closely for any signs of tariff-driven price increases, and after the government CPI report in June, there is evidence of price increases across particular items such as televisions, auto parts, and medical equipment, but these rises are so far not large enough to materially lift the overall inflation rate. Some broad inflation categories such as 'apparel' and 'new automobiles' reflect prices that are actually lower than March levels. Investors will need to continue to wait and see the degree to which businesses are passing tariff costs on to customers or are instead absorbing the costs.

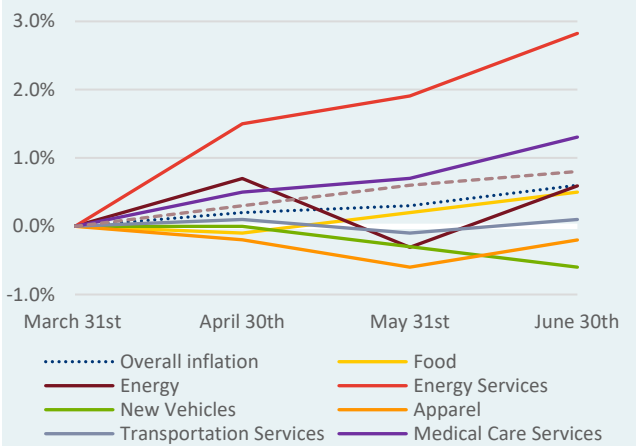
With regard to bad news around inflation, looking across all goods and service price categories, price rises were fairly broad and consistent in June. Inflation trends suggest perhaps a 2.5-3.5% range of inflation in the future—not too far from the recent range. Without further weakness in the economy, it is difficult to imagine price trends slowing materially or reversing, and the potential for tariff-fueled inflation adds some upside risk to the future range of outcomes.

U.S. CPI (YOY)



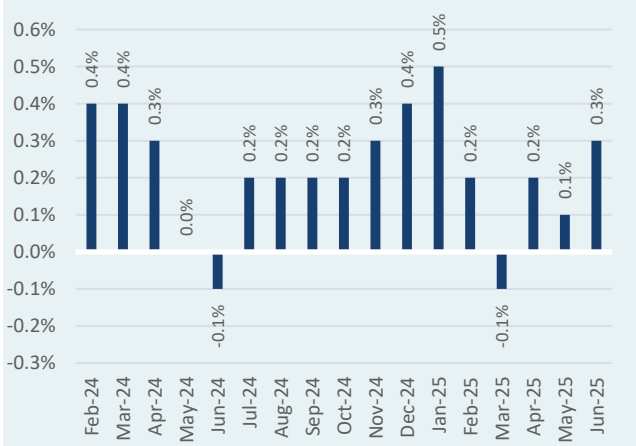
Source: BLS, as of 6/30/25

INFLATION SINCE "LIBERATION DAY"



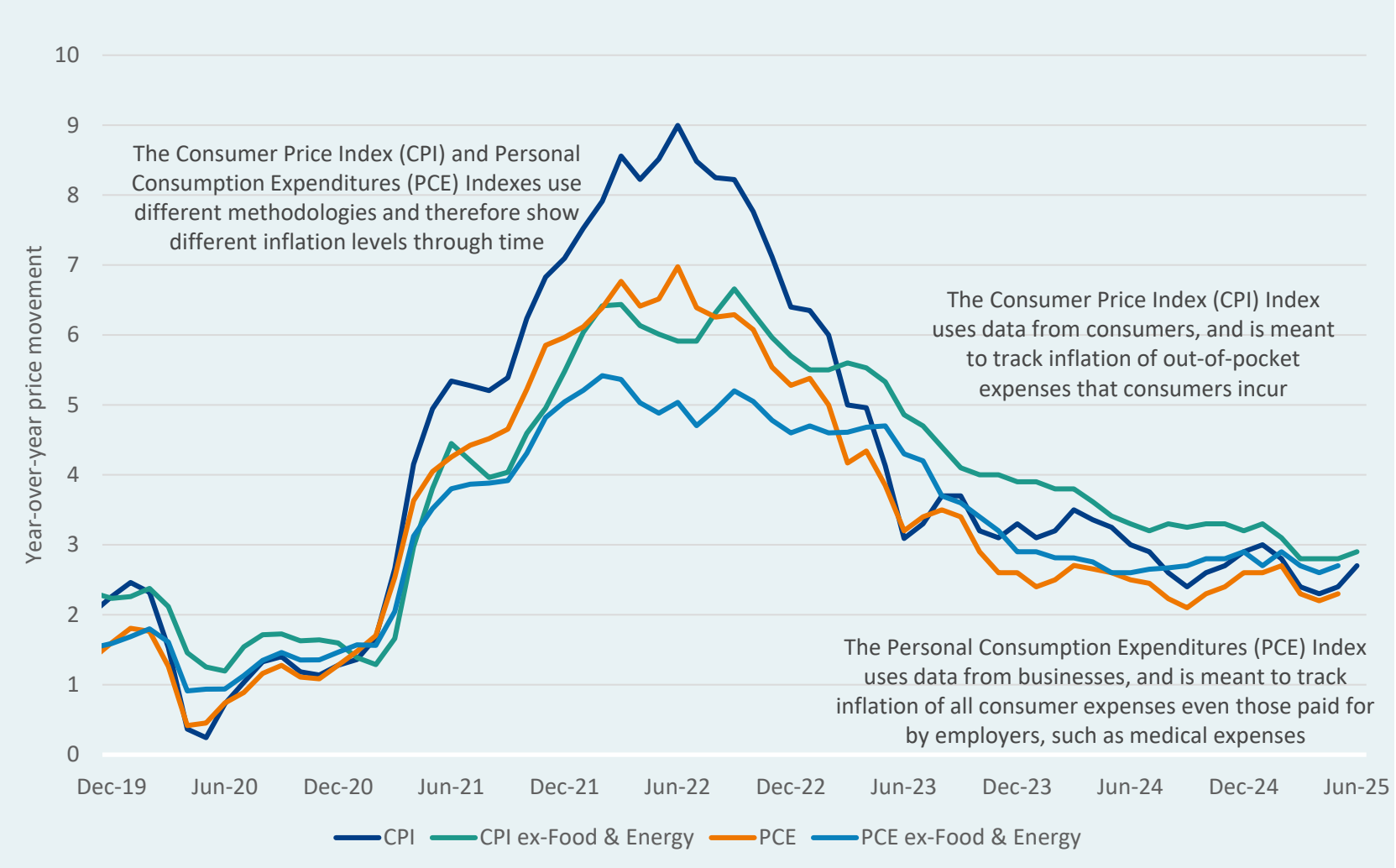
Source: Verus, BLS, as of 6/30/25

MONTHLY PRICE MOVEMENT (CPI)



Source: BLS, as of 6/30/25

U.S. inflation remains above the Fed target



Inflation remained sticky, above the Fed's 2% target

So far, there is little evidence of broad tariff-fueled price rises

Source: FRED, Verus, as of 6/30/25 – or most recent release

GDP growth

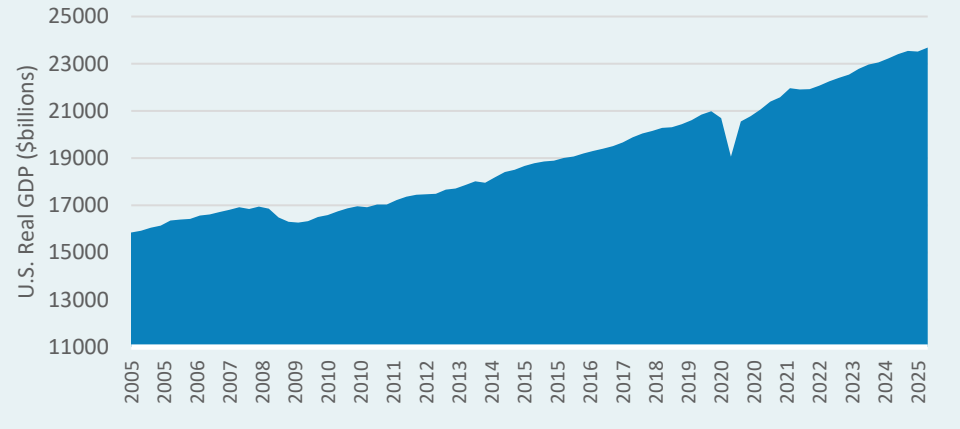
Real GDP growth beat expectations in Q2, coming in at 3.0% quarter-over-quarter annualized (2.0% year-over-year) relative to expectations for a growth number in the mid-2s. This report was welcome news to investors and served as further evidence that the economy is moving along at a moderate pace, rather than slowing abruptly. Calendar year 2025 growth will likely be much milder than the surprising strength shown during 2024.

Consumer spending, which is the largest component of the economy, once again showed a slow growth rate of 1.4% annualized, but growth was positive despite very poor sentiment since April. Business investment was also positive at a 1.9% annualized growth rate as businesses continued to spend and invest despite the shift in U.S. trade policy.

An interesting dynamic in the U.S. economy has been occurring across inventory purchases and import activity (see bottom right chart). The first and second quarters were nearly mirror opposite images of one another in this respect. In Q1, businesses dramatically increased their foreign purchases (imports) in an effort to avoid incoming tariffs. Imports often occur to the detriment of domestic purchases, which means imports dragged growth significantly lower in Q1. In Q2, this reversed as fewer imports were needed after such large Q1 purchases, meaning fewer imports greatly boosted growth in Q2. Inventories showed a similar effect but in opposite order—big inventory purchases occurred in Q1 as businesses avoided tariffs which boosted the economy and then in Q2 fewer inventories were needed which created a drag on the economy.

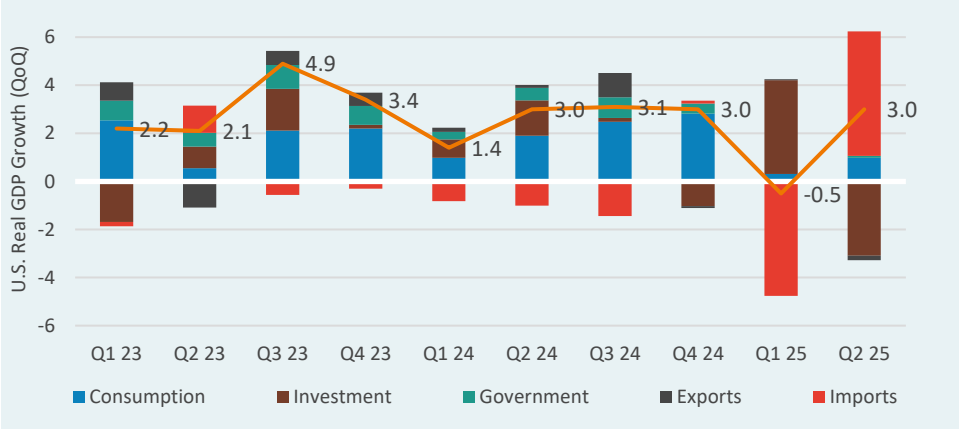
U.S. real GDP growth of 3% beat expectations and provided further evidence that economic activity remains stable

U.S. GDP GROWTH



Source: FRED, as of 6/30/25

U.S. REAL GDP COMPONENTS (QOQ)



Source: FRED, as of 6/30/25

Labor market

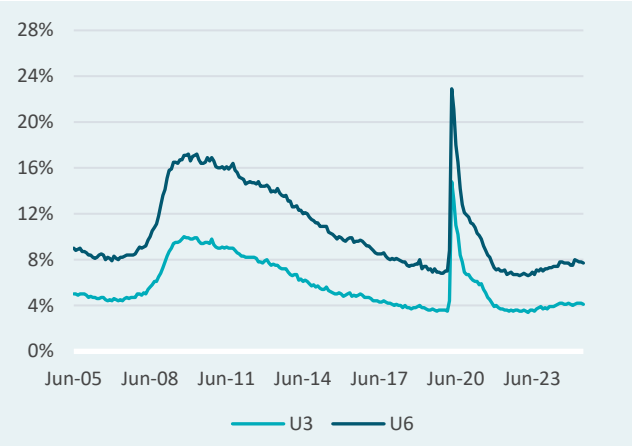
Most aspects of the labor market continue to suggest good to strong conditions. The rate of unemployment fell to 4.1% in June, alongside a jobs report that beat expectations by a wide margin (147,000 vs. 117,500 expected). Additionally, weekly jobless claims activity has been very low (the number of individuals who newly filed for unemployment benefits). In fact, job openings defied expectations in April and May, rising during both months. However, not all aspects of the job market have shown strength. Hiring activity has been muted and job seekers report having more difficulty finding work. Uncertainty exists around government layoffs and the ability of those workers to find new positions—this may be playing a part in jobs data (a large portion of job gains in June were for state & local government positions). The labor market tends to be a key indicator of the health of the economy, which suggests recession risk is low.

Less U.S. immigration will likely impact the economy throughout the year—as fewer workers are available in certain occupations and regions, perhaps pushing wages upwards due to less supply of cheap labor. In June it was reported that the Trump administration was considering exempting farms, hotels, and restaurants from immigration crackdowns. As certain businesses face pressure, we would not be surprised to see the executive branch ease immigration enforcement in some targeted ways.

The job market remains relatively strong

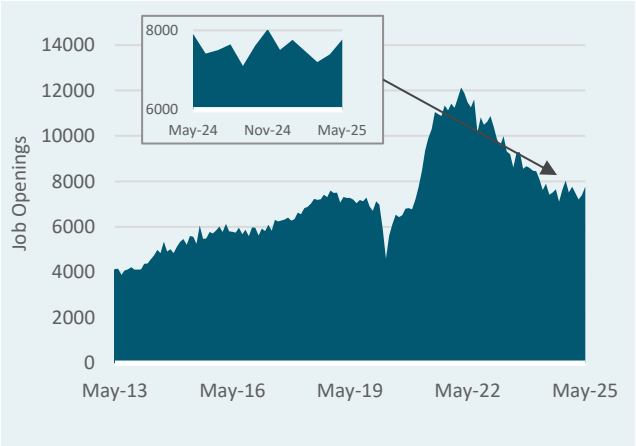
Immigration enforcement may impact business activity & wages in 2025

U.S. UNEMPLOYMENT



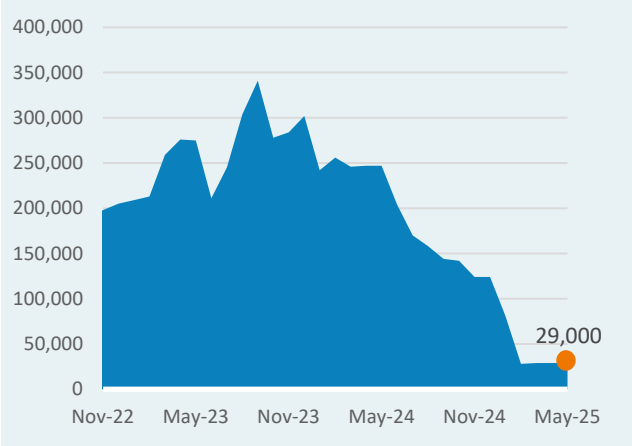
Source: FRED, as of 6/30/25

U.S. JOB CUT ANNOUNCEMENTS



Source: FRED, Nonfarm Job Openings, as of 5/31/25

U.S. BORDER ENCOUNTERS (MONTHLY)



Source: U.S. Customs & Border Protection total national unlawful encounters, as of 5/31/25

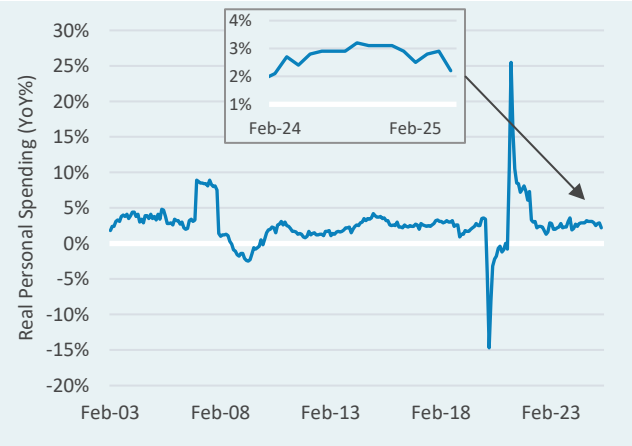
The consumer

Inflation-adjusted personal spending growth was 2.2% year-over-year in May, materially weaker than the latter-half of 2024 (above 3%) but still at a level that implies a moderate U.S. economic growth rate. Spending has been somewhat volatile month-to-month and there is much uncertainty around the degree to which households are pulling back on purchases.

So far, data suggests a low chance of near-term recession. Consumer spending growth has been positive and, given the recent upturn in consumer sentiment, it would be surprising to see a sharp slowdown many months after the initial shock to confidence amidst tariff fears. Here we show automobile and overall retail sales as possible barometers of discretionary spending. Auto sales saw large gains in spring but have since fallen back towards early 2025 levels, while retail sales overall have been steady.

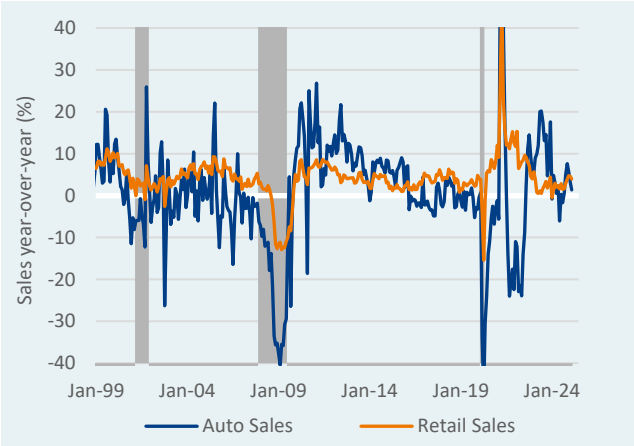
The average household savings rate was relatively stable at 4.5% during the quarter, after rising notably through the first quarter. As always, it is difficult to pin down specific reasons for higher household savings. Elevated savings could be a product of more conservative spending habits if households are more concerned about the future, it could be a natural result of lower U.S. inflation as price rises slow and more income is left over to save, or it could be due to other factors.

REAL PERSONAL SPENDING



Source: FRED, as of 5/31/25

AUTO & RETAIL SALES



Source: FRED, as of 5/31/25

PERSONAL SAVINGS RATE



Source: FRED, as of 5/31/25

Sentiment

Very poor consumer sentiment has been a key story of 2025, as households became concerned about potentially rising inflation, a slowing economy, and worse job prospects as consequences of tariffs and shifting U.S. trade policy. However, sentiment has seen improvement according to popular sentiment surveys. It appears that some fears are easing as the economy and job market remain strong, though households are more pessimistic than prior to the shift in U.S. trade policy.

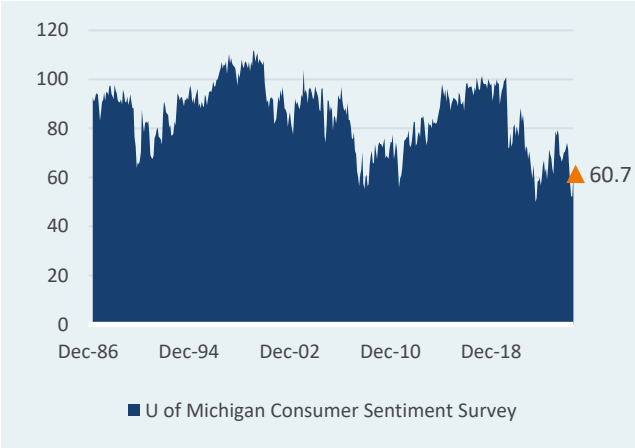
The University of Michigan survey improved in June, due to some easing of fears and acknowledgment that economic conditions remain surprisingly resilient. One-year inflation expectations dropped significantly, from 6.6% in May to 5.0% as Americans see that tariffs are not leading to broad price rises.

The Conference Board Consumer Confidence Index improved after April, but in June saw some deterioration. The Future Expectations portion of the index, which reflects the shorter-term outlook for income, business, and labor market conditions, is at a low level that historically has suggested a recessionary outlook.

Small business sentiment moved slightly higher in Q2, from 97.4 to 98. Conditions are mildly better than the 50-year average level, with more business owners expecting better business conditions in the future. The greatest concern is labor quality with many employers struggling to find qualified workers.

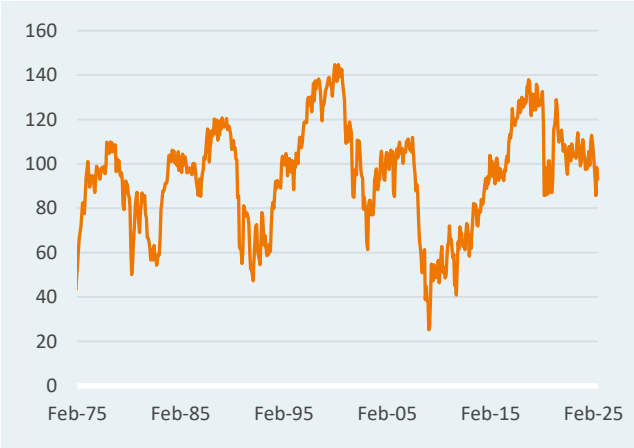
Sentiment was mixed but is better than April levels, as households see that trade policies have not led to recession or materially higher inflation

CONSUMER SENTIMENT (UNIV. OF MICHIGAN)



Source: University of Michigan, as of 6/30/25

CONSUMER CONFIDENCE (CONFERENCE BOARD)



Source: Conference Board, as of 6/30/25

NFIB SMALL BUSINESS SENTIMENT



Source: NFIB, as of 5/31/25

Housing

Home prices in the United States rose 1% over the past year nationwide, according to Redfin, although price gains may be set to slow as new construction rises along with overall inventory, and homes are sitting on the market longer.

U.S. residential housing construction activity increased, now closer to long-term average levels. However, sales of those homes have lagged, resulting in historically high inventory levels *relative to sales*. It seems reasonable to assume that extreme unaffordability is contributing to sluggish new home sales. The 30-year average fixed mortgage rate sat at 6.8% to end Q2, only a bit lower than the recent high of 7.8%, which was the highest mortgage rate since year 2000. The price of an average home has increased approximately 200% since the year 2000, according to the S&P CoreLogic Case-Shiller Index, while average household weekly wages have gone up only 100%.

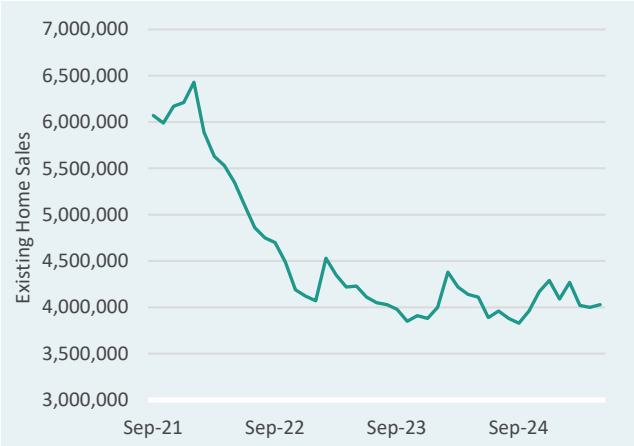
National average rent costs are down -1% year-over-year according to Redfin. "Apartment construction in America has been hovering near a 50-year high, and even though renter demand is strong, it's not keeping pace with supply," said Redfin Senior Economist Sheharyar Bokhari. Oversupply is becoming a problem as new apartment building vacancies sit near record levels.

30-YEAR MORTGAGE RATE (%)



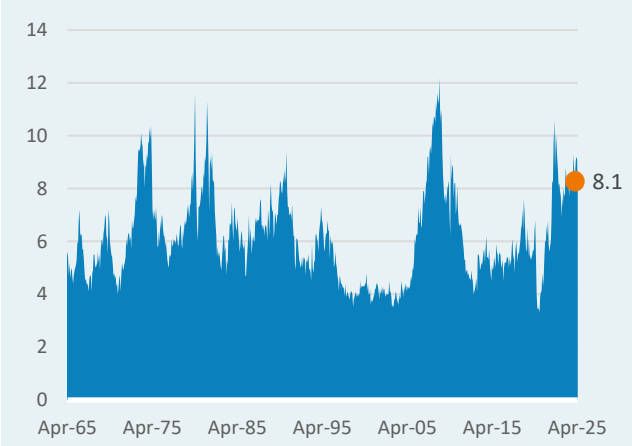
Source: Freddie Mac, as of 6/30/25

EXISTING HOME SALES



Source: National Association of Realtors, as of 5/31/25

DAYS OF NEW HOUSING INVENTORY



Source: FRED, as of 4/30/25 – days of inventory relative to daily sales

International economics summary

— Economic growth for developed economies during 2025 is expected be weak, ranging from 0.2% real GDP growth in Germany, to 0.8% in Japan, 1.0% in the Eurozone, and 1.5% in the U.S. These estimates moved lower alongside trade conflicts and barriers that will crimp economic activity.

— The ECB cut rates in June by 25bps, likely raising tensions between President Trump and Fed Chair Powell regarding U.S. rate policy. President Trump has been placing pressure on Powell very publicly, as he sees lower interest rates as stimulative to the economy and an approach to mitigate high national debt service costs.

— Escalating tensions between Iran and Israel led to fears of broader conflict. A ceasefire between the two nations was achieved after the U.S. executed a direct attack on Iranian nuclear facilities which was followed by a muted military response. This ceasefire agreement has held, although uncertainty remains high as Iran's leadership ramped up anti-U.S. rhetoric in late-June.

— Following the German election win by the conservative Christian Democratic Union and its alliance the Christian Social Union, Friedrich Merz was elected Chancellor and a grand coalition with the Social Democratic Party was formed. The coalition's main priorities include economic growth, border security, a more pragmatic approach to energy, and further European integration.

— On May 8th, the BOE decided to cut interest rates by 25bps to 4.25%. This marked the fourth rate cut of 25bps since August, when the policy rate was 5.25%. The BOE cited cooling inflation, slowing growth, and a weaker job market as contributing factors.

— 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 rest of 2025.

	GDP (Real, YoY)	Inflation (CPI, YoY)	Unemployment
United States	2.0% *6/30/2025*	2.7% *6/30/2025*	4.1% *6/30/2025*
Eurozone	1.4% *6/30/2025*	2.0% *6/30/2025*	6.2% *6/30/2025*
Japan	1.7% *3/31/2025*	3.3% *6/30/2025*	2.6% *5/31/2025*
Canada	1.2% *5/31/2025*	1.9% *6/30/2025*	6.9% *6/30/2025*
BRICS Nations	5.1% *3/31/2025*	1.6% *6/30/2025*	4.9% *6/30/2025*
Brazil	2.9% *3/31/2025*	5.4% *6/30/2025*	5.8% *6/30/2025*
Russia	1.4% *3/31/2025*	9.4% *6/30/2025*	2.2% *6/30/2025*
India	7.4% *3/31/2025*	2.1% *6/30/2025*	8.5% *12/31/2017*
China	5.2% *6/30/2025*	0.1% *6/30/2025*	5.0% *6/30/2025*

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

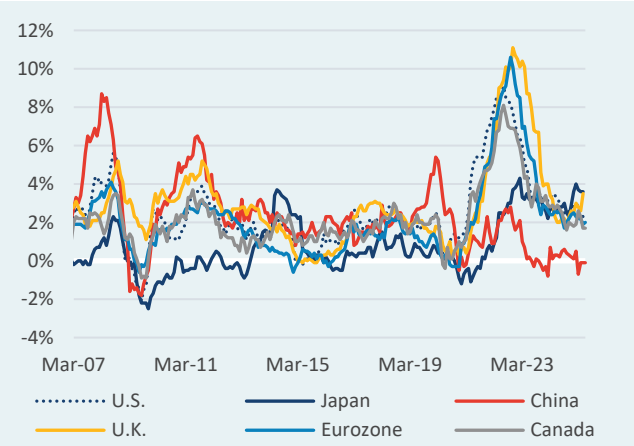
The Eurozone grew 1.5% YoY in Q1. Full year growth is expected at only 0.9%, according to the ECB which cited trade policy uncertainty. On July 4th, the central bank cut rates to 2.0% as inflation continued to moderate, though a prolonged trade war could further weaken the economy and reignite some inflation pressure.

The U.S. expanded the initial February tariff rates on "Liberation Day", including a 10% baseline and 54% on China, 20% on the EU, and 25% on Canada and Mexico. The U.S. cited business operation onshoring, national defense, improving the trade deficit / foreign terms of trade, and immigration and drug control as goals of tariff policy. No permanent trade deals were secured by mid-July, with partners making concessions but also claiming that they would seek to diversify trade away from the U.S. The trade war with China escalated after "Liberation Day", with tariff rates reaching 145% on Chinese goods and 125% on U.S. goods. A 90-day deal in June reduced tariffs to 30% on Chinese goods and 10% on U.S. goods and included a Chinese commitment to continue exports of rare earth minerals, alleviating the recent halt in exports.

Canada, Mexico, and the EU initially imposed counter-tariffs but suspended them after a 90-day pause was announced in May and later extended through August 1, bringing most countries to the baseline tariff rate of 10%. We believe it is likely that 10% baseline tariffs will stay in place long-term.

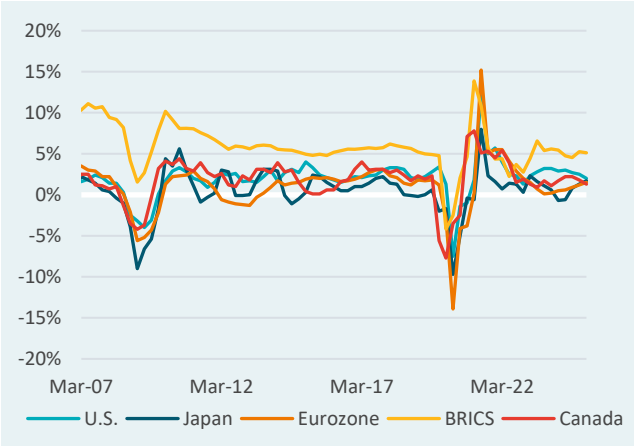
In May, the U.S. and U.K. announced a non-binding Economic Prosperity Deal, maintaining the 10% U.K. tariff while reducing rates on select sectors. The U.K.'s relatively low tariff rate may reflect its strategic alignment with the U.S.

INFLATION (CPI YEAR-OVER-YEAR)



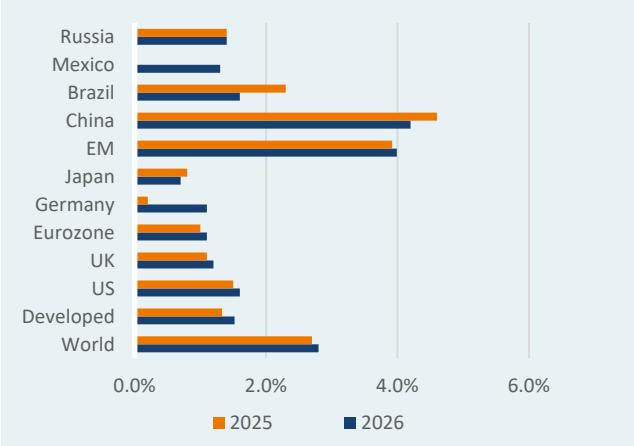
Source: BLS, Verus, as of 6/30/25 or most recent date

REAL GDP GROWTH (YEAR-OVER-YEAR)



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

GDP GROWTH EXPECTATIONS



Source: Bloomberg, as of 6/30/25

Fixed income rates & credit

Fixed income environment

— The 10-year U.S. Treasury yield was unchanged at 4.23% during the quarter, although yields moved in a very wide range from slightly below 4.0% following trade "Liberation Day" to 4.6% after Moody's downgraded the U.S. credit rating and fears circulated of a debt crisis. With notable upside and also downside risks to yields, investors may be justified in avoiding large bond duration bets.

— The Federal Reserve kept rates steady again in June at a target range of 4.25%-4.50%, expressing concerns about possible inflationary impacts of tariffs. Chair Jerome Powell at the meeting said that policymakers are "well positioned to wait" and that there were few signs of economic weakening. President Trump continued to place pressure on Jerome Powell to cut rates.

— The U.S. yield curve has returned to an upward sloping shape—the steepest since early 2022 when the Federal Reserve began quickly hiking interest rates. The 10-year U.S. Treasury yield was 0.6% higher than the 2-year yield as of June 30th.

— Longer duration credit lagged shorter duration. The yield curve experienced some steepening due primarily to a selloff in the longer end of the curve during April. Long duration corporate bonds lost -1.9% while Bank loans added +2.3% and high yield returned +3.5%.

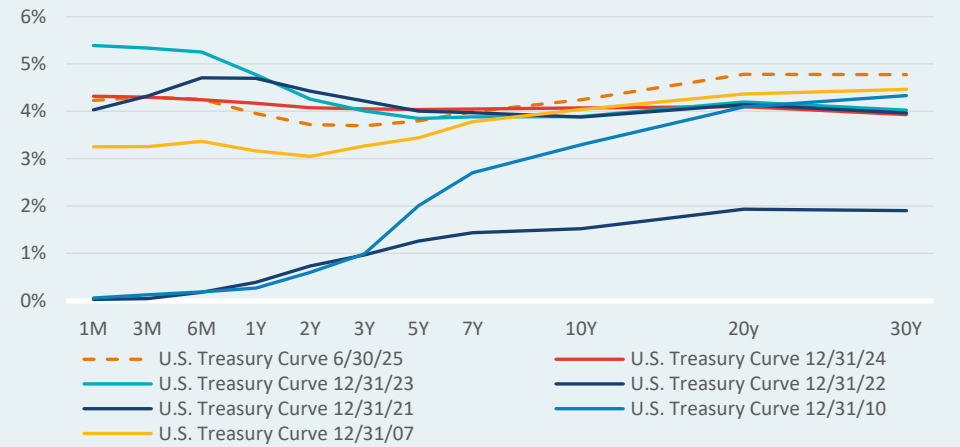
— Credit spreads widened due to risk off movements, and lower quality spreads experienced the largest shifts. High yield bond spreads tightened by 56bps to 2.96%, while investment grade spreads fell to 0.88%. Leveraged loan spreads likewise tightened 25 basis points to 4.47%. Despite recent widening events, BB- and B- rated credit spreads remain below long-term historical averages while CCC-rated credit remains closer to the long-term average.

	QTD Total Return	1 Year Total Return
Core Fixed Income (Bloomberg U.S. Aggregate)	1.2%	6.7%
Core Plus Fixed Income (Bloomberg U.S. Universal)	1.4%	7.1%
U.S. Treasuries (Bloomberg U.S. Treasury)	0.8%	5.9%
U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+)	-1.9%	2.1%
U.S. High Yield (Bloomberg U.S. Corporate HY)	3.5%	10.4%
Bank Loans (S&P/LSTA Leveraged Loan)	2.3%	7.3%
Emerging Market Debt Local (JPM GBI-EM Global Diversified)	7.6%	14.0%
Emerging Market Debt Hard (JPM EMBI Global Diversified)	3.3%	10.7%
Mortgage-Backed Securities (Bloomberg MBS)	1.1%	7.2%

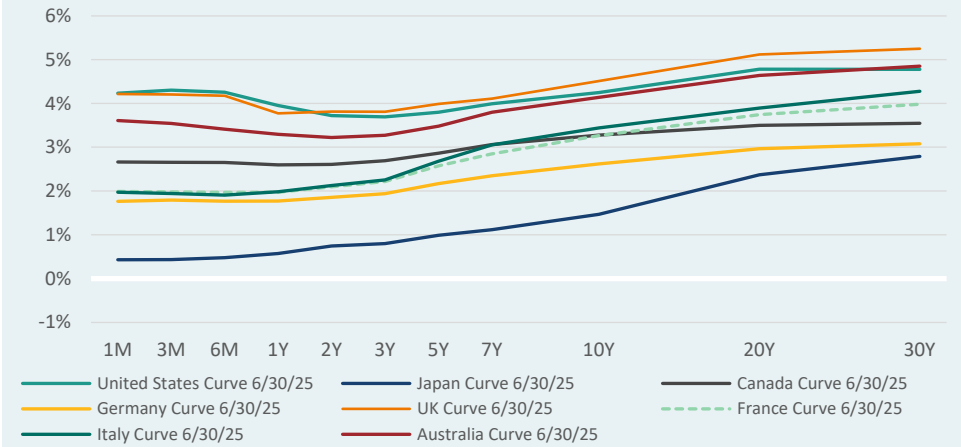
Source: Standard & Poor's, J.P. Morgan, Bloomberg, as of 6/30/25

Yield environment

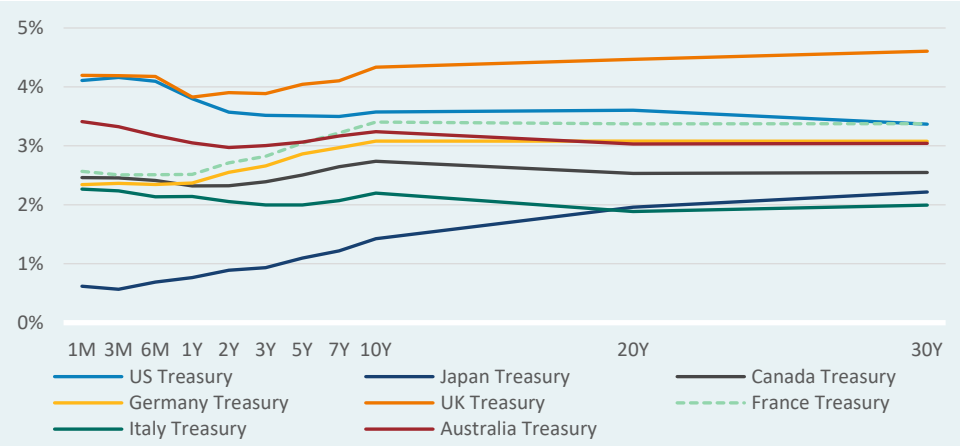
U.S. YIELD CURVE



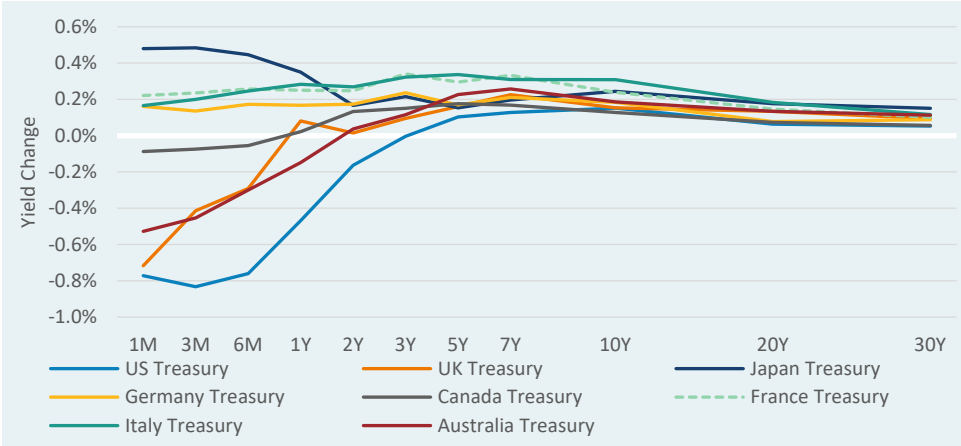
GLOBAL GOVERNMENT YIELD CURVES



YIELD CURVE CHANGES OVER LAST FIVE YEARS



IMPLIED CHANGES OVER NEXT YEAR



Source: Bloomberg, as of 6/30/25

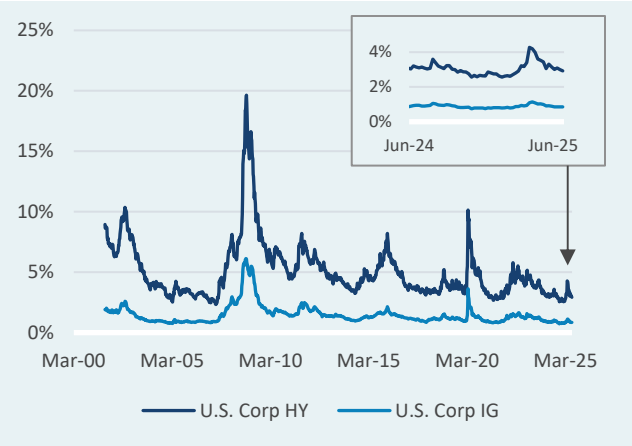
Credit environment

During Q2, longer duration credit noticeably lagged shorter duration credit. The yield curve experienced a bearish steepening event in April due primarily to a selloff in the longer end of the curve (a move higher in yields). Shorter duration credit assets such as bank loans and high yield delivered +2.3% and +3.5% returns respectively, while long duration, higher quality credit lost -1.9%.

Returns within the high yield bond market were positive, with lower quality credits initially lagging BB- and B- rated bonds but outperforming during the months of May and June. Bonds rated CCC, including distressed, returned +4.4% on the quarter, compared to +3.6% and +3.7% for BB- and B- rated bonds. respectively. Lower quality bank loans saw less of a loss during April, subsequently resulting in less return during the rally that followed. CCC-rated loans returned +2% while B- and BB- rated loans returned +2.6% and +2.3%, respectively.

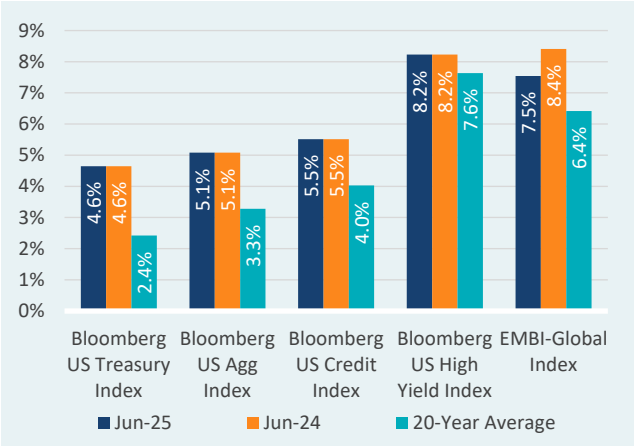
Credit spreads widened in April following "Liberation Day" but quickly rebounded as initial tariffs were delayed and the consumer outlook improved. Despite widening by nearly 1% in April, high yield bond spreads ended the quarter tighter by 56bps at 2.96%. Investment grade spreads similarly tightened, ending the quarter at 0.88%. Bank loan spreads widened less in April but still tightened in May and June, ending the quarter 25bps lower at 4.47%. After the recovery from April's selloff, credit spreads remain well below long-term historical averages. This continues to reflect an apparent confidence in corporate debt, though the total impact of tariffs on U.S. businesses is not yet known.

SPREADS



Source: Barclays, Bloomberg, as of 6/30/25

YIELD TO MATURITY



Source: Morningstar, as of 6/30/25

CREDIT SPREAD (OAS)

Market	6/30/2025	6/30/2024
Long U.S. Corp	1.0%	1.2%
U.S. Inv Grade Corp	0.8%	0.9%
U.S. High Yield	2.9%	3.1%
U.S. Bank Loans*	4.4%	4.8%

Source: Barclays, Credit Suisse, Bloomberg, as of 6/30/25
**Discount margin (4-year life)*

Default & issuance

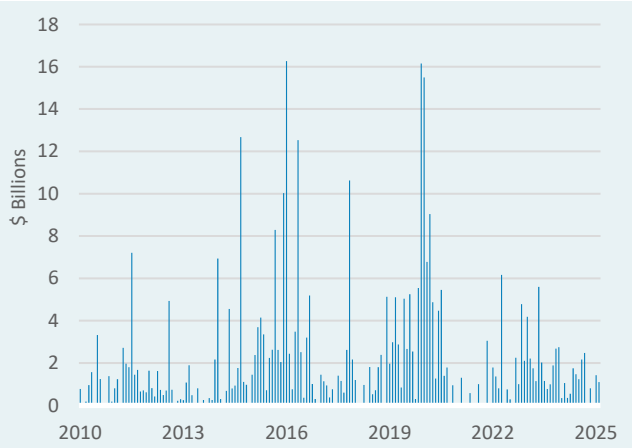
Default activity trended lower during Q2, with no defaults occurring in June (only the third month of no defaults since 2022). During the full quarter, nine companies defaulted, totaling more than $2.5 billion in bonds and $3.9 billion in loans. While higher than Q1 default levels, this activity was half of the average default volume of the prior two years.

Loans continued to surpass bonds in both default and distressed activity. Distressed exchanges totaled $2.8 billion in bonds and $7.7 billion in loans. While this was higher than the recent average, distressed credit volumes have fallen since the nearly $20 billion that occurred in Q4 of 2024.

High yield bond default rates rose 21bps to 1.4%, well below the long-term annual average of over 3.0%. Loan default rates, by comparison, dropped slightly to 3.8%. While the default gap between bonds and loans shrank, the gap remains close to the post-2000 high of 3% experienced in 2024.

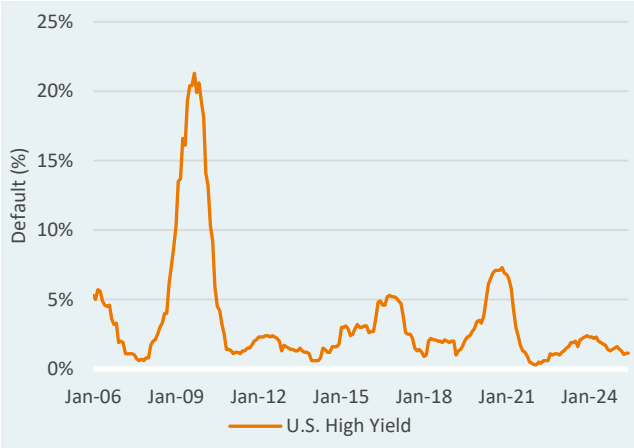
Quarterly issuance volume of high yield bonds was slightly higher, totaling $77 billion, though still down -12% year-over-year. Notably, the majority of this issuance occurred in June, the highest single month of issuance ($37 billion) since September 2021. Bank loans issuance slowed to $103 billion. This figure contrasts with the prior two quarters, which saw the second highest ($337 billion) and highest ($505 billion) levels of bank loan issuance on record. That might be attributed to, among other factors, the stalling of deal activity during the month of April following "Liberation Day", as reflected in April issuance of $6.2 billion, which marked a 30-month low.

U.S. HIGH YIELD MONTHLY DEFAULTS



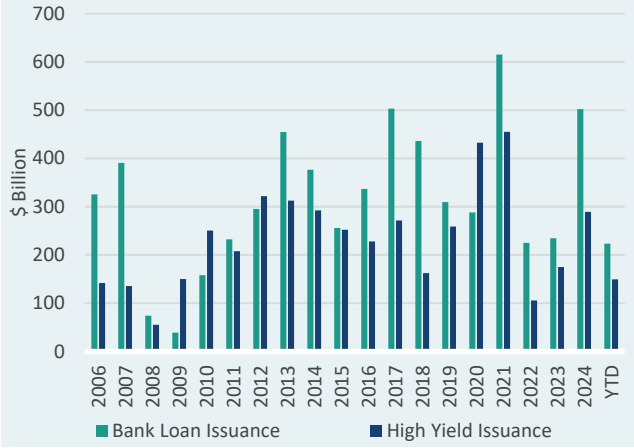
Source: BofA Merrill Lynch, Verus, as of 6/30/25 – par weighted

U.S. HIGH YIELD DEFAULTS (LAST 12 MONTHS)



Source: BofA Merrill Lynch, as of 6/30/25 – par weighted

USD ISSUANCE ($ BILLIONS)



Source: BofA Merrill Lynch, as of 6/30/25

Equity

Equity environment

— Regional equity markets delivered nearly identical returns during Q2. Year-to-date the U.S. market has lagged by a wide margin, although most of this was caused by foreign currency movements (a substantial fall in U.S. dollar value recently created a performance tailwind for U.S. investors with unhedged foreign currency exposure).

— Following the rebound from April's selloff, U.S. equity forward P/E multiples climbed back to very high levels. This recovery to new index highs surprised many investors who point to weaker earnings forecasts, slower economic growth, and a variety of new risks on the horizon.

— Value stocks trailed growth significantly during Q2 (Russell 1000 Value +3.8% vs. Russell 1000 Growth +17.8%). Index concentration in mega-cap growth stocks seems to be contributing to style factor volatility lately. The extreme drawdown of the "Magnificent 7" stocks during 2022 led to the best value stock performance in decades, and then after those seven stocks rebounded led to exceptionally poor value stock performance.

— While Chinese equities rallied strongly during Q1, leading the overall index, this market stalled in Q2, and other regional markets roared back to life (MSCI China +2.1% vs. MSCI EM ex-China +16.5%). Chinese equities remain a laggard over the medium term.

— Market-priced volatility spiked to extreme levels on trade "Liberation Day" as fears of a trade slowdown and global recession circulated. In some places, bilateral de-escalation of tariffs and punitive trade proposals has eased volatility. In other places, the U.S. reached new trade agreements with its partners. This progress has helped bring market volatility back closer to the longer-term average.

	QTD TOTAL RETURN		1 YEAR TOTAL RETURN	
	(unhedged)	(hedged)	(unhedged)	(hedged)
U.S. Large Cap (S&P 500)	10.9%		14.9%	
U.S. Small Cap (Russell 2000)	8.5%		8.6%	
U.S. Equity (Russell 3000)	11.0%		15.1%	
U.S. Large Value (Russell 1000 Value)	3.8%		14.4%	
U.S. Large Growth (Russell 1000 Growth)	17.8%		16.1%	
Global Equity (MSCI ACWI)	11.5%	9.5%	15.9%	13.9%
International Large (MSCI EAFE)	11.8%	5.3%	17.5%	10.1%
Eurozone (EURO STOXX 50)	11.6%	3.1%	20.5%	12.0%
U.K. (FTSE 100)	9.5%	3.2%	20.5%	11.3%
Japan (TOPIX)	11.1%	8.7%	10.8%	8.0%
Canada (S&P/TSX)	13.3%	8.0%	25.4%	26.7%
Emerging Markets (MSCI Emerging Markets)	12.0%	8.0%	15.1%	12.8%

Source: Standard & Poor's, FTSE, MSCI, STOXX, JPX, as of 6/30/25 – performance quoted from perspective of U.S. dollar investor

Domestic equity

U.S. equities rallied back strongly in Q2 (S&P 500 +10.9%) despite some weakening of economic conditions and ongoing inflation fears. This brought the domestic market to +6.2% year-to-date, which at first glance implies that the U.S. market has been one of the worst performers among global markets. However, most of the outperformance of international equity markets recently has been due to foreign currency movements rather than strong underlying equity market gains (most U.S. investors do not hedge foreign currency risk which exposes those investors to currency swings).

Year-over-year Q2 earnings growth of the S&P 500 is expected to be +5.6%, according to FactSet as of July 18th. This would mark the weakest earnings growth since Q4 2023. However, given that most corporations end up beating earnings expectations, based on past trends reported earnings could ultimately top a +9% growth figure. For full year 2025, earnings growth is expected to rise to a +9.3% growth rate.

As domestic stocks have become more expensive, and as more of the index is composed of growth stocks with lower dividend payouts, the dividend yield of the S&P 500 reached an incredibly low 1.3% in Q2—the lowest level in market history other than what was seen during the late-1990s dot-com bubble. Investors will be far more dependent on earnings growth in the future, given a lack of dividend yield.

U.S. equities roared back in Q2, fully recovering April losses despite risks remaining on the horizon

S&P 500 PRICE INDEX



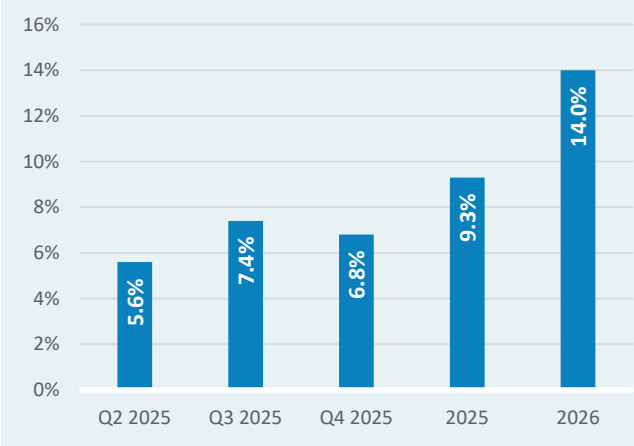
Source: Standard &Poor's, as of 6/30/25

S&P 500 DIVIDEND YIELD



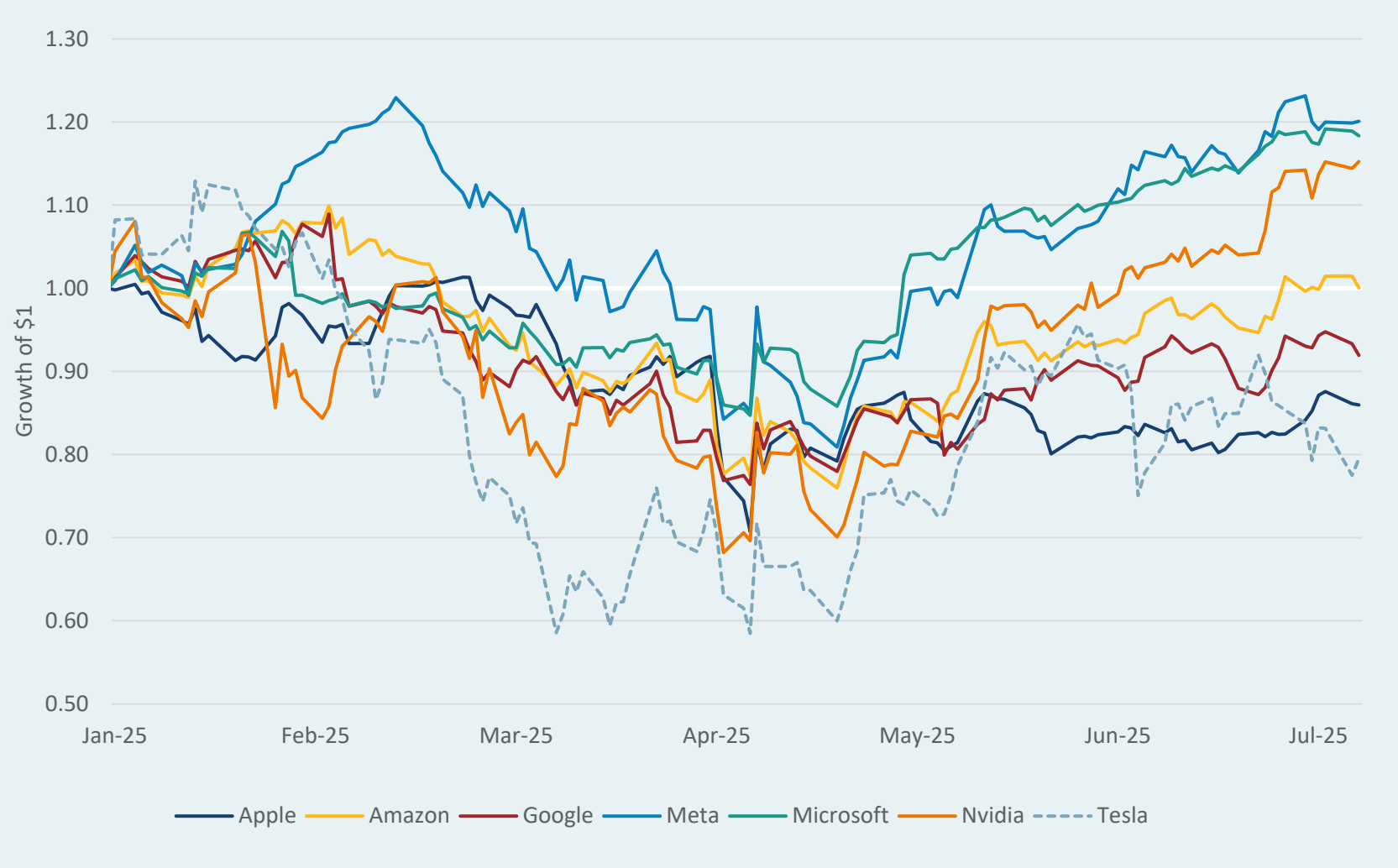
Source: Bloomberg, as of 6/30/25

S&P 500 EARNINGS FORECASTS (YOY)



Source: Factset, Verus, as of 7/18/25

Magnificent 7



Following a deep selloff during April, the Magnificent 7 stocks have recovered much of their year-to-date losses

Source: Bloomberg, Verus, as of 6/30/25

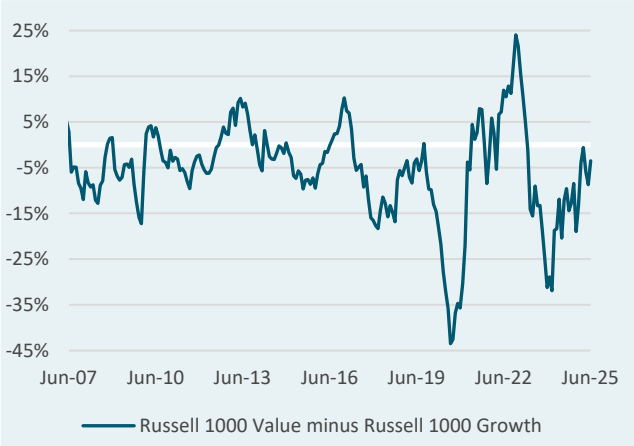
Domestic equity size & style

Small cap equities underperformed large caps during Q2 (FTSE Russell 2000 +8.5% vs. FTSE Russell 1000 +11.1%) and also year-to-date (-1.8% vs. +6.1%), continuing a long string of underperformance. Value stocks underperformed growth by a large margin during Q2 (Russell 1000 Value +3.8% vs. Russell 1000 Growth +17.8%) but were on par year-to-date (+6.0% vs 6.1%) as growth sectors saw bigger losses following "Liberation Day" but have since rebounded.

Very high index concentration in mega-cap growth stocks has contributed to style factor volatility lately. For example, as shown in the chart below, the extreme drawdown of the "Magnificent 7" stocks during 2022 led to the best value stock performance in decades, and then once those seven stocks rebounded led to exceptionally poor value stock performance. We suspect that index concentration and sector effects are creating an even more difficult environment for investors to successfully make shorter-term factor tilts. We continue to believe that factor investing should be accomplished through longer-term strategic positioning, unless an unusually attractive tactical opportunity presents itself (and that these opportunities arise perhaps only once every decade or so).

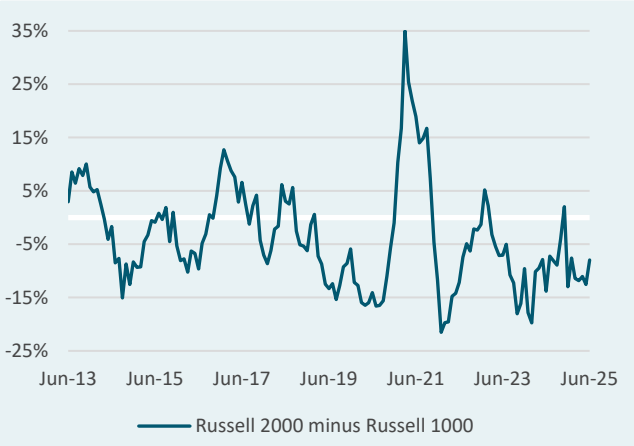
Small caps & value stocks both underperformed during Q2

VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE



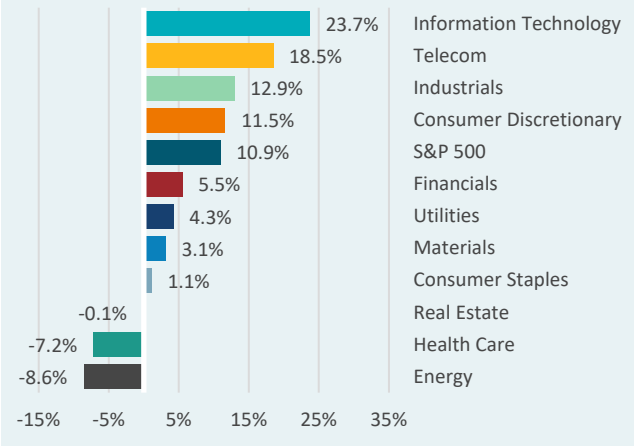
Source: FTSE, as of 6/30/25

SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE



Source: FTSE Russell, as of 6/30/25

Q2 PERFORMANCE

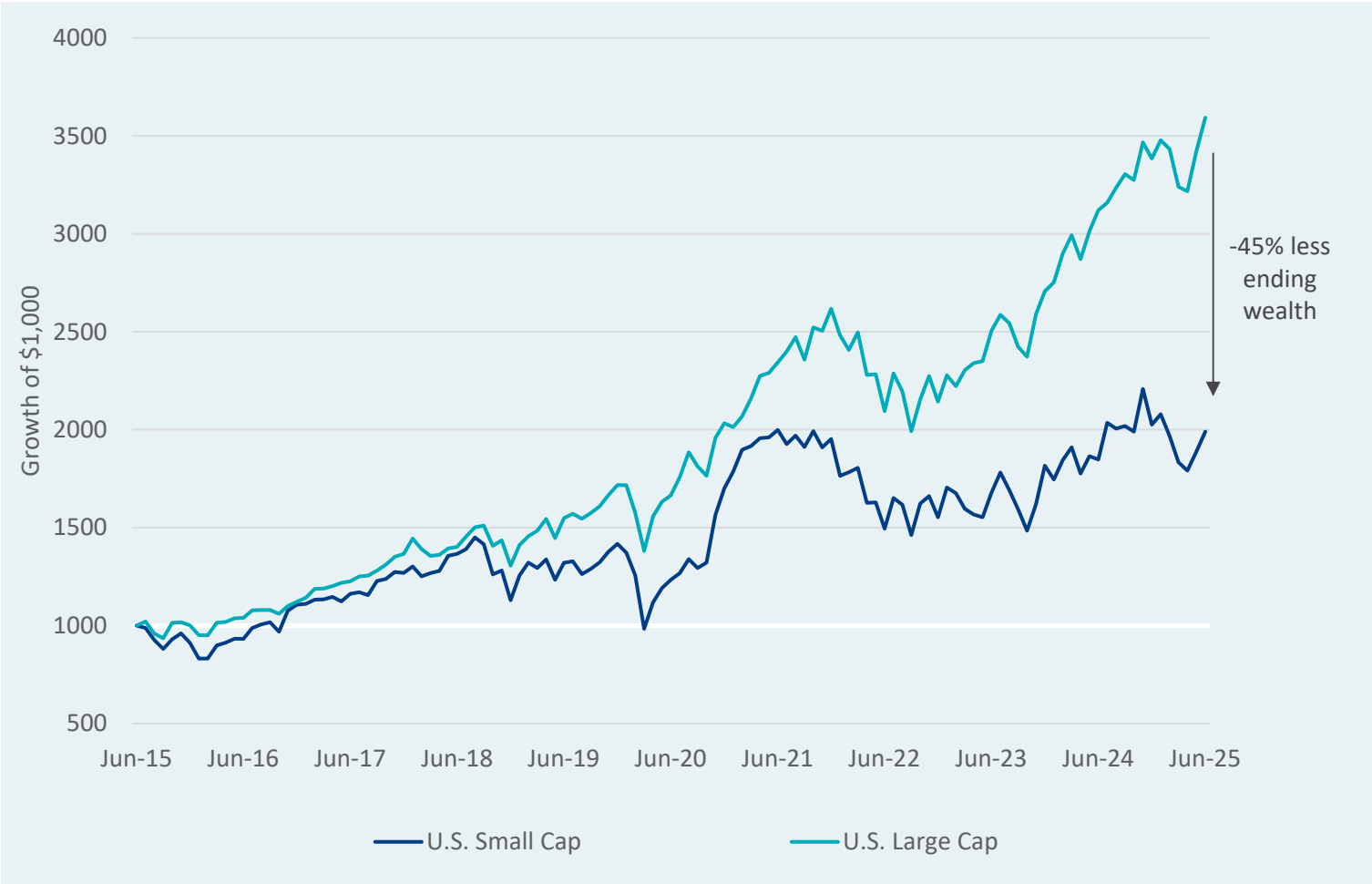


Source: Morningstar, as of 6/30/25

A difficult decade for small caps

Small caps have consistently underperformed large caps for an extended period

Domestic small cap stocks have consistently underperformed large cap stocks for an extended period of time. Over the past decade, an investment in small caps would have ended in -45% less wealth than an investment in large caps[1]. During that time, small caps underperformed in 2015, 2017, 2018, 2019, 2021, 2022, 2023, 2024, and 2025 year-to-date as of June 30th. Given weak earnings growth, aging businesses, and a rising portion of index companies that are unprofitable, many investors are questioning the case for a dedicated U.S. small cap allocation. However, we believe skilled active management has and may continue to assist investors in achieving alpha and mitigating some of these benchmark issues.



[1]*U.S. Large Cap defined as S&P 500, U.S. Small Cap defined as FTSE Russell 2000. While these indexes are not perfect academic representations of small cap vs. large cap performance, they are the most common indexes that investors use across the two asset classes.*

Source: Verus, Standard & Poor's, FTSE Russell, as of 6/30/25

International developed equity

Broad regional equity markets delivered very positive, and nearly identical, results during Q2 as many of the worst trade war fears failed to materialize. International developed shares (MSCI EAFE +11.8%) and emerging market equities (MSCI EM +12.0%) both outperformed domestic stocks (S&P 500 +10.9%).

Non-U.S. markets have substantially outperformed domestic stocks year-to-date, although most of this outperformance was caused by foreign currency movements (because few U.S. investors hedge currency risk, this showed as an extreme impact on performance). So far in 2025, corporate earnings forecasts have been revised lower in the U.S., perhaps reflecting a marginally more bearish earnings outlook as trade frictions unfold.

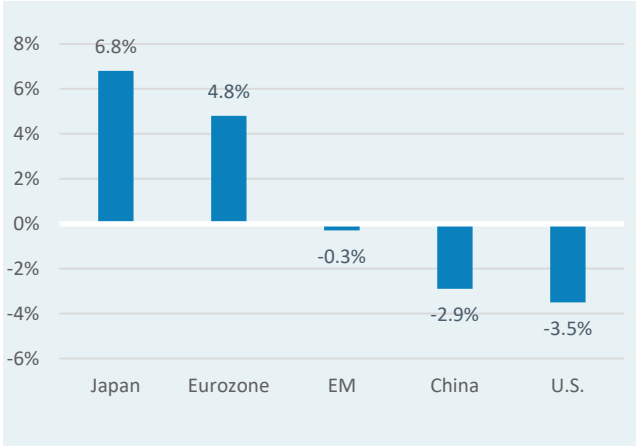
At the onset of the trade war earlier in the year, it may have been reasonable to assume that trading partners with the most to lose from a conflict with the United States would have seen notably poor equity market performance in recent months. So far, this has not been the case, as many countries and regions that have gone tit-for-tat with the U.S. regarding terms of trade have fared well in market performance year-to-date, significantly outperforming the U.S. market. We suspect that as investors learn more about how the trade war has impacted these economies so far, and what trade agreements are likely to be for the longer-term, more performance differentiation will be seen across markets.

INTERNATIONAL DEVELOPED EQUITY



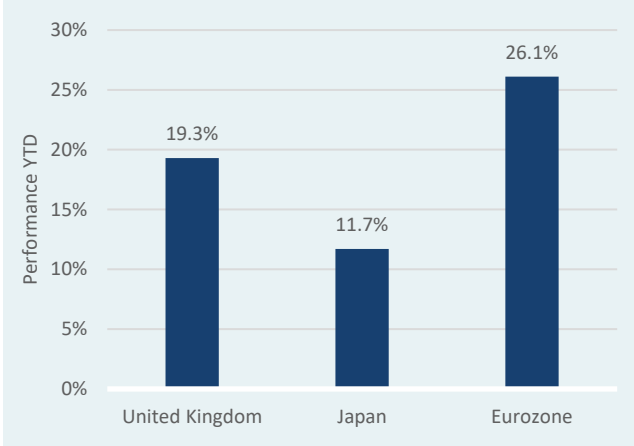
Source: MSCI, as of 6/30/25

YTD REVISIONS TO 2025 EARNINGS FORECASTS



Source: J.P. Morgan, FactSet - all indexes are MSCI other than the U.S. market which is represented by the S&P 500, as of 5/31/25

REGIONAL RETURNS (YEAR-TO-DATE)



Source: MSCI Indices, as of 6/30/25

Emerging market equity

Emerging market equities delivered strong results in Q2 (MSCI EM +12.0%) as markets bounced back from April's selloff and U.S. dollar depreciation boosted the returns of domestic investors with unhedged currency exposure. Regional markets have arguably shown much less sensitivity to tariffs imposed by the U.S. administration than investors had expected. For example, Mexican equities are up 30.9% year-to-date in U.S. dollar terms despite aggressive trade penalties imposed by the United States. Taiwan and South Korea were two of the top performing markets in Q2, despite receiving some of the highest tariff rates among other U.S. trading partners. Once more is known around the magnitude of trade policy impact on these economies, this could lead to more market performance differentiation.

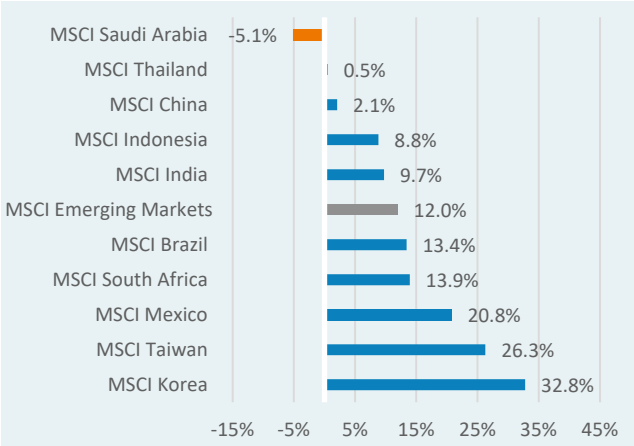
Chinese equities lagged other regions during Q2 (MSCI China +2.1% vs. MSCI EM ex-China +16.5%), marking a change in pace from the recent China comeback story. MSCI China has underperformed other emerging markets by -31% over the past ten years.

EMERGING MARKET EQUITY



Source: MSCI, as of 6/30/25

MSCI EM 2025 Q2 COUNTRY RETURNS (USD)



Source: Verus, Bloomberg, as of 6/30/25

CHINA STILL LAGGING



Source: MSCI, as of 6/30/25

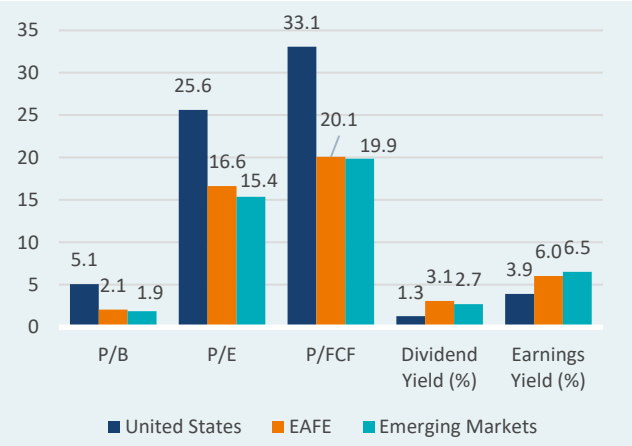
Equity valuations

Following a very strong rebound from the April "Liberation Day" selloff, U.S. equity forward P/E multiples have climbed back to levels near the upper end of the historical range. This full recovery to new all-time-highs has surprised many investors who point to weaker corporate earnings forecasts, slower economic growth, and a variety of new risks on the horizon (tariff-induced inflation and other trade frictions, for example) as reasons that could justify more moderate domestic valuations. However, ongoing earnings momentum—specifically, stellar earnings growth from the Magnificent 7—may allow for a continued march higher despite valuation concerns.

Some in the investor community over recent months have been concerned about a possible 'buyer's strike' on U.S. assets (an intentional divestment from U.S. assets by foreign institutions in protest of the trade war). Three months have passed since "Liberation Day" and there is little evidence of this occurring.

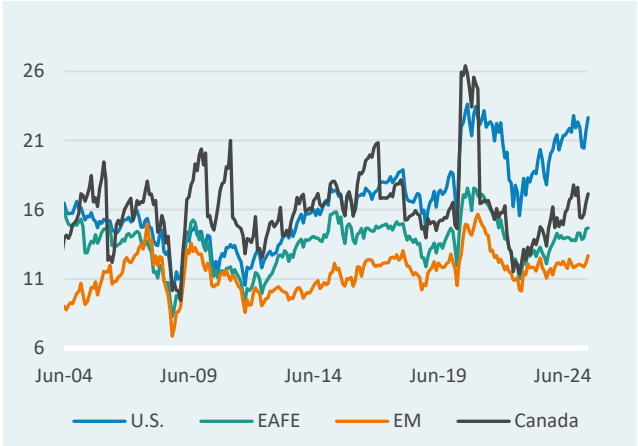
As the U.S. market has become more concentrated in megacap high-growth businesses such as Nvidia, and more exposed to higher growth industry sectors, this has pushed up total index profitability and total index growth forecasts. Overall, U.S. large cap indexes have changed materially in characteristics and behavior, which creates challenges in comparing current valuations to those of the past.

MSCI VALUATION METRICS (3-MONTH AVG)



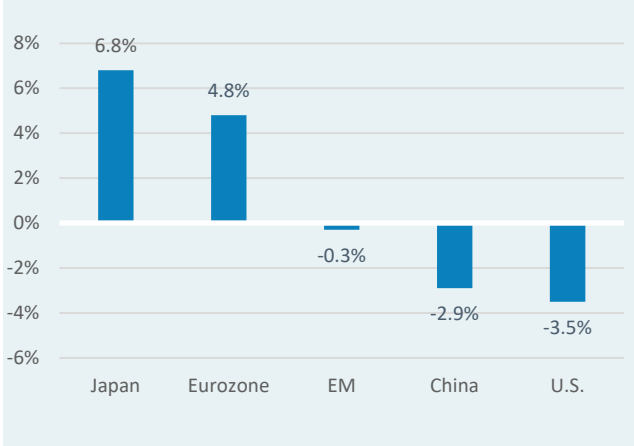
Source: MSCI, Verus, as of 6/30/25 – trailing P/E

FORWARD P/E



Source: MSCI, Canada shown as S&P/TSX, as of 6/30/25

YTD ADJUSTMENT IN EARNINGS FORECASTS



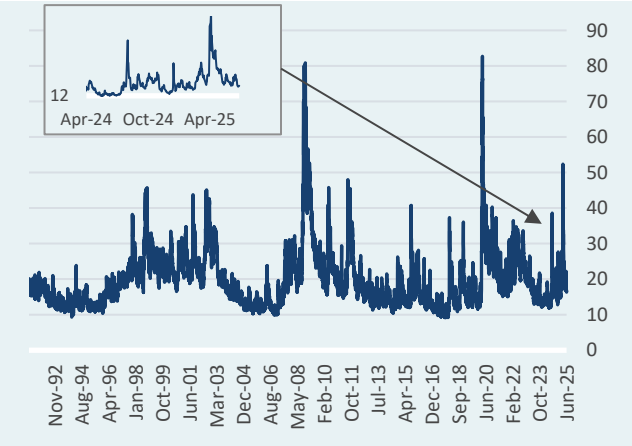
Source: J.P. Morgan, FactSet - all indexes are MSCI other than the U.S. market which is represented by the S&P 500, as of 5/31/25

Market volatility

Market-priced volatility (Cboe VIX Index) spiked above 50 to extreme levels in early April as trade "Liberation Day" shocked markets and led to fears of a trade slowdown and global recession. In some places, bilateral de-escalation of tariffs and punitive trade rules has eased market volatility. In other places, the United States has reached new trade agreements with trading partners. This progress, along with growing evidence that many of the feared *worst-case scenarios* around tariffs (ex: sharp slowdown in consumer spending, spiking inflation, weakening job market) have not come to fruition, has helped bring market volatility back closer to the longer-term average.

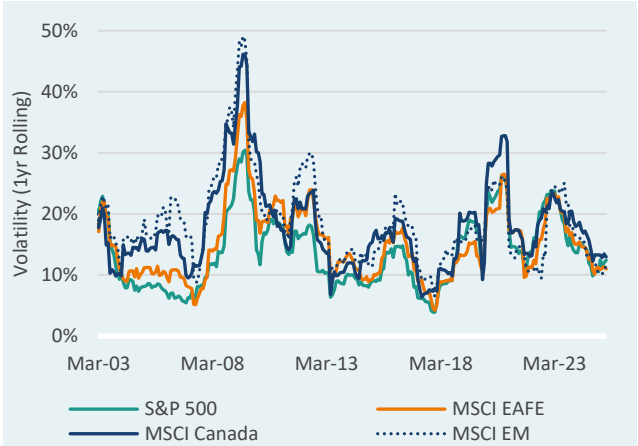
Implied bond market volatility also jumped in the first week of April but has since fallen to the lower-end of the three-year trading range. The risks priced into bond markets are numerous. Fluctuations in foreign demand for U.S. dollars due to radical shifts in the trade policy of the Trump administration many continue to add to jumps in prices. Impacts of the "One Big Beautiful Bill Act" on the U.S. fiscal situation have generated uncertainty around the creditworthiness of the nation.

U.S. IMPLIED VOLATILITY (VIX)



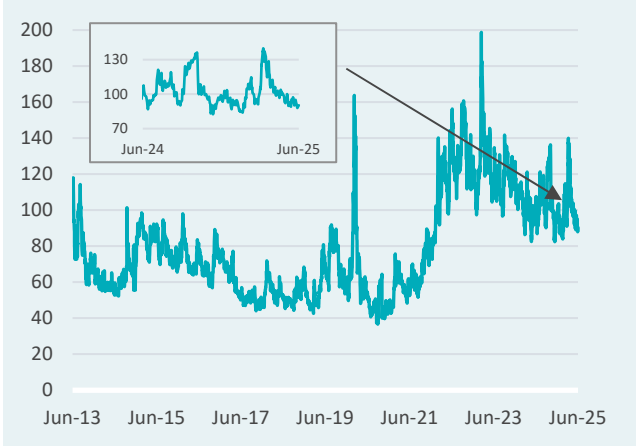
Source: Cboe, as of 6/30/25

REALIZED VOLATILITY



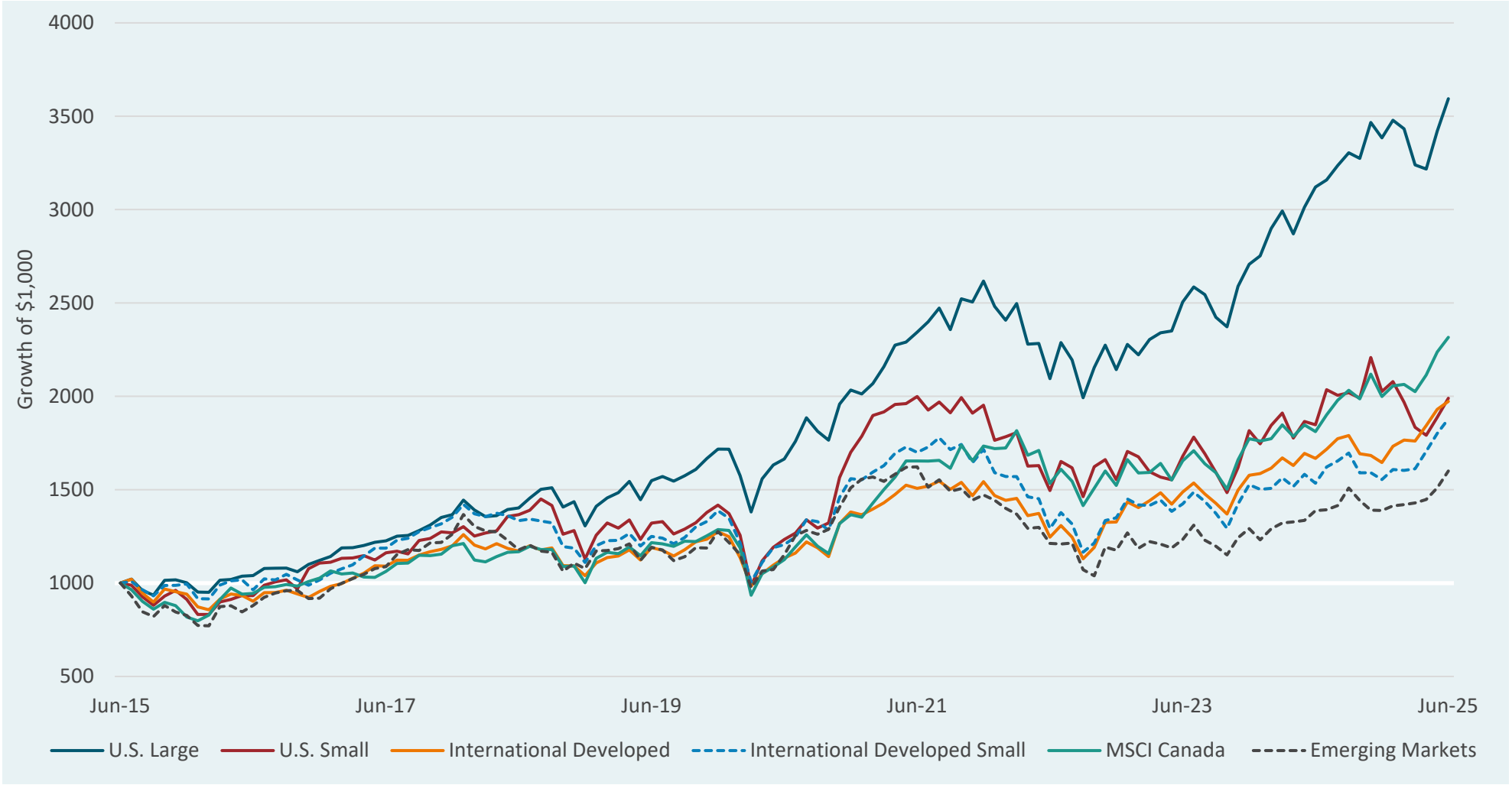
Source: Standard & Poor's, MSCI, Verus, as of 6/30/25

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



Source: BofA, as of 6/30/25

Long-term equity performance



Source: Standard & Poor's, FTSE, MSCI, Verus, as of 6/30/25

Other assets

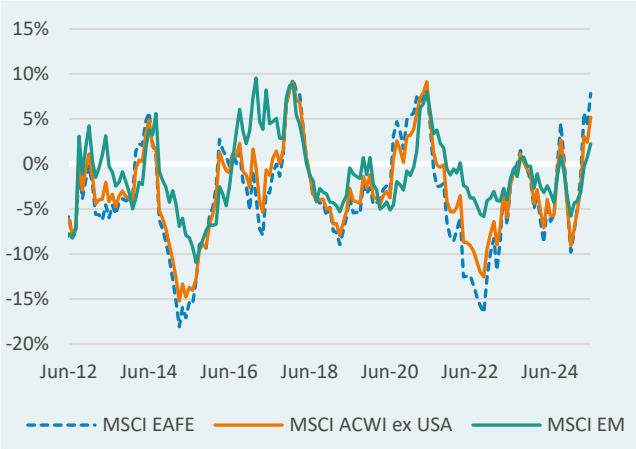
Currency

The U.S. dollar fell materially again during Q2, down -11% since the beginning of the year according to the U.S. Dollar Index (DXY). These large swings in the dollar continue to have significant impacts on performance for U.S. investors who do not have a currency hedging program in place. Tariff and trade fears, downward adjustments to economic growth expectations, and possibly international fund flows have impacted the value of the dollar. These swings will also create some degree of inflation in the U.S., as many imported goods are beginning to rise in price.

Dollar swings raised the portfolio returns of U.S. investors with unhedged foreign currency exposure—a gain of +11.6% from currency moves across international equities (MSCI EAFE) year-to-date.

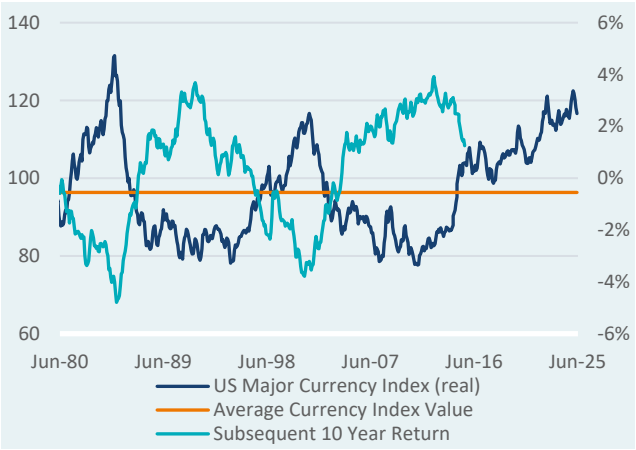
A more thoughtful portfolio approach to currency exposure has provided lower portfolio volatility and higher long-term returns—a rare proposition. This approach involves reducing the uncompensated risk of unhedged foreign currency exposure, and instead of unhedged exposure, making a passive investment 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, although the past year of currency volatility has resulted in an historically less common environment of Currency Factor Mix underperformance and embedded (unhedged) currency outperformance.

EFFECT OF CURRENCY (1-YEAR ROLLING)



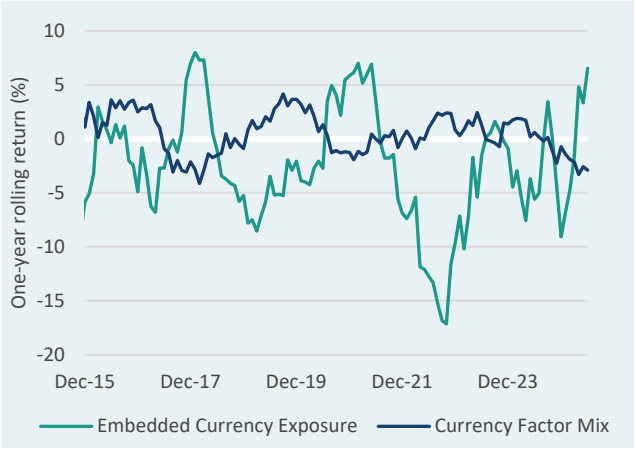
Source: MSCI, Verus, as of 6/30/25

U.S. DOLLAR MAJOR CURRENCY INDEX



Source: FRED, Verus, as of 6/30/25

EMBEDDED CURRENCY VS CURRENCY FACTORS



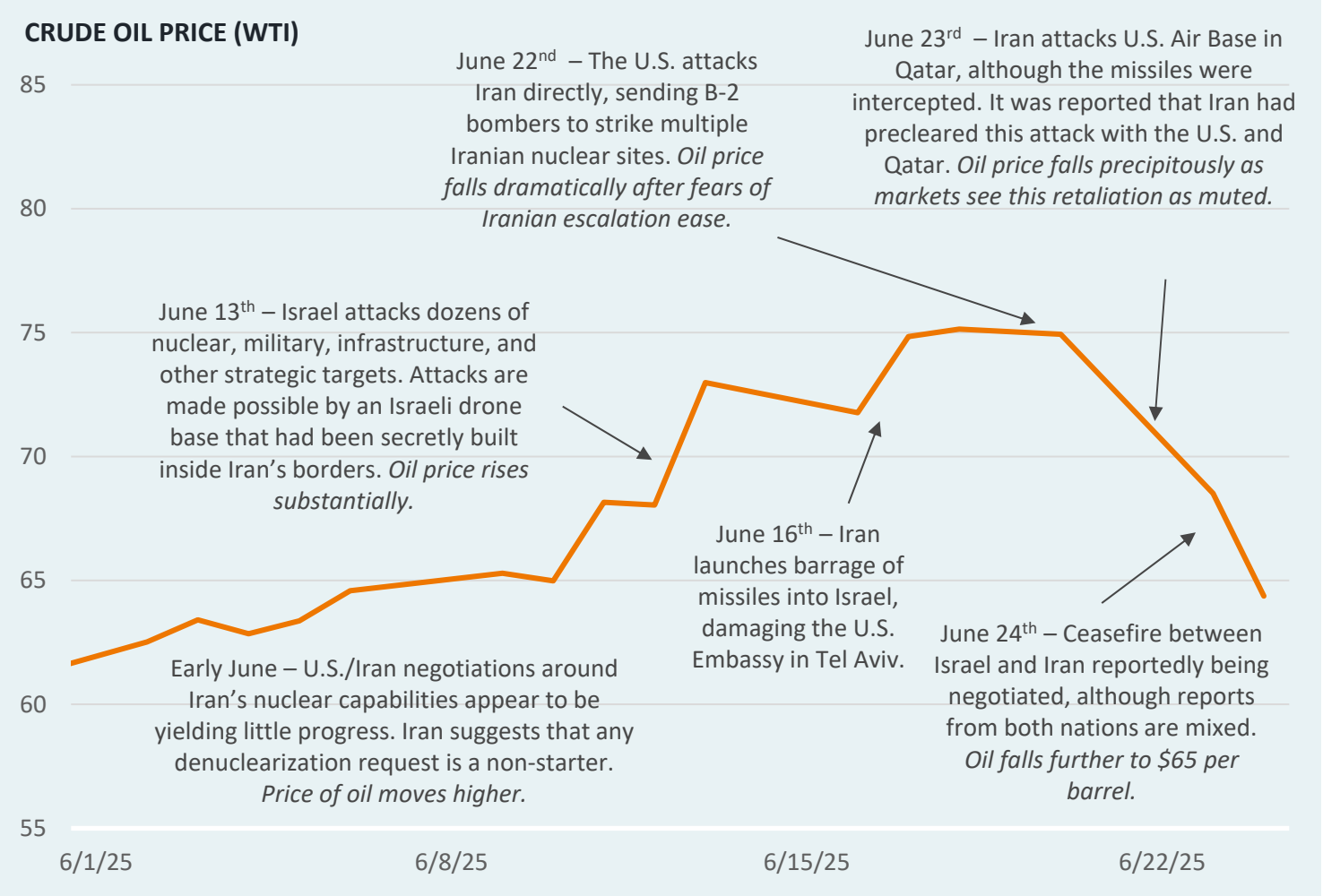
Source: MSCI, Verus, as of 6/30/25 "Embedded Currency Exposure" is the currency return impact from not hedging currency risk

Middle East tensions & energy prices

A wild ride for energy markets

Escalating tensions between Iran and Israel have led to fears of broader military conflict and a possible energy supply shock in the second quarter. Iran produces nearly 5% of the world's oil, and approximately 20% of global oil and gas is shipped through the Strait of Hormuz, which could be quickly blocked by Iran.

A ceasefire between the two nations has been achieved after the United States executed a direct attack on Iranian nuclear facilities which was followed by a muted response from Iran. This ceasefire agreement has held and appears likely to hold, which has sent oil prices tumbling. Uncertainty remains high, however. With energy as an important element of inflation baskets, this may have implications for inflation and interest rates in the medium term.



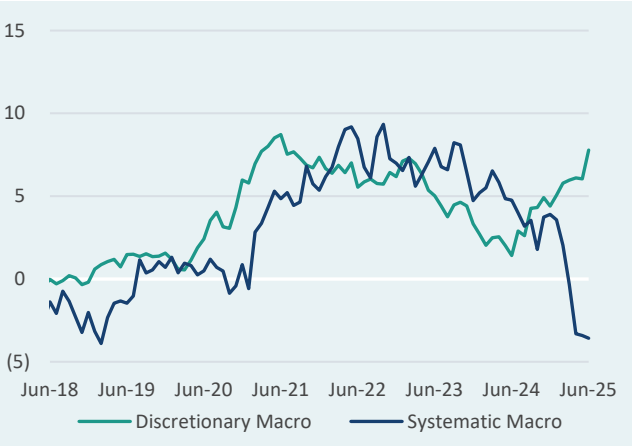
Source: Verus, Bloomberg – West Texas Intermediate (WTI) oil futures price

Hedge funds – macro & event-driven

The gap between machine-driven, systematic macro trading strategies and human driven, discretionary macro funds widened significantly in the first half of 2025. Systematic strategies rely on identifying historical patterns in fundamental, technical, or economic market data to predict future price patterns. Given the rapidly evolving geopolitical dynamics and divergent economic implications, systematic strategies such as 'trend following' have been caught offsides in multiple asset classes and were whipsawed recently.

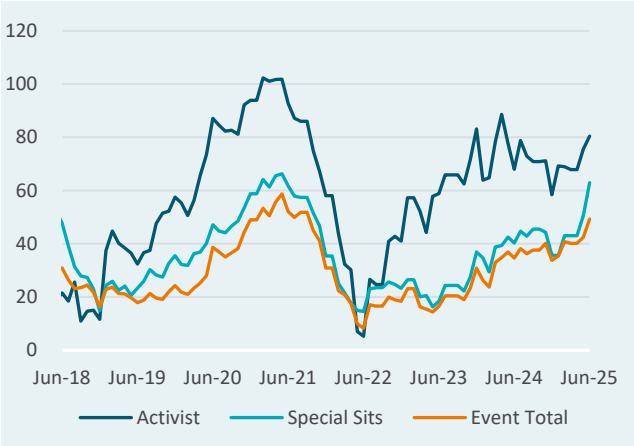
Event driven strategies, such as those focused on mergers, activism, and other special situations investments, have seen greater upside participation in recent quarters. After a slump in corporate activity and M&A following the SPAC bubble bursting in '21-22, the number of deals announced or proposed in the first half of 2025 was the highest since 2021. Strong tailwinds for M&A should support greater upside across a variety of hedge fund strategies, including multi-strategy and 'pod shop' funds that make extensive use of both hard catalyst and merger arbitrage trading styles.

3 YR ROLLING RETURNS OF HFRI MACRO



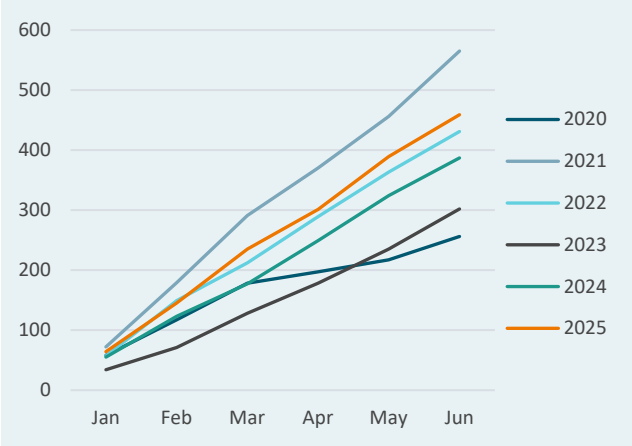
Source: MPI, HFR, as of 6/30/25

12M UP MARKET CAPTURE % VS S&P 500



Source: MPI, HFR , as of 6/30/25

ANNOUNCED STOCK OR CASH DEALS IN H1 2025



Source: Bloomberg, as of 6/30/25

Appendix

Periodic table of returns

BEST ↑ ↓ WORST

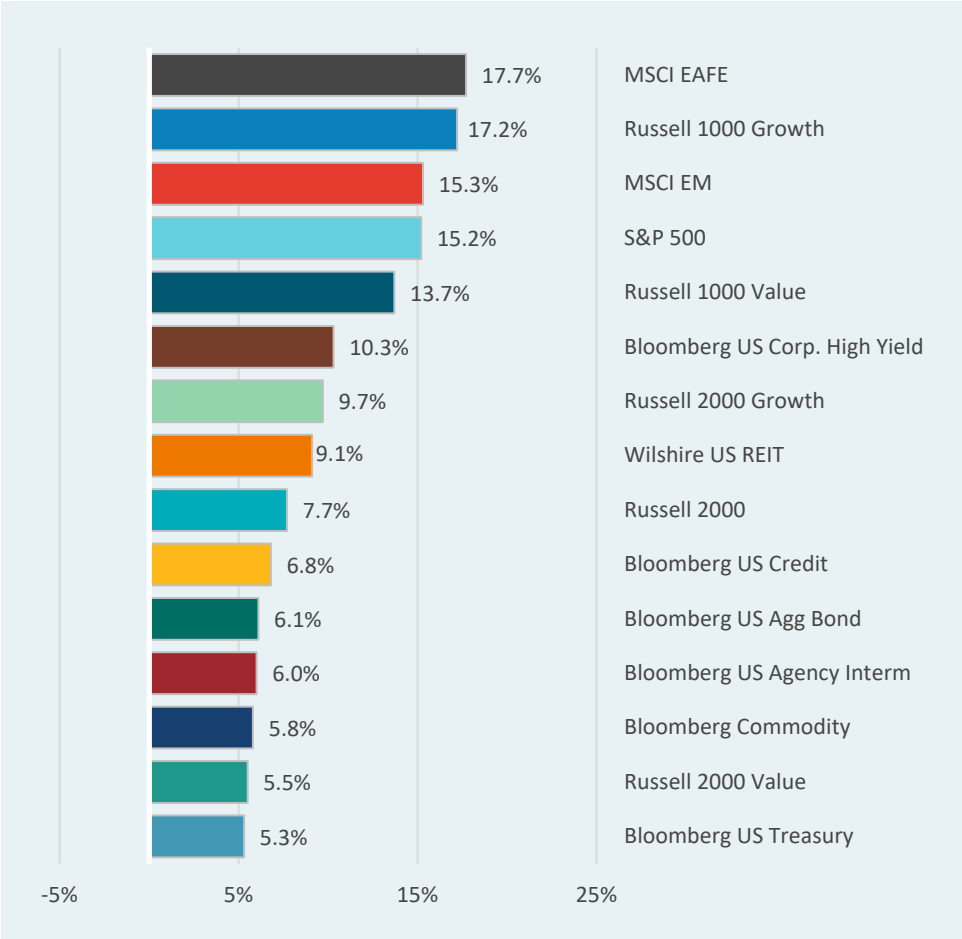
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	YTD	5-Year	10-Year
International Equity	34.5	32.6	39.8	5.2	79.0	29.1	14.3	18.6	43.3	13.5	13.3	31.7	37.3	6.7	36.4	38.5	28.3	16.1	42.7	33.4	19.4	18.1	17.0
Emerging Markets Equity	21.4	26.9	16.2	1.4	37.2	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	15.3	16.3	13.4
60/40 Global Portfolio	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	9.0	13.9	9.2
Large Cap Equity	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	6.1	12.7	7.1
Large Cap Growth	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	6.1	12.5	7.1
Large Cap Value	7.1	16.6	10.9	-28.9	27.2	16.7	0.1	16.3	32.5	5.6	-0.4	11.3	17.1	-4.8	22.4	14.0	17.7	-13.0	15.4	9.9	6.0	11.2	6.7
Commodities	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	5.5	10.0	6.5
US Bonds	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	4.0	7.4	6.1
Hedge Funds of Funds	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	3.0	7.4	5.4
Real Estate	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	2.2	6.8	4.8
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	2.1	6.2	3.8
Small Cap Growth	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	-0.5	3.3	2.0
Small Cap Equity	3.2	4.3	-1.6	-43.1	0.2	5.7	-13.3	0.1	-2.3	-4.5	-14.9	0.5	1.7	-13.8	6.4	0.5	-1.5	-26.4	-7.9	1.3	-1.8	2.7	1.9
Small Cap Value	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	-3.2	-0.7	1.8

Large Cap Equity
Large Cap Value
Large Cap Growth
Small Cap Equity
Small Cap Value
Small Cap Growth
International Equity
Emerging Markets Equity
US Bonds
Cash
Commodities
Real Estate
Hedge Funds of Funds
60% MSCI ACWI/40% Bloomberg Global Bond

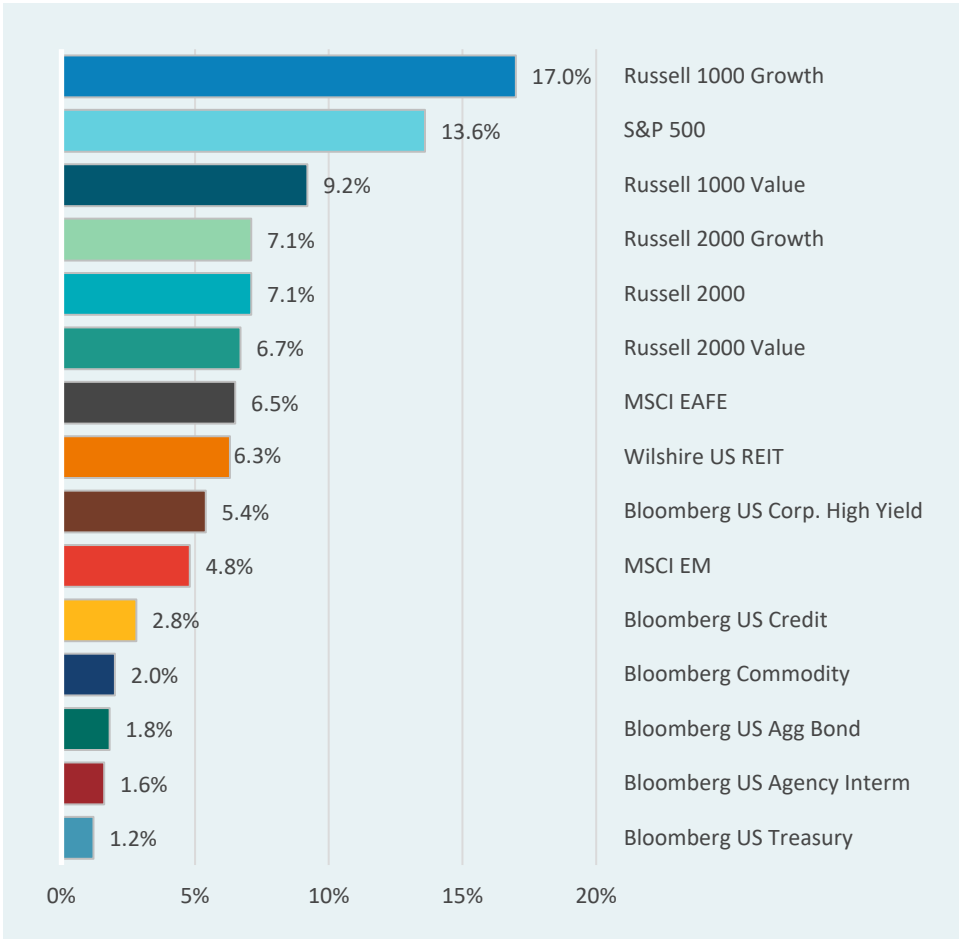
Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, T-Bill 90 Day, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 3/31/25.

Major asset class returns

ONE YEAR ENDING JUNE



TEN YEARS ENDING JUNE



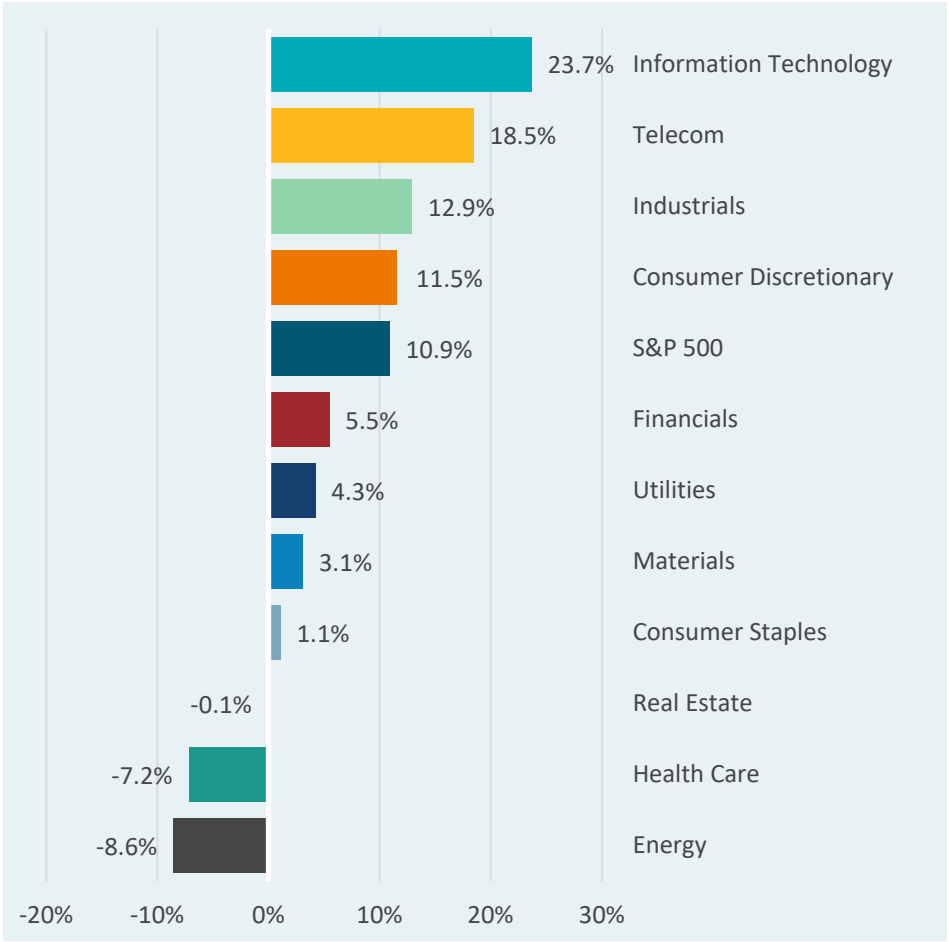
**Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.*

Source: Morningstar, as of 6/30/25

Source: Morningstar, as of 6/30/25

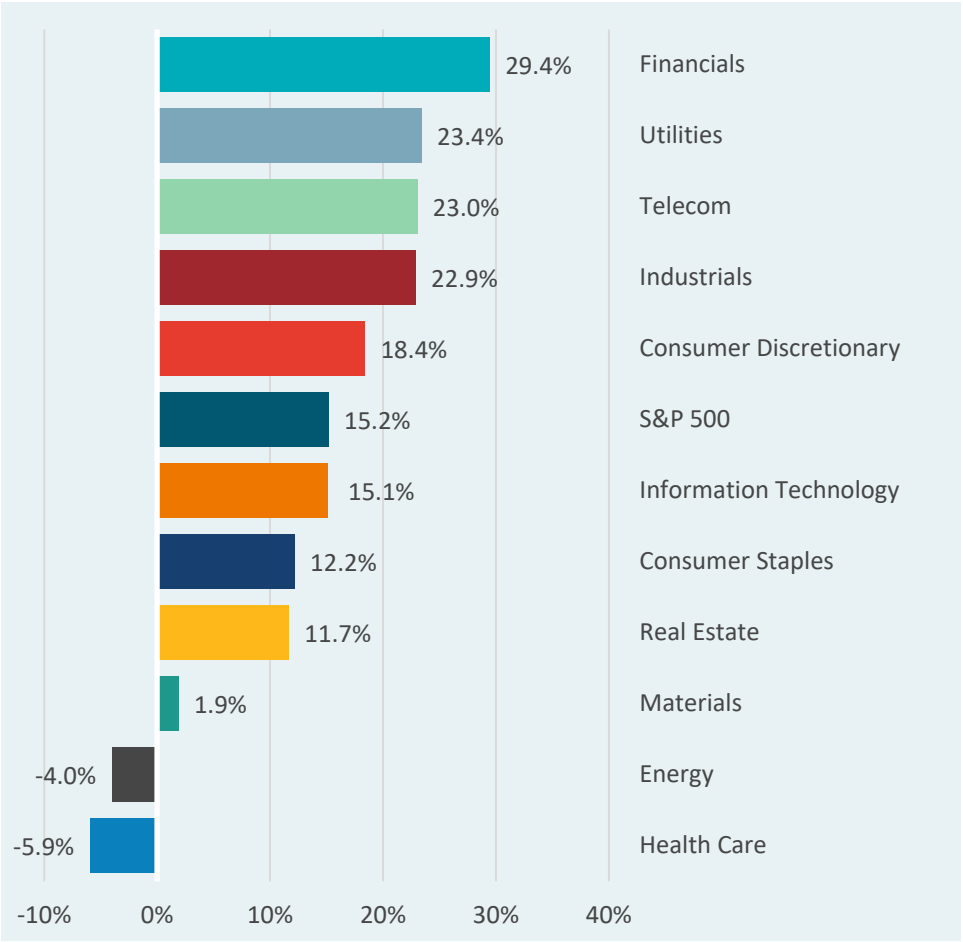
S&P 500 sector returns

QTD



Source: Morningstar, as of 6/30/25

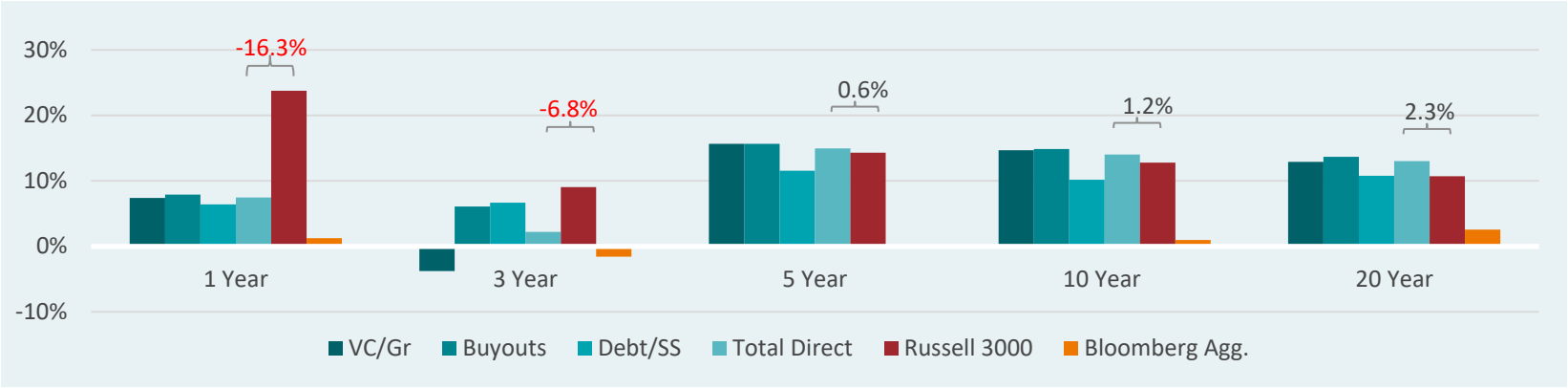
ONE YEAR ENDING JUNE



Source: Morningstar, as of 6/30/25

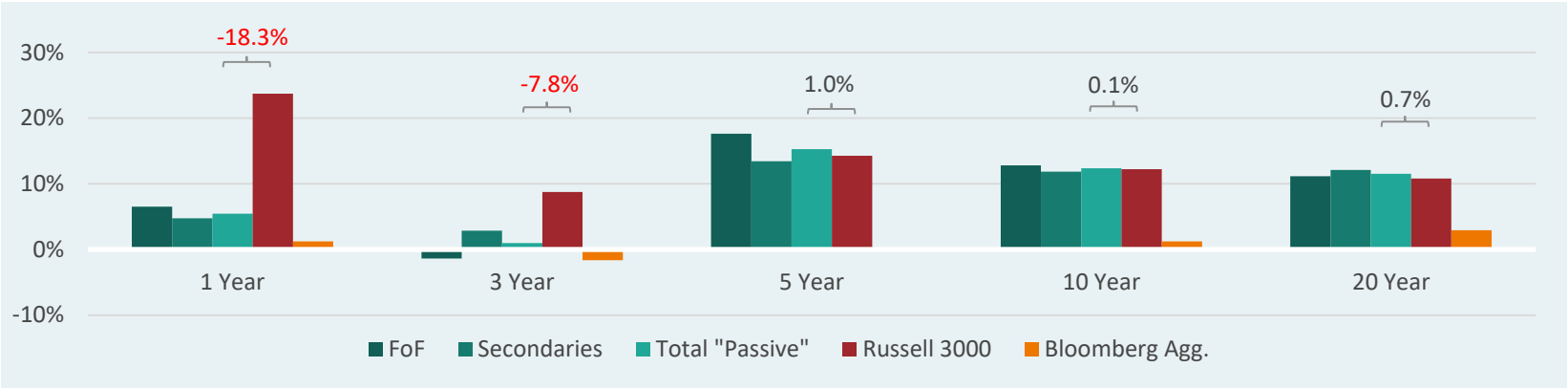
Private equity vs. traditional assets performance

DIRECT PRIVATE EQUITY FUND INVESTMENTS



Direct P.E Fund Investments vs. public equites has been mixed.

"PASSIVE" STRATEGIES

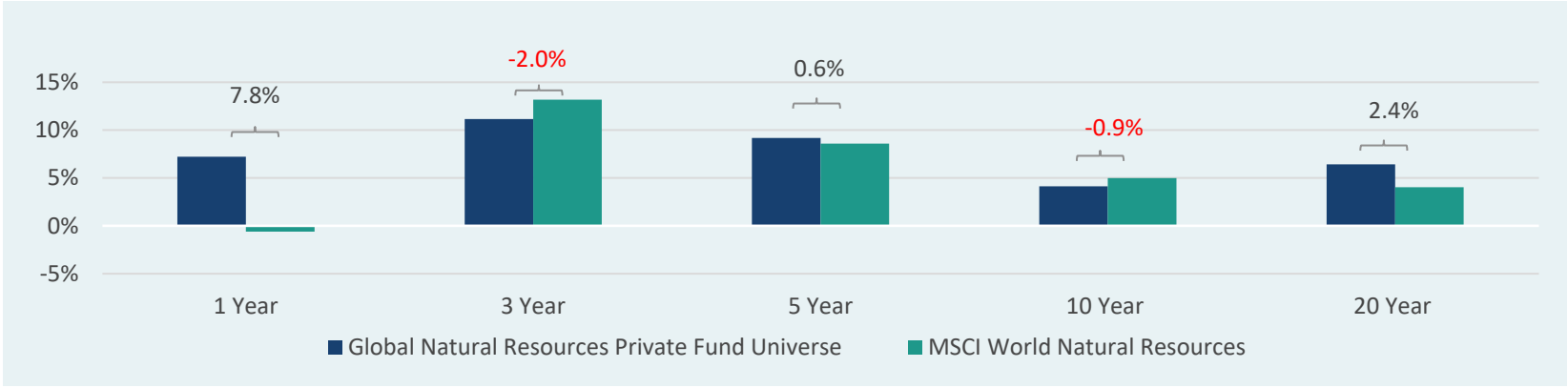


"Passive" strategies vs public equities has been mixed.

Sources: FTSE PME: U.S. Direct Private Equity and "Passive" returns are as of December 31, 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.

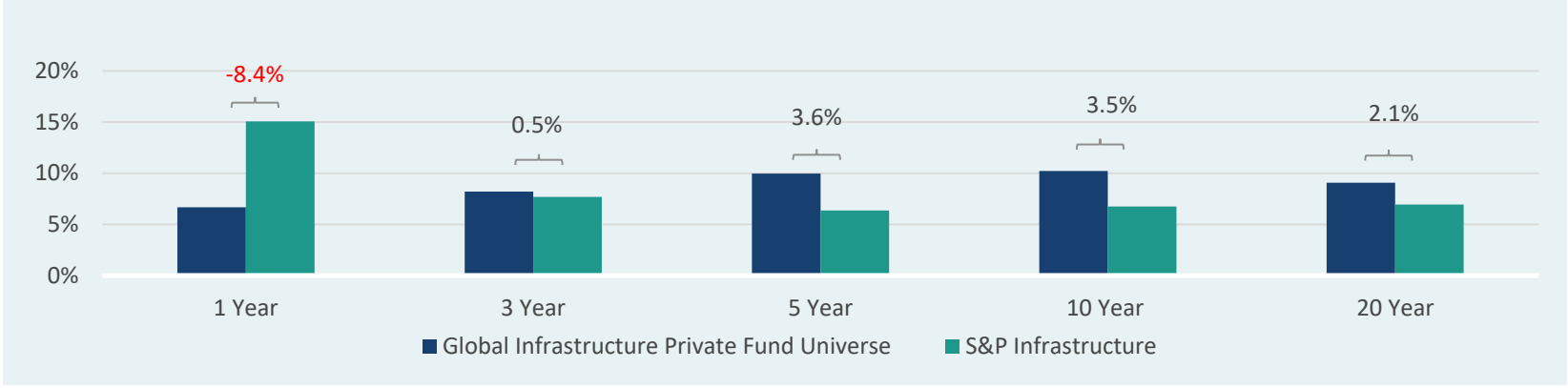
Private vs. liquid real assets performance

GLOBAL NATURAL RESOURCES FUNDS



N.R. funds vs. the MSCI World Natural Resources benchmark has been mixed.

GLOBAL INFRASTRUCTURE FUNDS

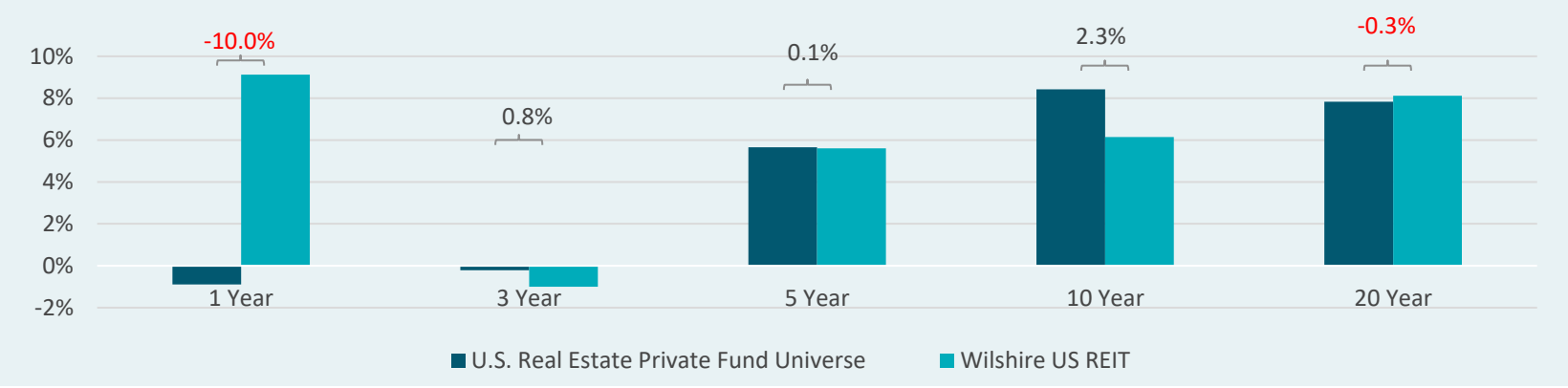


Infra. funds outperformed S&P Infra. over most periods.

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 December 31, 2024. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real assets universes.

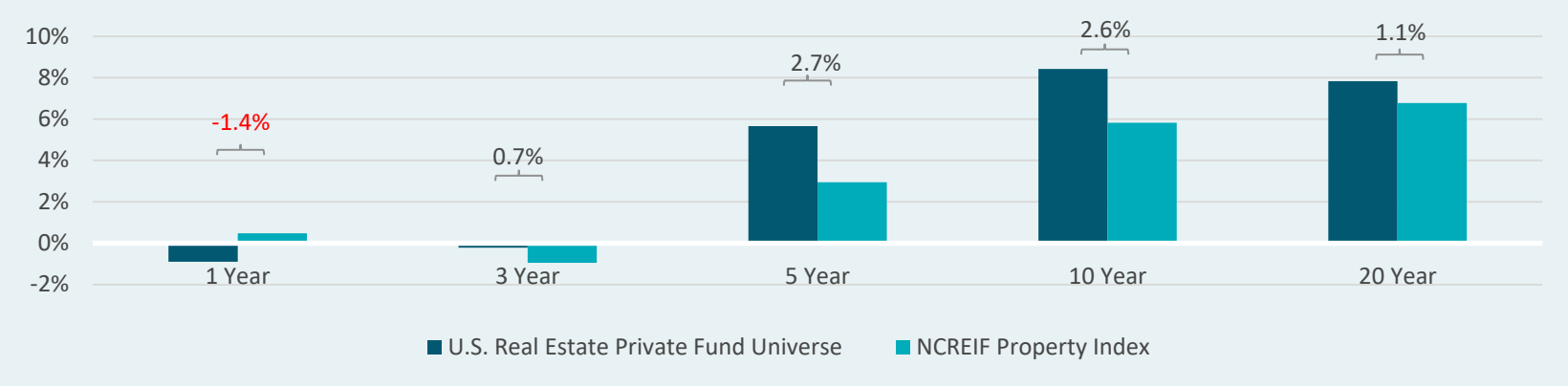
Private vs. liquid and core real estate performance

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



U.S. Private R.E. funds vs. the Wilshire U.S. REIT Index was mixed.

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



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

Sources: FTSE PME: U.S. Real Estate universes as of December 31, 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

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Core Index							
S&P 500	5.1	10.9	6.2	15.2	19.7	16.6	13.6
S&P 500 Equal Weighted	3.4	5.5	4.8	12.7	12.8	14.4	10.7
DJ Industrial Average	4.5	5.5	4.5	14.7	15.0	13.5	12.1
Russell Top 200	5.4	11.8	6.5	15.8	21.3	17.3	14.6
Russell 1000	5.1	11.1	6.1	15.7	19.6	16.3	13.4
Russell 2000	5.4	8.5	(1.8)	7.7	10.0	10.0	7.1
Russell 3000	5.1	11.0	5.8	15.3	19.1	16.0	13.0
Russell Mid Cap	3.7	8.5	4.8	15.2	14.3	13.1	9.9
Style Index							
Russell 1000 Growth	6.4	17.8	6.1	17.2	25.8	18.1	17.0
Russell 1000 Value	3.4	3.8	6.0	13.7	12.8	13.9	9.2
Russell 2000 Growth	5.9	12.0	(0.5)	9.7	12.4	7.4	7.1
Russell 2000 Value	4.9	5.0	(3.2)	5.5	7.5	12.5	6.7

INTERNATIONAL EQUITY

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
MSCI ACWI	4.5	11.5	10.0	16.2	17.3	13.7	10.0
MSCI ACWI ex US	3.4	12.0	17.9	17.7	14.0	10.1	6.1
MSCI EAFE	2.2	11.8	19.4	17.7	16.0	11.2	6.5
MSCI EM	6.0	12.0	15.3	15.3	9.7	6.8	4.8
MSCI EAFE Small Cap	4.3	16.6	20.9	22.5	13.3	9.3	6.5
Style Index							
MSCI EAFE Growth	2.7	13.5	16.0	11.4	13.6	7.9	6.7
MSCI EAFE Value	1.7	10.1	22.8	24.2	18.4	14.3	6.1
Regional Index							
MSCI UK	1.4	8.7	19.3	20.0	15.2	14.0	5.4
MSCI Japan	1.7	11.4	11.7	13.9	15.0	8.8	6.1
MSCI Euro	2.5	12.7	26.1	22.2	21.3	13.4	7.3
MSCI EM Asia	6.3	12.4	13.9	14.9	9.4	6.5	5.7
MSCI EM Latin American	6.1	15.2	29.9	13.4	11.6	11.1	3.7

FIXED INCOME

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Broad Index							
Bloomberg US TIPS	1.0	0.5	4.7	5.8	2.3	1.6	2.7
Bloomberg US Treasury Bills	0.3	1.1	2.1	4.8	4.6	2.8	2.0
Bloomberg US Agg Bond	1.5	1.2	4.0	6.1	2.5	(0.7)	1.8
Bloomberg US Universal	1.6	1.4	4.1	6.5	3.3	(0.1)	2.1
Duration							
Bloomberg US Treasury 1-3 Yr	0.6	1.2	2.8	5.7	3.4	1.3	1.6
Bloomberg US Treasury Long	2.5	(1.5)	3.1	1.6	(3.7)	(8.2)	0.1
Bloomberg US Treasury	1.3	0.8	3.8	5.3	1.5	(1.6)	1.2
Issuer							
Bloomberg US MBS	1.8	1.1	4.2	6.5	2.3	(0.6)	1.3
Bloomberg US Corp. High Yield	1.8	3.5	4.6	10.3	9.9	6.0	5.4
Bloomberg US Agency Interm	0.8	1.4	3.4	6.0	3.4	0.8	1.6
Bloomberg US Credit	1.8	1.8	4.2	6.8	4.2	0.1	2.8

OTHER

	Month	QTD	YTD	1 Year	3 Year	5 Year	10 Year
Index							
Bloomberg Commodity	2.4	(3.1)	5.5	5.8	0.1	12.7	2.0
Wilshire US REIT	(0.6)	(1.2)	(0.2)	9.1	5.7	8.7	6.3
S&P UBS Leveraged Loan	1.4	1.0	1.9	6.7	8.4	7.5	5.0
S&P Global Infrastructure	2.0	10.4	15.5	27.7	12.5	13.1	7.7
Alerian MLP	2.6	(4.9)	7.1	13.9	26.2	28.1	5.2
Regional Index							
JPM EMBI Global Div	2.4	3.3	5.6	10.0	8.9	1.8	3.5
JPM GBI-EM Global Div	2.8	7.6	12.3	13.8	8.5	1.9	2.1
Hedge Funds							
HFRI Composite	2.4	4.4	3.9	8.0	7.5	8.4	5.3
HFRI FOF Composite	1.8	3.4	3.0	7.3	6.5	6.2	3.8
Currency (Spot)							
Euro	3.4	8.7	13.4	9.5	3.9	0.9	0.5
Pound Sterling	1.6	6.2	9.4	8.4	4.1	2.1	(1.4)
Yen	(0.1)	3.5	8.8	11.4	(2.0)	(5.7)	(1.6)

Source: Morningstar, HFRI, as of 6/30/25

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 conditions conducted by the University of Michigan. For the preliminary release approximately three hundred consumers are surveyed while five hundred are interviewed for the final figure. The level of consumer sentiment is related to the strength of consumer spending. (www.Bloomberg.com)*

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

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

Notices & disclosures

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Kern County Employees Retirement Association

Investment Performance Review

Period Ending: June 30, 2025

Verus

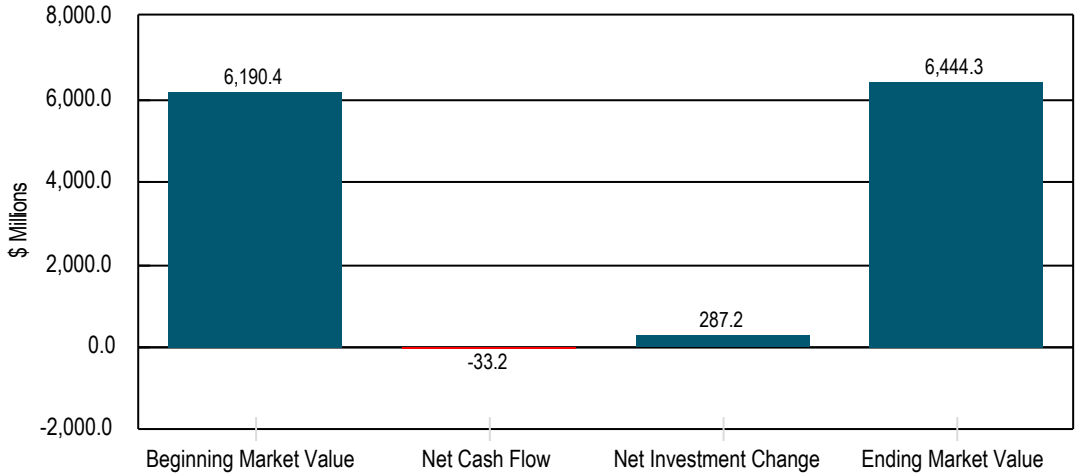
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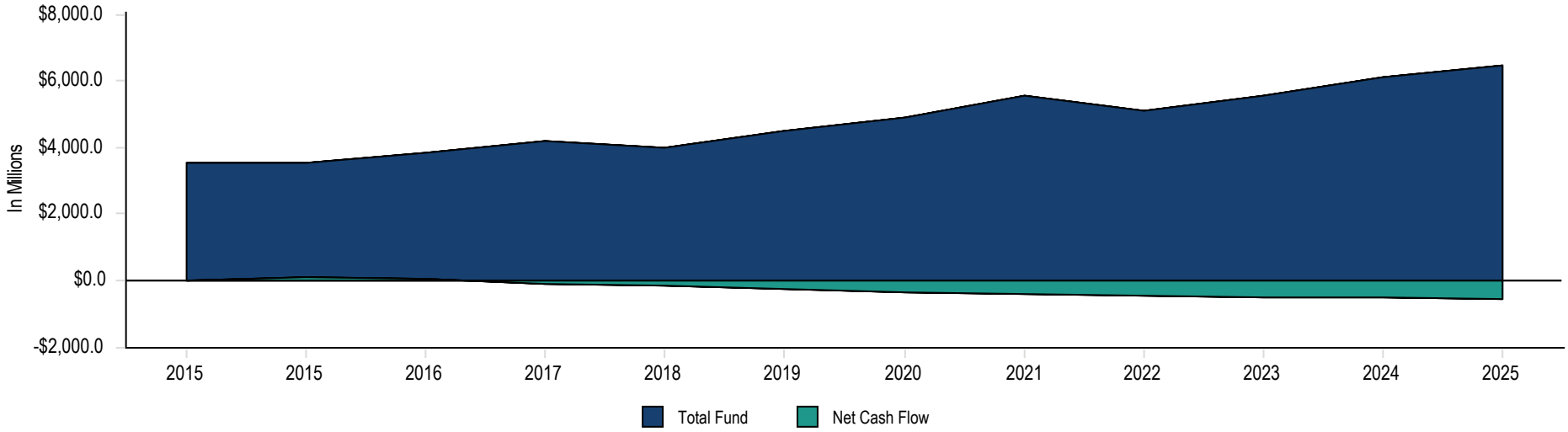
Portfolio Reconciliation

	Last Three Months
Beginning Market Value	$6,190,407,316
Net Cash Flows	-$33,173,184
Net Investment Change	$287,198,566
Ending Market Value	$6,444,339,563

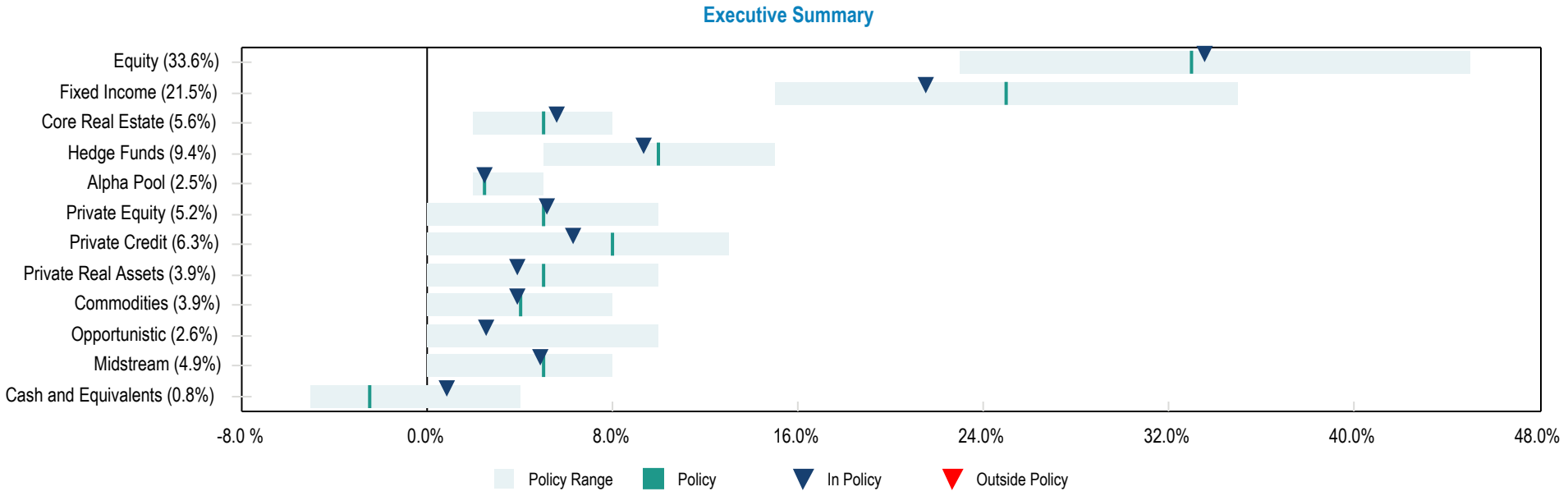
Change in Market Value
Last Three Months

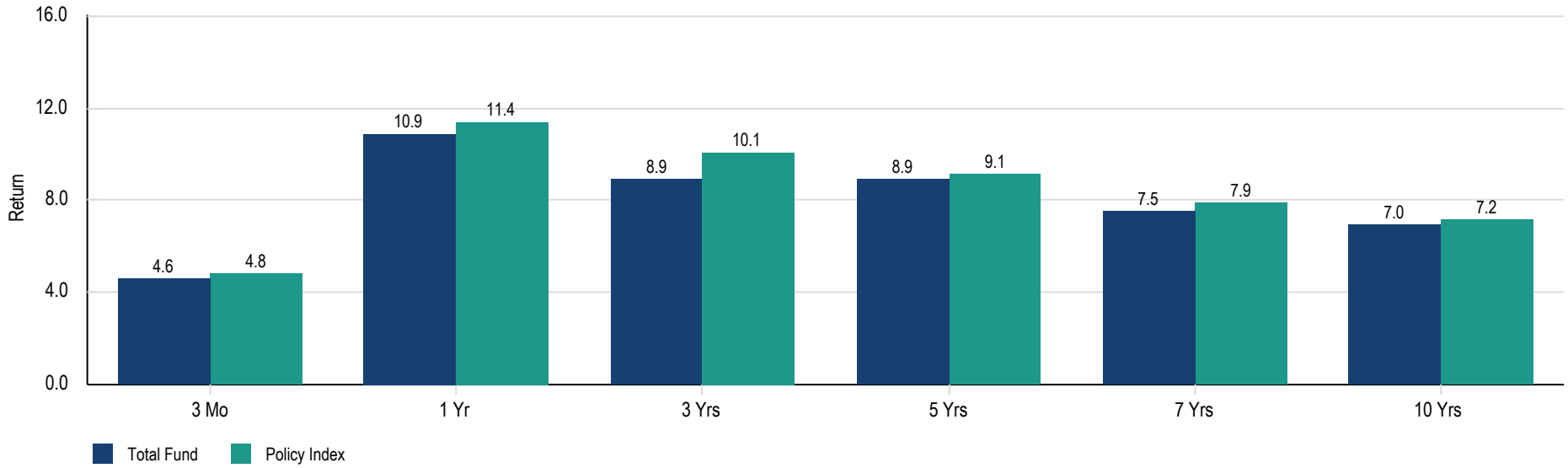


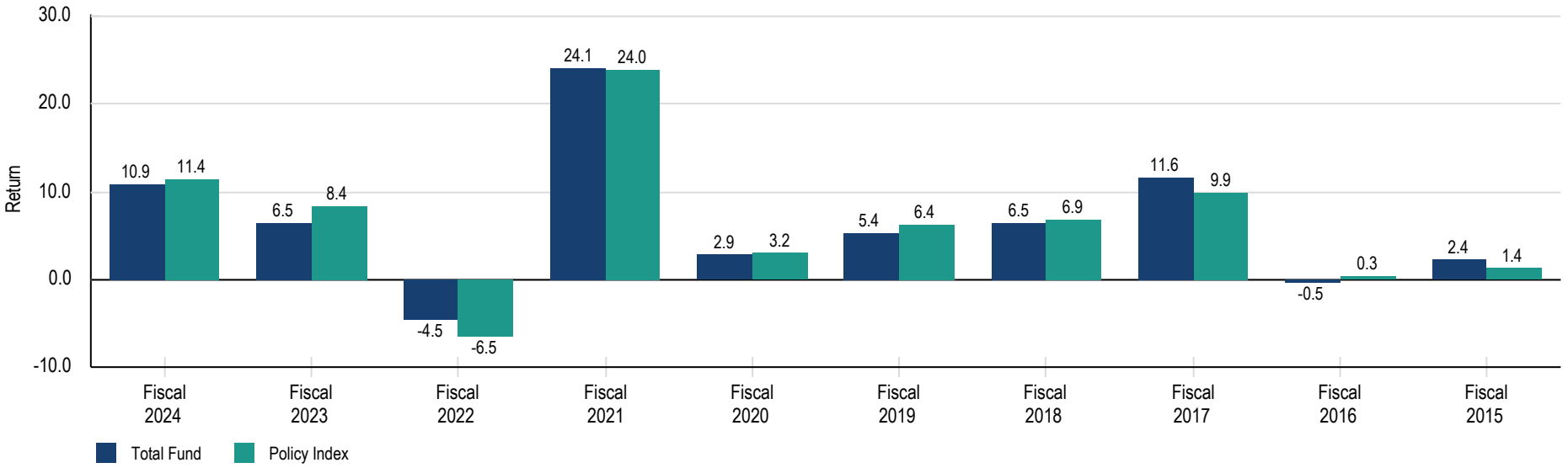
Market Value History



	Current Balance ($)	Current Allocation (%)	Policy Allocation (%)	Excess Allocation (%)	Policy Range (%)	Within IPS Range?
Equity	2,163,118,845	33.6	33.0	0.6	23.0 - 45.0	Yes
Fixed Income	1,385,395,986	21.5	25.0	-3.5	15.0 - 35.0	Yes
Core Real Estate	359,635,361	5.6	5.0	0.6	2.0 - 8.0	Yes
Hedge Funds	603,308,350	9.4	10.0	-0.6	5.0 - 15.0	Yes
Alpha Pool	158,822,269	2.5	2.5	0.0	2.0 - 5.0	Yes
Private Equity	334,025,975	5.2	5.0	0.2	0.0 - 10.0	Yes
Private Credit	404,673,592	6.3	8.0	-1.7	0.0 - 13.0	Yes
Private Real Assets	251,833,184	3.9	5.0	-1.1	0.0 - 10.0	Yes
Commodities	249,749,478	3.9	4.0	-0.1	0.0 - 8.0	Yes
Opportunistic	166,383,003	2.6	0.0	2.6	0.0 - 10.0	Yes
Midstream	313,908,819	4.9	5.0	-0.1	0.0 - 8.0	Yes
Cash and Equivalents	53,484,699	0.8	-2.5	3.3	-5.0 - 4.0	Yes
Total	**6,444,339,563**	**100.0**	**100.0**	**0.0**		




16.0
12.0
8.0
4.0
0.0
Return
4.6
4.8
10.9
11.4
8.9
10.1
8.9
9.1
7.5
7.9
7.0
7.2
3 Mo
1 Yr
3 Yrs
5 Yrs
7 Yrs
10 Yrs
Total Fund
Policy Index


30.0
20.0
10.0
0.0
-10.0
Return
10.9
11.4
6.5
8.4
-4.5
-6.5
24.1
24.0
2.9
3.2
5.4
6.4
6.5
6.9
11.6
9.9
-0.5
0.3
2.4
1.4
Fiscal 2024
Fiscal 2023
Fiscal 2022
Fiscal 2021
Fiscal 2020
Fiscal 2019
Fiscal 2018
Fiscal 2017
Fiscal 2016
Fiscal 2015
Total Fund
Policy Index

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2024	Fiscal 2023	Fiscal 2022	Fiscal 2021	Fiscal 2020
Total Fund	**6,444,339,563**	**100.0**	**4.7**	**11.2**	**11.2**	**9.2**	**9.2**	**7.3**	**9.7**	**6.7**	**-4.2**	**24.4**	**3.2**
Policy Index			*4.8*	*11.4*	*11.4*	*10.1*	*9.1*	*7.2*	*10.5*	*8.4*	*-6.5*	*24.0*	*3.2*
InvMetrics Public DB > $1B Rank			*82*	*25*	*25*	*52*	*44*	*51*	*58*	*71*	*37*	*88*	*22*
Equity	**2,163,118,845**	**33.6**	**10.9**	**14.8**	**14.8**	**16.0**	**13.4**	**10.2**	**17.1**	**15.9**	**-14.9**	**41.2**	**0.7**
MSCI AC World IMI Index (Net)			*11.6*	*15.9*	*15.9*	*16.8*	*13.4*	*9.7*	*18.4*	*16.1*	*-16.5*	*40.9*	*1.2*
Domestic Equity	1,155,091,987	17.9	9.6	12.9	12.9	17.7	15.5	13.2	22.4	17.8	-12.0	43.6	6.3
MSCI USA IMI			*11.1*	*15.2*	*15.2*	*19.2*	*16.1*	*13.1*	*23.3*	*19.2*	*-13.7*	*44.4*	*6.7*
International Developed Equity	758,643,414	11.8	12.0	17.8	17.8	15.3	11.0	6.8	11.0	17.2	-19.6	37.0	-5.5
MSCI World ex U.S. IMI Index (Net)			*12.7*	*19.3*	*19.3*	*15.4*	*11.3*	*6.6*	*10.8*	*16.3*	*-17.7*	*34.8*	*-5.1*
Emerging Markets Equity	249,381,660	3.9	14.3	17.0	17.0	12.1	9.2	5.1	14.2	5.3	-21.4	40.6	-10.9
MSCI Emerging Markets IMI (Net)			*12.7*	*14.3*	*14.3*	*10.2*	*7.6*	*4.9*	*13.6*	*3.2*	*-24.8*	*43.2*	*-4.0*
Fixed Income	**1,385,395,986**	**21.5**	**1.9**	**7.4**	**7.4**	**4.9**	**1.2**	**2.9**	**4.2**	**3.1**	**-12.7**	**5.4**	**6.6**
Fixed Income Custom Benchmark			*2.1*	*7.4*	*7.4*	*4.7*	*1.1*	*2.7*	*4.8*	*1.9*	*-11.6*	*4.0*	*5.2*
Core Fixed Income	677,673,929	10.5	1.2	5.6	5.6	2.4	-0.8	2.0	2.5	-0.9	-11.2	1.0	9.5
Core Fixed Income Benchmark			*1.3*	*5.8*	*5.8*	*2.4*	*-0.8*	*1.7*	*2.5*	*-0.9*	*-10.3*	*-0.3*	*8.7*
Credit Fixed Income	707,468,816	11.0	3.0	10.0	10.0	8.8	4.3	3.9	7.1	9.3	-14.2	11.6	-0.2
Credit Fixed Income Benchmark			*3.7*	*10.5*	*10.5*	*9.3*	*4.3*	*4.3*	*8.2*	*9.2*	*-15.7*	*12.2*	*-1.1*
Commodities	**249,749,478**	**3.9**	**-0.4**	**6.6**	**6.6**	**4.6**	**14.5**	**4.5**	**14.6**	**-6.3**	**20.1**	**43.5**	**-10.7**
Bloomberg Commodity Index Total Return			*-3.1*	*5.8*	*5.8*	*0.1*	*12.7*	*2.0*	*5.0*	*-9.6*	*24.3*	*45.6*	*-17.4*
Hedge Funds	**603,308,350**	**9.4**	**2.9**	**9.0**	**9.0**	**8.3**	**8.8**	**6.5**	**9.2**	**6.9**	**2.9**	**16.3**	**7.3**
75% (3 Month T-Bill + 3%) + 25% MSCI ACWI Net			*4.2*	*10.0*	*10.0*	*10.3*	*8.0*	*6.5*	*11.4*	*9.4*	*-1.7*	*11.4*	*4.5*
Alpha Pool	**158,822,269**	**2.5**	**1.3**	**6.2**	**6.2**	**2.0**	**4.3**	**-**	**0.7**	**-0.9**	**1.5**	**14.5**	**-**
3-Month Treasury Bill +3%			*1.8*	*7.8*	*7.8*	*7.7*	*5.8*	*-*	*8.6*	*6.7*	*3.2*	*3.1*	*-*
Midstream Energy	**313,908,819**	**4.9**	**-0.3**	**22.4**	**22.4**	**24.3**	**-**	**-**	**30.6**	**20.1**	**9.7**	**-**	**-**
Alerian Midstream Energy Index			*-1.2*	*30.8*	*30.8*	*22.9*	*-*	*-*	*26.7*	*12.2*	*11.4*	*-*	*-*
Core Real Estate	**358,808,370**	**5.6**	**2.5**	**4.6**	**4.6**	**-9.6**	**-0.2**	**3.3**	**-19.8**	**-11.9**	**25.6**	**6.6**	**2.3**
NCREIF ODCE (Net)			*0.8*	*2.7*	*2.7*	*-6.2*	*2.5*	*4.4*	*-10.0*	*-10.7*	*28.3*	*7.1*	*1.3*
Private Real Assets	**252,660,175**	**3.9**	**-0.2**	**0.4**	**0.4**	**0.4**	**9.1**	**8.7**	**-6.4**	**7.9**	**38.8**	**9.6**	**4.4**
			-0.2	*0.4*	*0.4*	*0.4*	*9.1*	*8.7*	*-6.4*	*7.9*	*38.8*	*9.6*	*4.4*
Private Equity	**334,025,975**	**5.2**	**3.3**	**9.1**	**9.1**	**6.7**	**15.9**	**10.4**	**11.9**	**-0.6**	**21.5**	**41.9**	**-10.5**
			3.3	*9.1*	*9.1*	*6.7*	*15.9*	*10.4*	*11.9*	*-0.6*	*21.5*	*41.9*	*-10.5*
Private Credit	**404,673,592**	**6.3**	**0.6**	**9.7**	**9.7**	**8.6**	**6.1**	**-**	**13.1**	**3.2**	**0.3**	**4.8**	**5.5**
			0.6	*9.7*	*9.7*	*8.6*	*6.1*	*-*	*13.1*	*3.2*	*0.3*	*4.8*	*5.5*

Policy Index: 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 19% Core (12% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 8% Credit (1.5% Securitized (0.75% Bloomberg Non-Agency CMBS Index; 0.50% Bloomberg ABS Index; 0.25% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 4% Emerging Market Debt (2% JPM EMBI Global Div / 2% JPM GBI EM Global Div), 4% Bloomberg Commodity Index, 10% Hedge fund (7.5% 3-Month T-bill + 3%, 2.5% MSCI ACWI (Net)), 2.5% 3-Month T-Bill + 3%, 5% Alerian Midstream Energy Index, 6% NCREIF-ODCE Net Monthly, 5% actual time-weighted Private Equity Returns, 6% actual time-weighted Private Credit Returns*, 4% actual time-weighted Private Real Estate Returns*, 0% Assumed Rate of Return +3%, -2.5% 3-Month T-bill. Fixed Income Beta Exposure return includes overlay cash and an implied hurdle rate also applied to the Alpha pool.*

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2024	Fiscal 2023	Fiscal 2022	Fiscal 2021	Fiscal 2020
Opportunistic	**166,383,003**	**2.6**	**3.9**	**18.4**	**18.4**	**7.0**	**13.2**	**-**	**2.9**	**0.6**	**-5.3**	**60.3**	**-**
Assumed Rate of Return +3%			*2.4*	*10.0*	*10.0*	*10.0*	*10.0*	*-*	*10.0*	*10.0*	*10.0*	*10.0*	*-*
Cash	**250,828,300**	**3.9**	**1.2**	**5.4**	**5.4**	**4.8**	**2.8**	**2.5**	**6.4**	**2.6**	**-0.1**	**0.1**	**1.0**
3 Month T-Bill			*1.0*	*4.7*	*4.7*	*4.6*	*2.8*	*2.0*	*5.4*	*3.6*	*0.2*	*0.1*	*1.6*

Policy Index: 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 19% Core (12% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 8% Credit (1.5% Securitized (0.75% Bloomberg Non-Agency CMBS Index; 0.50% Bloomberg ABS Index; 0.25% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 4% Emerging Market Debt (2% JPM EMBI Global Div / 2% JPM GBI EM Global Div), 4% Bloomberg Commodity Index, 10% Hedge fund (7.5% 3-Month T-bill + 3%, 2.5% MSCI ACWI (Net)), 2.5% 3-Month T-Bill + 3%, 5% Alerian Midstream Energy Index, 6% NCREIF-ODCE Net Monthly, 5% actual time-weighted Private Equity Returns, 6% actual time-weighted Private Credit Returns*, 4% actual time-weighted Private Real Estate Returns*, 0% Assumed Rate of Return +3%, -2.5% 3-Month T-bill. Fixed Income Beta Exposure return includes overlay cash and an implied hurdle rate also applied to the Alpha pool.*

Performance and Attribution

Total Fund
Performance (Net of Fees)

Kern County Employees' Retirement Association
Period Ending: June 30, 2025

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2024	Fiscal 2023	Fiscal 2022	Fiscal 2021	Fiscal 2020	Inception	Inception Date
Total Fund	**6,444,339,563**	**100.0**	**4.6**	**10.9**	**10.9**	**8.9**	**8.9**	**7.0**	**9.5**	**6.5**	**-4.5**	**24.1**	**2.9**	**6.9**	**Jun-11**
Policy Index			*4.8*	*11.4*	*11.4*	*10.1*	*9.1*	*7.2*	*10.5*	*8.4*	*-6.5*	*24.0*	*3.2*	*7.0*	
Equity	**2,163,118,845**	**33.6**	**10.9**	**14.6**	**14.6**	**15.7**	**13.1**	**9.8**	**16.9**	**15.7**	**-15.1**	**40.7**	**0.3**	**9.7**	**Jun-11**
MSCI AC World IMI Index (Net)			*11.6*	*15.9*	*15.9*	*16.8*	*13.4*	*9.7*	*18.4*	*16.1*	*-16.5*	*40.9*	*1.2*	*9.3*	
Domestic Equity	**1,155,091,987**	**17.9**	**9.5**	**12.7**	**12.7**	**17.4**	**15.3**	**12.8**	**22.1**	**17.6**	**-12.2**	**43.2**	**6.0**	**12.3**	**Jul-14**
MSCI USA IMI			*11.1*	*15.2*	*15.2*	*19.2*	*16.1*	*13.1*	*23.3*	*19.2*	*-13.7*	*44.4*	*6.7*	*12.5*	
Mellon DB SL Stock Index Fund	655,409,933	10.2	10.9	15.1	15.1	19.7	16.6	-	24.5	19.6	-10.6	40.8	7.5	14.1	Oct-17
S&P 500 Index			*10.9*	*15.2*	*15.2*	*19.7*	*16.6*	-	*24.6*	*19.6*	*-10.6*	*40.8*	*7.5*	*14.1*	
PIMCO StocksPLUS	168,332,044	2.6	10.9	15.1	15.1	19.8	16.3	13.5	25.6	18.8	-12.8	41.7	7.7	11.5	Jul-03
S&P 500 Index			*10.9*	*15.2*	*15.2*	*19.7*	*16.6*	*13.6*	*24.6*	*19.6*	*-10.6*	*40.8*	*7.5*	*10.8*	
Chilton High Conviction Equity	160,783,574	2.5	-	-	-	-	-	-	-	-	-	-	-	7.2	May-25
S&P 500 Index			-	-	-	-	-	-	-	-	-	-	-	*6.4*	
AB US Small Cap Value Equity	67,984,676	1.1	5.0	4.8	4.8	6.1	12.2	-	9.1	4.3	-16.1	77.5	-19.4	6.4	Jul-15
Russell 2000 Value Index			*5.0*	*5.5*	*5.5*	*7.5*	*12.5*	*6.7*	*10.9*	*6.0*	*-16.3*	*73.3*	*-17.5*	*6.8*	
Geneva Capital Small Cap Growth	102,581,759	1.6	4.4	3.3	3.3	9.4	7.0	-	9.8	15.6	-22.1	37.6	9.3	9.4	Jul-15
Russell 2000 Growth Index			*12.0*	*9.7*	*9.7*	*12.4*	*7.4*	*7.1*	*9.1*	*18.5*	*-33.4*	*51.4*	*3.5*	*7.0*	
International Developed Equity	**758,643,414**	**11.8**	**12.0**	**17.7**	**17.7**	**15.2**	**11.4**	**6.7**	**10.9**	**17.1**	**-17.8**	**36.7**	**-5.7**	**6.0**	**Jul-14**
MSCI World ex U.S. IMI Index (Net)			*12.7*	*19.3*	*19.3*	*15.4*	*11.3*	*6.6*	*10.8*	*16.3*	*-17.7*	*34.8*	*-5.1*	*5.5*	
Mellon DB SL World ex-US Index Fund	382,686,441	5.9	12.2	19.0	19.0	16.2	12.3	-	11.7	17.9	-16.1	35.6	-5.5	7.9	Jul-18
MSCI World ex U.S. IMI Index (Net)			*12.7*	*19.3*	*19.3*	*15.4*	*11.3*	-	*10.8*	*16.3*	*-17.7*	*34.8*	*-5.1*	*7.1*	
Cevian Capital II	53,594,602	0.8	5.2	13.2	13.2	20.0	18.4	9.3	21.8	25.3	-8.2	46.8	-8.2	9.3	Dec-14
MSCI Europe Index (Net) Hedged			*1.9*	*6.9*	*6.9*	*12.1*	*10.0*	*6.7*	*12.2*	*17.3*	*-8.6*	*25.0*	*-5.6*	*7.0*	
Lazard Japanese Equity	160,482,986	2.5	10.0	14.2	14.2	-	-	-	-	-	-	-	-	20.0	Nov-23
TOPIX Net Total Return Index			*11.3*	*15.5*	*15.5*	-	-	-	-	-	-	-	-	*18.9*	
American Century Non-US Small Cap	75,445,746	1.2	20.3	16.9	16.9	10.9	-	-	8.3	7.9	-27.4	-	-	3.0	Dec-20
MSCI World ex U.S. Small Cap Growth Index (Net)			*19.0*	*22.1*	*22.1*	*12.2*	-	-	*5.6*	*9.5*	*-28.6*	-	-	*2.8*	
Dalton Japan Long Only	86,433,639	1.3	12.0	23.5	23.5	-	-	-	-	-	-	-	-	22.2	Oct-23
MSCI Japan Small Cap Index (Net)			*12.4*	*22.9*	*22.9*	-	-	-	-	-	-	-	-	*20.4*	
Emerging Markets Equity	**249,381,660**	**3.9**	**14.1**	**16.5**	**16.5**	**11.5**	**8.6**	**4.3**	**13.8**	**4.6**	**-21.9**	**39.5**	**-11.8**	**3.4**	**Jul-14**
MSCI Emerging Markets IMI (Net)			*12.7*	*14.3*	*14.3*	*10.2*	*7.6*	*4.9*	*13.6*	*3.2*	*-24.8*	*43.2*	*-4.0*	*4.1*	
DFA Emerging Markets Value I	62,205,550	1.0	11.0	11.9	11.9	12.1	12.6	6.1	16.7	7.9	-12.9	47.6	-17.7	5.6	Mar-14
MSCI Emerging Markets Value (Net)			*10.0*	*12.7*	*12.7*	*10.2*	*9.1*	*4.0*	*14.1*	*4.1*	*-18.6*	*41.6*	*-15.7*	*3.8*	
Mellon Emerging Markets Stock Index Fund	23,588,101	0.4	11.9	15.5	15.5	9.5	6.7	-	12.0	1.6	-25.5	41.1	-	6.5	Jun-20
MSCI Emerging Markets (Net)			*12.0*	*15.3*	*15.3*	*9.7*	*6.8*	-	*12.5*	*1.7*	*-25.3*	*40.9*	-	*8.2*	
Carrhae Capital Long Master Fund Ltd	85,455,259	1.3	17.1	-	-	-	-	-	-	-	-	-	-	22.1	Aug-24
MSCI Emerging Markets IMI (Net)			*12.7*	-	-	-	-	-	-	-	-	-	-	*14.0*	
ABS Emerging Market Direct	78,132,749	1.2	14.1	-	-	-	-	-	-	-	-	-	-	11.4	Aug-24
MSCI Emerging Markets IMI (Net)			*12.7*	-	-	-	-	-	-	-	-	-	-	*12.5*	
Fixed Income	**1,385,395,986**	**21.5**	**1.8**	**7.2**	**7.2**	**4.7**	**1.0**	**2.7**	**3.9**	**2.9**	**-13.0**	**5.1**	**6.3**	**3.4**	**Jun-10**
Fixed Income Custom Benchmark			*2.1*	*7.4*	*7.4*	*4.7*	*1.1*	*2.7*	*4.8*	*1.9*	*-11.6*	*4.0*	*5.2*	*3.3*	
Core Fixed Income	**677,673,929**	**10.5**	**1.2**	**5.5**	**5.5**	**2.3**	**-0.9**	**1.9**	**2.4**	**-1.0**	**-11.4**	**0.8**	**9.3**	**1.8**	**Jul-14**
Core Fixed Income Benchmark			*1.3*	*5.8*	*5.8*	*2.4*	*-0.8*	*1.7*	*2.5*	*-0.9*	*-10.3*	*-0.3*	*8.7*	*1.7*	
Aristotle Short Duration Bond Strategy	256,555,255	4.0	1.6	-	-	-	-	-	-	-	-	-	-	3.6	Jan-25
Blmbg. U.S. Corporate 1-3 Year Index			*1.5*	-	-	-	-	-	-	-	-	-	-	*3.1*	

Policy Index: 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 19% Core (12% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 8% Credit (1.5% Securitized (0.75% Bloomberg Non-Agency CMBS Index; 0.50% Bloomberg ABS Index; 0.25% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 4% Emerging Market Debt (2% JPM EMBI Global Div / 2% JPM GBI EM Global Div), 4% Bloomberg Commodity Index, 10% Hedge fund (7.5% 3-Month T-bill + 3%, 2.5% MSCI ACWI (Net)), 2.5% 3-Month T-Bill + 3%, 5% Alerian Midstream Energy Index, 6% NCREIF-ODCE Net Monthly, 5% actual time-weighted Private Equity Returns, 6% actual time-weighted Private Credit Returns*, 4% actual time-weighted Private Real Estate Returns*, 0% Assumed Rate of Return +3%, -2.5% 3-Month T-bill. Fixed Income Beta Exposure return includes overlay cash and an implied hurdle rate also applied to the Alpha pool.*

Verus

Total Fund
Performance (Net of Fees)

Kern County Employees' Retirement Association
Period Ending: June 30, 2025

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2024	Fiscal 2023	Fiscal 2022	Fiscal 2021	Fiscal 2020	Inception	Inception Date
Fixed Income Beta Exposure	97,845,705	1.5	1.6	5.5	5.5	1.5	-	-	1.7	-2.5	-	-	-	2.3	Jun-22
ICE BofA 7-10 Year U.S. Treasury Index			*1.4*	*6.3*	*6.3*	*1.0*	-	-	*0.3*	*-3.3*	-	-	-	*0.7*	
Mellon DB SL Aggregate Bond Index Fund	139,786,570	2.2	1.2	6.1	6.1	2.6	-0.8	1.7	2.6	-0.9	-10.4	-0.4	8.8	2.2	Jan-11
Bloomberg U.S. Aggregate Index			*1.2*	*6.1*	*6.1*	*2.5*	*-0.7*	*1.8*	*2.6*	*-0.9*	*-10.3*	*-0.3*	*8.7*	*2.3*	
PIMCO Core Plus	183,486,399	2.8	1.6	7.4	7.4	3.4	0.1	2.2	3.6	-0.7	-9.9	1.1	8.7	2.7	Feb-11
Bloomberg U.S. Aggregate Index			*1.2*	*6.1*	*6.1*	*2.5*	*-0.7*	*1.8*	*2.6*	*-0.9*	*-10.3*	*-0.3*	*8.7*	*2.3*	
Credit Fixed Income	**707,468,816**	**11.0**	**2.9**	**9.6**	**9.6**	**8.4**	**3.9**	**3.5**	**6.7**	**8.9**	**-14.6**	**11.1**	**-0.6**	**-**	**May-05**
Credit Fixed Income Benchmark			*3.7*	*10.5*	*10.5*	*9.3*	*4.3*	*4.3*	*8.2*	*9.2*	*-15.7*	*12.2*	*-1.1*	*5.9*	
TCW Securitized Opportunities	93,049,527	1.4	2.5	10.2	10.2	5.8	3.9	-	3.1	4.4	-4.0	6.4	2.2	4.1	Feb-16
Bloomberg U.S. High Yield - 2% Issuer Cap			*3.5*	*10.3*	*10.3*	*9.9*	*6.0*	-	*10.4*	*9.1*	*-12.8*	*15.3*	*0.0*	*6.7*	
KKR US Broadly Syndicated Loan Fund	178,313,524	2.8	1.8	-	-	-	-	-	-	-	-	-	-	2.7	Oct-24
Morningstar LSTA U.S. Leveraged Loan			*2.3*	-	-	-	-	-	-	-	-	-	-	*4.3*	
Guggenheim Structured Credit	100,257,314	1.6	-	-	-	-	-	-	-	-	-	-	-	0.4	Jun-25
50% Bloomberg Non-Agency CMBS Index, 33.33% Bloomberg ABS Index, 16.67% JPM CL			-	-	-	-	-	-	-	-	-	-	-	*0.8*	
Schroders Credit	155,000,000	2.4	-	-	-	-	-	-	-	-	-	-	-	0.0	Jun-25
50% Bloomberg Non-Agency CMBS Index, 33.33% Bloomberg ABS Index, 16.67% JPM CL			-	-	-	-	-	-	-	-	-	-	-	*0.6*	
Stone Harbor Emerging Markets Debt Blend Portfolio	15,884,186	0.2	5.4	12.0	12.0	9.9	2.8	2.8	6.8	10.8	-20.9	9.5	-1.8	1.4	Aug-12
50 JPM GBI-EM Global Div/ 40 JPM EMBI Global Div/ 10 JPM Corporate EM Bond Idx			*5.3*	*11.7*	*11.7*	*8.6*	*2.0*	*2.9*	*4.9*	*9.2*	*-19.5*	*7.2*	*-0.8*	*2.1*	
PIMCO EMD	164,964,265	2.6	4.8	11.8	11.8	9.5	2.9	-	5.6	11.3	-19.2	8.7	-	1.9	Feb-20
65 JPM EMBI Global Div / 35 JPM GBI EM Global Div			*5.5*	*11.9*	*11.9*	*8.7*	*1.9*	-	*4.9*	*9.4*	*-20.2*	*7.1*	-	*0.8*	
Commodities	**249,749,478**	**3.9**	**-0.5**	**5.9**	**5.9**	**3.9**	**13.8**	**3.8**	**13.7**	**-7.0**	**19.3**	**42.5**	**-11.3**	**1.2**	**Jul-13**
Bloomberg Commodity Index Total Return			*-3.1*	*5.8*	*5.8*	*0.1*	*12.7*	*2.0*	*5.0*	*-9.6*	*24.3*	*45.6*	*-17.4*	*0.0*	
Wellington Commodities	249,749,478	3.9	-0.5	5.8	5.8	5.0	13.7	4.7	15.5	-5.2	17.2	40.2	-7.5	2.0	Sep-13
S&P GSCI Commodity Equal Weighted			*-0.8*	*4.8*	*4.8*	*2.9*	*12.8*	*4.1*	*10.4*	*-6.0*	*19.0*	*40.9*	*-12.4*	*1.6*	
Hedge Funds	**603,308,350**	**9.4**	**2.8**	**8.4**	**8.4**	**8.1**	**8.7**	**6.1**	**8.9**	**7.0**	**3.4**	**16.1**	**6.9**	**5.9**	**Jun-13**
75% (3 Month T-Bill + 3%) + 25% MSCI ACWI Net			*4.2*	*10.0*	*10.0*	*10.3*	*8.0*	*6.5*	*11.4*	*9.4*	*-1.7*	*11.4*	*4.5*	*6.2*	
Aristeia International Limited	79,678,154	1.2	1.3	6.9	6.9	5.8	8.0	7.1	5.1	5.5	1.8	21.6	8.7	5.4	May-14
Brevan Howard Fund	59,502,698	0.9	5.4	6.3	6.3	2.8	5.8	6.3	3.1	-1.0	15.2	6.1	20.5	6.8	Sep-13
D.E. Shaw Composite Fund	70,455,222	1.1	4.3	19.3	19.3	14.3	18.1	14.8	12.9	11.0	29.0	19.0	15.6	14.5	Jul-13
HBK Fund II	54,684,514	0.8	1.9	9.3	9.3	9.4	8.3	5.7	11.1	7.9	2.3	11.0	1.5	5.4	Nov-13
Hudson Bay Cap Structure Arbitrage Enhanced Fund	86,620,566	1.3	2.1	8.6	8.6	6.8	8.4	-	4.0	7.7	7.7	14.2	16.2	9.6	Jun-19
Indus Pacific Opportunities Fund	55,510,741	0.9	6.4	13.1	13.1	6.0	8.6	5.6	5.8	-0.4	-8.2	38.0	15.8	7.2	Jul-14
Pharo Macro Fund	82,460,889	1.3	6.3	16.2	16.2	9.8	4.1	-	12.7	1.2	-11.1	3.5	-	4.2	Dec-19
PIMCO Commodity Alpha Fund	76,936,625	1.2	-2.0	-6.7	-6.7	8.4	9.6	-	15.6	18.3	8.6	14.2	4.8	9.4	Jun-16
Elliott Associates	37,458,940	0.6	0.8	5.5	5.5	-	-	-	-	-	-	-	-	5.5	Jul-24
Alpha Pool	**158,822,269**	**2.5**	**1.3**	**6.2**	**6.2**	**2.0**	**4.3**	**-**	**0.7**	**-0.9**	**1.5**	**14.5**	**-**	**4.3**	**Jul-20**
3-Month Treasury Bill +3%			*1.8*	*7.8*	*7.8*	*7.7*	*5.8*	-	*8.6*	*6.7*	*3.2*	*3.1*	-	*5.8*	
Hudson Bay - Alpha Pool	39,439,929	0.6	1.3	5.7	5.7	0.5	-	-	-2.8	-1.1	6.7	-	-	4.1	Aug-20
Davidson Kempner Institutional Partners	55,923,059	0.9	1.3	8.0	8.0	1.6	-	-	1.2	-4.1	-3.4	-	-	2.1	Dec-20
HBK Fund II	20,287,798	0.3	1.1	6.4	6.4	3.1	-	-	4.0	-1.0	1.3	-	-	3.4	Dec-20
Garda Fixed Income Relative Value Opportunity Fund	43,171,484	0.7	1.3	4.2	4.2	3.2	-	-	1.8	3.6	-	-	-	4.0	Sep-21
Midstream Energy	**313,908,819**	**4.9**	**-0.4**	**21.6**	**21.6**	**23.5**	**-**	**-**	**29.8**	**19.3**	**9.3**	**-**	**-**	**26.9**	**Sep-20**
Alerian Midstream Energy Index			*-1.2*	*30.8*	*30.8*	*22.9*	-	-	*26.7*	*12.2*	*11.4*	-	-	*26.6*	
Harvest Midstream	193,380,301	3.0	-1.1	23.3	23.3	26.5	-	-	35.9	20.9	15.3	-	-	32.0	Aug-20

Policy Index: 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 19% Core (12% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 8% Credit (1.5% Securitized (0.75% Bloomberg Non-Agency CMBS Index; 0.50% Bloomberg ABS Index; 0.25% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 4% Emerging Market Debt (2% JPM EMBI Global Div / 2% JPM GBI EM Global Div), 4% Bloomberg Commodity Index, 10% Hedge fund (7.5% 3-Month T-bill + 3%, 2.5% MSCI ACWI (Net)), 2.5% 3-Month T-Bill + 3%, 5% Alerian Midstream Energy Index, 6% NCREIF-ODCE Net Monthly, 5% actual time-weighted Private Equity Returns, 6% actual time-weighted Private Credit Returns*, 4% actual time-weighted Private Real Estate Returns*, 0% Assumed Rate of Return +3%, -2.5% 3-Month T-bill. Fixed Income Beta Exposure return includes overlay cash and an implied hurdle rate also applied to the Alpha pool.*

Verus

	Market Value	% of Portfolio	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs	Fiscal 2024	Fiscal 2023	Fiscal 2022	Fiscal 2021	Fiscal 2020	Inception	Inception Date
Alerian Midstream Energy Index			*-1.2*	*30.8*	*30.8*	*22.9*	-	-	*26.7*	*12.2*	*11.4*	-	-	*26.2*	
PIMCO Midstream	120,528,518	1.9	0.0	19.3	19.3	19.9	-	-	23.6	16.9	2.2	-	-	22.0	Oct-20
50/25/25 Alerian Midstream/ ICE BofA US Pipeline/ ICE BofA US HY Midstream			*-0.1*	*18.6*	*18.6*	*15.3*	-	-	*17.6*	*10.1*	*-0.7*	-	-	*16.3*	
Core Real Estate	**358,808,370**	**5.6**	**2.4**	**4.1**	**4.1**	**-10.1**	**-0.8**	**2.7**	**-20.2**	**-12.4**	**24.8**	**5.6**	**1.4**	**3.5**	**Oct-14**
NCREIF ODCE (Net)			*0.8*	*2.7*	*2.7*	*-6.2*	*2.5*	*4.4*	*-10.0*	*-10.7*	*28.3*	*7.1*	*1.3*	*5.0*	
ASB Allegiance Real Estate Fund	116,581,713	1.8	1.8	2.8	2.8	-12.1	-2.5	1.6	-23.9	-13.3	23.0	5.4	1.5	3.3	Sep-13
NCREIF ODCE			*0.8*	*2.7*	*2.7*	*-6.2*	*2.5*	*4.4*	*-10.0*	*-10.7*	*28.3*	*7.1*	*1.3*	*5.6*	
JPMCB Strategic Property Fund	96,612,701	1.5	1.0	3.9	3.9	-7.8	1.2	3.7	-14.9	-11.4	27.9	5.9	1.3	4.4	Jul-14
NCREIF ODCE			0.8	2.7	2.7	-6.2	2.5	4.4	-10.0	-10.7	28.3	7.1	1.3	6.9	Jan-78
Blue Owl Real Estate Fund VI	32,709,368	0.5	11.9	12.0	12.0	-	-	-	-	-	-	-	-	-1.8	May-24
NCREIF ODCE			*0.8*	*2.7*	*2.7*	-	-	-	-	-	-	-	-	*1.7*	
Sculptor Diversified REIT	48,867,215	0.8	2.7	-	-	-	-	-	-	-	-	-	-	1.1	Dec-24
NCREIF ODCE			*0.8*	-	-	-	-	-	-	-	-	-	-	*2.6*	
Hudson Bay Real Estate Opportunities	28,183,404	0.4	0.0	-	-	-	-	-	-	-	-	-	-	1.5	Jan-25
NCREIF ODCE			*0.8*	-	-	-	-	-	-	-	-	-	-	*1.7*	
TPG AG Essential Housing III	20,460,703	0.3	0.0	-	-	-	-	-	-	-	-	-	-	2.5	Dec-24
NCREIF ODCE			*0.8*	-	-	-	-	-	-	-	-	-	-	*2.6*	
BPC Real Estate Debt Fund LP	15,393,266	0.2	3.2	-	-	-	-	-	-	-	-	-	-	8.5	Mar-25
NCREIF ODCE			*0.8*	-	-	-	-	-	-	-	-	-	-	*1.7*	
Private Real Assets	**252,660,175**	**3.9**	**-0.2**	**0.4**	**0.4**	**0.4**	**9.1**	**8.7**	**-6.4**	**7.9**	**38.8**	**9.6**	**4.4**	**10.8**	**Mar-11**
			-0.2	*0.4*	*0.4*	*0.4*	*9.1*	*8.7*	*-6.4*	*7.9*	*38.8*	*9.6*	*4.4*	*10.5*	
Private Equity	**334,025,975**	**5.2**	**3.3**	**9.1**	**9.1**	**6.7**	**15.9**	**10.4**	**11.9**	**-0.6**	**21.5**	**41.9**	**-10.5**	**10.8**	**Sep-10**
			3.3	*9.1*	*9.1*	*6.7*	*15.9*	*10.4*	*11.9*	*-0.6*	*21.5*	*41.9*	*-10.5*	*10.7*	
Private Credit	**404,673,592**	**6.3**	**0.6**	**9.7**	**9.7**	**8.6**	**6.1**	**-**	**13.1**	**3.2**	**0.3**	**4.8**	**5.5**	**7.8**	**Jan-16**
			0.6	*9.7*	*9.7*	*8.6*	*6.1*	-	*13.1*	*3.2*	*0.3*	*4.8*	*5.5*	*7.8*	
Opportunistic	**166,383,003**	**2.6**	**3.9**	**18.4**	**18.4**	**7.0**	**13.2**	**-**	**2.9**	**0.6**	**-5.4**	**60.3**	**-**	**10.2**	**Jan-20**
Assumed Rate of Return +3%			*2.4*	*10.0*	*10.0*	*10.0*	*10.0*	-	*10.0*	*10.0*	*10.0*	*10.0*	-	*10.0*	
River Birch International	4,478,943	0.1	3.4	39.7	39.7	38.5	-	-	31.0	45.1	-	-	-	42.8	Jun-22
Assumed Rate of Return +3%			*2.4*	*10.0*	*10.0*	*10.0*	-	-	*10.0*	*10.0*	-	-	-	*10.0*	
Sixth Street TAO Partners (D)	86,520,286	1.3	1.7	8.3	8.3	8.0	14.0	-	11.3	4.4	9.6	39.6	-	13.3	Mar-20
Assumed Rate of Return +3%			*2.4*	*10.0*	*10.0*	*10.0*	*10.0*	-	*10.0*	*10.0*	*10.0*	*10.0*	-	*10.0*	
Aristeia Select Opportunities II	58,978,303	0.9	6.3	35.1	35.1	4.2	-	-	-9.7	-7.2	-	-	-	4.4	Jul-21
Assumed Rate of Return +3%			*2.4*	*10.0*	*10.0*	*10.0*	-	-	*10.0*	*10.0*	*10.0*	-	-	*10.0*	
Hudson Bay Special Opportunities Fund LP	4,553,071	0.1	14.1	65.0	65.0	-	-	-	-	-	-	-	-	63.1	Feb-24
Assumed Rate of Return +3%			*2.4*	*10.0*	*10.0*	-	-	-	-	-	-	-	-	*10.0*	
Pharo Opportunities Fund SPC	11,852,400	0.2	4.8	18.5	18.5	-	-	-	-	-	-	-	-	18.4	Jun-24
Assumed Rate of Return +3%			*2.4*	*10.0*	*10.0*	-	-	-	-	-	-	-	-	*10.0*	
Cash	**250,828,300**	**3.9**	**1.2**	**5.2**	**5.2**	**4.6**	**2.7**	**2.5**	**6.3**	**2.5**	**-0.2**	**0.1**	**1.0**	**2.0**	**Apr-11**
3 Month T-Bill			*1.0*	*4.7*	*4.7*	*4.6*	*2.8*	*2.0*	*5.4*	*3.6*	*0.2*	*0.1*	*1.6*	*1.4*	

Policy Index: 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 19% Core (12% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 8% Credit (1.5% Securitized (0.75% Bloomberg Non-Agency CMBS Index; 0.50% Bloomberg ABS Index; 0.25% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 4% Emerging Market Debt (2% JPM EMBI Global Div / 2% JPM GBI EM Global Div), 4% Bloomberg Commodity Index, 10% Hedge fund (7.5% 3-Month T-bill + 3%, 2.5% MSCI ACWI (Net)), 2.5% 3-Month T-Bill + 3%, 5% Alerian Midstream Energy Index, 6% NCREIF-ODCE Net Monthly, 5% actual time-weighted Private Equity Returns, 6% actual time-weighted Private Credit Returns*, 4% actual time-weighted Private Real Estate Returns*, 0% Assumed Rate of Return +3%, -2.5% 3-Month T-bill. Fixed Income Beta Exposure return includes overlay cash and an implied hurdle rate also applied to the Alpha pool.*

Vintage Year	Manager/Fund	Estimated Market Value as of 6/30/25	IRR Analysis as of IRR date: Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Market Value as of IRR date	Distrib./ Paid-In (DPI)[1]	Tot. Value/ Paid-In (TVPI)[2]	Net IRR Since Inception[3]	IRR Date
Private Equity												
2008	Abbott Capital PE VI	$9,941,607	$50,000,000	$49,750,000	100%	$250,000	$83,815,491	$13,242,893	*1.68x*	*1.88x*	*12.2%*	03/31/25
2006	Pantheon Global III	$535,597	$50,000,000	$47,300,000	95%	$2,700,000	$52,000,000	$537,225	*1.10x*	*1.11x*	*1.9%*	12/31/24
2002	Pantheon USA V	$30,817	$25,000,000	$24,350,000	97%	$650,000	$38,291,224	$30,817	*1.57x*	*1.57x*	*9.0%*	12/31/24
2004	Pantheon USA VI	$311,635	$35,000,000	$33,075,000	95%	$1,925,000	$50,623,827	$311,850	*1.53x*	*1.54x*	*6.7%*	12/31/24
2006	Pantheon USA VII	$3,376,418	$50,000,000	$46,600,000	93%	$3,400,000	$83,279,998	$4,226,046	*1.79x*	*1.86x*	*10.0%*	12/31/24
2020	Vista Foundation Fund IV	$23,417,581	$25,000,000	$20,952,742	84%	$4,047,258	$30,252	$23,417,581	*0.00x*	*1.12x*	*2.3%*	06/30/25
2021	Crown Global Secondaries V Master S.C.Sp	$42,979,853	$50,000,000	$34,250,000	69%	$15,750,000	$6,900,000	$42,979,853	*0.20x*	*1.46x*	*19.4%*	06/30/25
2021	Brighton Park Capital Fund I	$43,650,978	$30,000,000	$30,000,000	100%	$0	$4,690,392	$43,650,978	*0.16x*	*1.61x*	*13.4%*	06/30/25
2021	Warren Equity Partners Fund III	$39,342,340	$32,500,000	$29,582,245	91%	$2,917,755	$618,327	$39,342,340	*0.02x*	*1.35x*	*11.4%*	06/30/25
2021	Peak Rock Capital Fund III	$28,841,956	$30,000,000	$23,476,166	78%	$6,523,834	$7,068,422	$28,841,956	*0.30x*	*1.53x*	*26.9%*	06/30/25
2021	Level Equity Growth Partners V	$14,139,808	$15,000,000	$12,019,949	80%	$2,980,051	$2,393	$14,139,808	*0.00x*	*1.18x*	*11.3%*	06/30/25
2021	Level Equity Opportunities Fund 2021	$11,959,372	$15,000,000	$9,737,446	65%	$5,262,554	$0	$11,959,372	*0.00x*	*1.23x*	*17.4%*	06/30/25
2022	Linden Capital Partners V LP	$20,425,051	$22,500,000	$17,787,791	79%	$4,712,209	$0	$20,425,051	*0.00x*	*1.15x*	*14.1%*	06/30/25
2022	Rubicon Technology Partners IV LP	$15,295,404	$30,000,000	$14,481,332	48%	$15,518,668	$0	$15,295,404	*0.00x*	*1.06x*	*3.0%*	06/30/25
2022	OrbiMed Private Investments IX, LP	$4,622,243	$10,000,000	$4,399,201	44%	$5,600,799	$765,338	$4,622,243	*0.17x*	*1.22x*	*24.1%*	06/30/25
2022	Brighton Park Capital Fund II	$11,812,393	$30,000,000	$14,626,198	49%	$15,373,802	$3,722,467	$11,812,393	*0.25x*	*1.06x*	*2.6%*	06/30/25
2022	Linden Co-Investment V LP	$7,246,467	$7,500,000	$9,054,807	121%	-$1,554,807	$55,503	$7,246,467	*0.01x*	*0.81x*	*22.1%*	06/30/25
2022	Warren Equity Partners Fund IV	$24,482,939	$32,500,000	$14,821,090	46%	$17,678,910	$0	$24,482,939	*0.00x*	*1.65x*	*27.5%*	06/30/25
2023	WEP Co-Invest IV	$9,677,226	$10,000,000	$9,757,415	98%	$242,585	$173,170	$9,693,935	*0.02x*	*1.01x*	*0.0%*	03/31/25
2023	Crown Global Secondaries Fund VI	$5,845,574	$30,000,000	$4,350,000	15%	$25,650,000	$0	$5,845,574	*0.00x*	*1.34x*	*49.2%*	06/30/25
2023	Parthenon Investors VII	$3,316,568	$30,000,000	$3,604,963	12%	$26,395,037	$250,000	N/A	N/A	N/A	*N/A*	N/A
2024	Longreach Capital Partners	$3,392,495	$15,000,000	$4,320,870	29%	$10,679,130	$421,772	$3,318,576	*0.10x*	*0.88x*	*N/A*	N/A
2024	Blue Owl Strategic Equity	$5,241,421	$25,000,000	$6,904,011	28%	$18,095,989	$5,856,633	N/A	N/A	N/A	*N/A*	N/A
2025	WEP IV TreeCo Co-Invest	$3,790,842	$5,000,000	$3,866,955	77%	$1,133,045	$0	N/A	*0.00x*	*0.98x*	*6.8%*	06/30/25
2025	Accel-KKR Capital Partners VII	$349,389	$25,000,000	$349,389	1%	$24,650,611	$0	N/A	N/A	N/A	*N/A*	N/A
2025	Level Equity Growth Partners VI	$0	$15,000,000	$0	0%	$15,000,000	$0	N/A	N/A	N/A	*N/A*	N/A
2025	Level Equity Opportunities Fund 2025	$0	$15,000,000	$0	0%	$15,000,000	$0	N/A	N/A	N/A	*N/A*	N/A
2025	Linden Capital Partners VI	$0	$30,000,000	$0	0%	$30,000,000	$0	N/A	N/A	N/A	*N/A*	N/A
	Total Private Equity	**$334,025,975**	$740,000,000	$469,417,570	63%	$270,582,430	$338,565,209	$325,423,302	*0.72x*	*1.43x*		
	% of Portfolio (Market Value)	***5.2%***										

[1](DPI) is equal to (capital returned / capital called)
[2](TVPI) is equal to (market value + capital returned) / capital called
[3]Net IRR is calculated on the cash flows of all the limited partners of the fund and is net of all fees. Each IRR is provided by the Fund manager and is reflective of the Fund IRR, rather than KCERA's specific IRR.

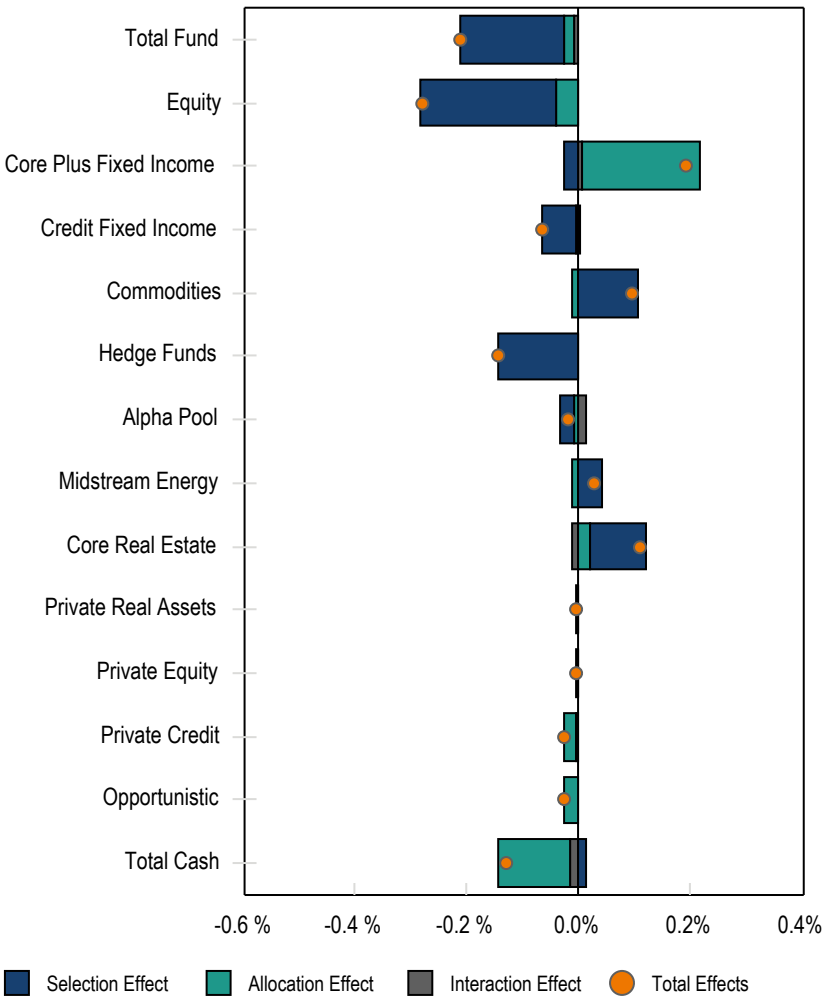
Vintage Year	Manager/Fund	Estimated Market Value 6/30/2025	IRR Analysis as of IRR date: Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Market Value as of IRR date	Distrib./ Paid-In (DPI)[1]	Tot. Value/ Paid-In (TVPI)[2]	Net IRR Since Inception[3]	IRR Date
Private Credit												
2015	DC Value Recovery Fund IV[4]	$16,672,836	$74,360,749	$73,340,099	99%	$1,020,650	$44,343,375	N/A	*0.60x*	*0.83x*	*N/A*	*N/A*
2017	Sixth Street TAO Partners (B)	$52,941,110	$108,035,958	$94,076,786	87%	$13,959,172	$48,567,799	$53,630,984	*0.52x*	*1.08x*	*9.7%*	3/31/25
2017	Brookfield Real Estate Finance Fund V	$5,593,475	$50,000,000	$39,198,138	78%	$10,801,862	$38,733,516	$5,593,475	*0.99x*	*1.13x*	*6.0%*	6/30/25
2018	Magnetar Constellation Fund V	$10,759,679	$60,000,000	$56,445,318	94%	$3,554,682	$57,647,898	$10,759,679	*1.02x*	*1.21x*	*4.8%*	6/30/25
2019	H.I.G Bayside Loan Opportunity Fund V	$38,993,387	$60,000,000	$35,821,497	60%	$24,178,503	$27,521,616	$38,993,387	*0.77x*	*1.86x*	*14.8%*	6/30/25
2020	Blue Torch Credit Opportunities Fund II	$12,893,298	$20,000,000	$17,296,007	86%	$2,703,993	$8,935,024	$13,178,986	*0.52x*	*1.26x*	*10.2%*	3/31/25
2020	Fortress Credit Opportunites Fund V Expansion	$33,136,198	$40,000,000	$32,853,973	82%	$7,146,027	$4,677,582	$32,268,388	*0.14x*	*1.15x*	*14.8%*	3/31/25
2021	Fortress Lending Fund II	$14,264,227	$40,000,000	$35,265,757	88%	$4,734,243	$26,695,299	$14,264,227	*0.76x*	*1.16x*	*8.4%*	6/30/25
2022	Blue Torch Credit Opportunities Fund III	$34,378,956	$40,000,000	$40,000,000	100%	$0	$14,999,536	$33,856,667	*0.37x*	*1.23x*	*16.7%*	3/31/25
2022	Fortress Lending Fund III	$28,814,785	$40,000,000	$26,960,070	67%	$13,039,930	$9,527,311	$28,814,785	*0.35x*	*1.42x*	*11.2%*	6/30/25
2022	OrbiMed Royalty & Credit Opportunities IV	$14,181,820	$30,000,000	$13,483,980	45%	$16,516,020	$4,594,099	$14,181,820	*0.34x*	*1.39x*	*13.3%*	6/30/25
2023	Cerberus Business Finance V	$21,847,785	$30,000,000	$22,055,642	74%	$7,944,358	$3,860,174	$22,636,092	*0.18x*	*1.17x*	*18.0%*	3/31/25
2023	Silver Point – Specialty Credit Fund III	$11,835,778	$30,000,000	$19,431,701	65%	$10,568,299	$10,495,495	$11,835,778	*0.54x*	*1.15x*	*14.6%*	6/30/25
2023	Ares Pathfinder II	$11,462,964	$30,000,000	$9,258,584	31%	$20,741,416	$0	$9,330,977	*0.00x*	*1.24x*	*21.6%*	3/31/25
2023	Oak Hill Advisors Structured Products Fund III, L.P.	$18,163,625	$25,000,000	$16,098,626	64%	$8,901,374	$1,127,312	$17,488,491	*0.07x*	*1.20x*	*13.9%*	3/31/25
2023	Ares Senior Direct Lending III	$7,949,978	$30,000,000	$7,747,966	26%	$22,252,034	$498,145	N/A	*0.06x*	*1.09x*	*N/A*	N/A
2024	ITE Rail Fund, L.P.	$34,870,595	$40,000,000	$34,296,307	86%	$5,703,693	$999,444	N/A	*0.03x*	*1.05x*	*N/A*	N/A
2024	HPS Special Situations Opportunity Fund II, L.P.	$9,052,334	$25,000,000	$8,385,898	66%	$16,614,102	$0	N/A	*N/A*	*N/A*	*N/A*	N/A
2024	Castlelake Aviation V Stable Yield	$3,978,047	$30,000,000	$2,380,358	8%	$27,619,642	$409,975	N/A	*0.17x*	*1.84x*	N/A	N/A
2025	Fortress Credit Opportunities Fund VI	$10,871,340	$25,000,000	$319,933	1%	$24,680,067	$0	N/A	*N/A*	*N/A*	N/A	N/A
2025	Quantum Capital Solutions II	$7,545,293	$39,600,000	$2,917,168	7%	$36,682,832	$0	N/A	*N/A*	*N/A*	N/A	N/A
2025	Quantum Capital Solutions II Co-Investment Fund, LP	$1,419,205	$7,900,000	$554,134	7%	$7,345,866	$0	N/A	*N/A*	*N/A*	N/A	N/A
2025	Blue Torch Credit Opportunities Fund IV	$3,046,878	$25,000,000	$3,046,878	12%	$21,953,122	$0	N/A	*N/A*	*N/A*	N/A	N/A
2025	OrbiMed Royalty & Credit Opportunities V	$0	$30,000,000	$0	0%	$30,000,000	$0	N/A	*N/A*	*N/A*	N/A	N/A
	Total Private Credit	**$404,673,592**	$929,896,707	$591,234,819	64%	$190,380,359	$303,633,602	$306,833,737	*0.51x*	*1.20x*		
	% of Portfolio (Market Value)	***6.3%***										

[1](DPI) is equal to (capital returned / capital called)
[2](TVPI) is equal to (market value + capital returned) / capital called
[3]Net IRR is calculated on the cash flows of all the limited partners of the fund and is net of all fees. Each IRR is provided by the Fund manager and is reflective of the Fund IRR, rather than KCERA's specific IRR.
[4]Name changed from Colony Distressed Credit fund to DC Value Recovery Fund IV

Vintage Year	Manager/Fund	Estimated Market Value 6/30/2025	Total Commitment	Capital Called	% Called	Remaining Commitment	Capital Returned	Market Value as of IRR date	Distrib./ Paid-In (DPI)[1]	Tot. Value/ Paid-In (TVPI)[2]	Net IRR Since Inception[3]	IRR Date
			IRR Analysis as of IRR date									
Private Real Assets												
2014	Invesco Real Estate Value-Add Fund IV	$140,304	$50,000,000	$43,637,717	87%	$6,362,283	$56,824,750	$157,969	*1.30x*	*1.31x*	*11.6%*	06/30/24
2017	Landmark Real Estate Partners VIII	$31,084,215	$60,000,000	$46,233,098	77%	$13,766,902	$26,951,123	$33,636,579	*0.58x*	*1.26x*	*10.4%*	12/31/24
2018	Long Wharf Real Estate Partners VI	$33,719,376	$50,000,000	$50,000,000	100%	$0	$24,777,007	$33,719,376	*0.50x*	*1.17x*	*11.1%*	06/30/25
2020	Covenant Apartment Fund X	$25,660,024	$30,000,000	$25,507,333	85%	$4,492,667	$10,462,593	$25,660,024	*0.41x*	*1.42x*	*9.0%*	06/30/25
2021	Singerman Real Estate Opportunity Fund IV	$21,868,351	$35,000,000	$23,021,250	66%	$11,978,750	$5,074,955	$18,703,195	*0.22x*	*1.17x*	*9.1%*	03/31/25
2022	LBA Logistics Value Fund IX, L.P.	$24,641,187	$40,000,000	$20,615,384	52%	$19,384,616	$0	$24,641,187	*0.00x*	*1.20x*	*-3.0%*	06/30/25
2022	Covenant Apartment Fund XI	$29,448,634	$30,000,000	$20,850,000	70%	$38,076,924	$835,076	$29,448,634	*0.04x*	*1.45x*	*6.8%*	06/30/25
2022	KSL Capital Partners VI	$8,133,486	$30,000,000	$11,393,165	38%	$18,606,835	$489,911	$8,133,486	*0.04x*	*0.76x*	*-21.3%*	06/30/25
2023	Merit Hill V	$19,021,731	$30,000,000	$25,932,173	86%	$4,067,827	$7,084,980	$9,610,459	*0.27x*	*1.01x*	*2.0%*	12/31/24
2024	Juniper Capital IV, L.P.	$5,707,996	$30,000,000	$5,115,008	17%	$24,884,992	$59,700	$5,394,886	*0.01x*	*1.13x*	*13.8%*	03/31/25
2024	Juniper High Noon Partners, L.P.	$4,673,121	$5,000,000	$3,309,091	66%	$1,690,909	$0	$3,313,080	*0.00x*	*1.41x*	*46.1%*	12/31/24
2024	Landmark Real Estate Partners IX	$9,936,719	$40,000,000	$9,743,987	24%	$30,256,013	$0	N/A	*0.00x*	*1.02x*	*N/A*	N/A
2024	LRAF Holdings 21 Project Yeti II	$13,693,257	$25,000,000	$16,186,912	65%	$8,813,089	$2,912,633	$13,693,257	*0.18x*	*1.03x*	*11.1%*	06/30/25
2024	Post Oak Energy Partners GP V, LP	$24,104,783	$40,000,000	$32,796,613	82%	$7,203,387	$5,882,500	$24,104,783	*0.18x*	*0.91x*	*50.1%*	06/30/25
2025	Covenant Apartment Fund XII	$826,991	$30,000,000	$900,000	3%	$29,100,000	$0	N/A	N/A	N/A	*N/A*	N/A
2025	Sculptor Real Estate V	$0	$50,000,000	$0	0%	$50,000,000	$0	N/A	N/A	N/A	*N/A*	N/A
2025	SRE Opportunity Fund V	$0	$30,000,000	$0	0%	$30,000,000	$0	N/A	N/A	N/A	*N/A*	N/A
	Total Private Real Assets	**$252,660,175**	$605,000,000	$335,241,732	55%	$298,685,192	$141,355,228	$230,216,916	*0.42x*	*1.18x*		
	% of Portfolio (Market Value)	***3.9%***										

[1](DPI) is equal to (capital returned / capital called)
[2](TVPI) is equal to (market value + capital returned) / capital called
[3]Net IRR is calculated on the cash flows of all the limited partners of the fund and is net of all fees. Each IRR is provided by the Fund manager and is reflective of the Fund IRR, rather than KCERA's specific IRR.

Attribution Effects
Last Three Months



Performance Attribution

	Last Three Months
Wtd. Actual Return	4.6
Wtd. Index Return	4.8
Excess Return	**-0.2**
Selection Effect	-0.2
Allocation Effect	0.0
Interaction Effect	0.0

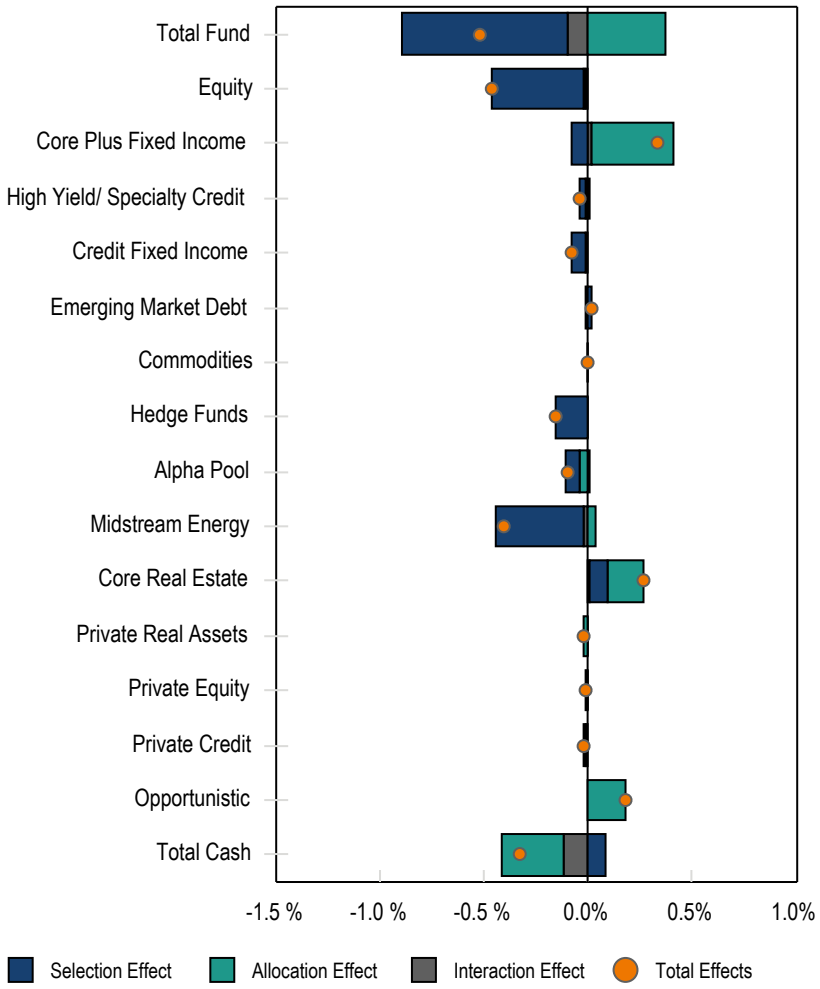
Attribution Summary
Last Three Months

	Actual Weight (%)	Policy Weight (%)	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Equity	32.3	33.0	10.9	11.6	-0.8	-0.2	0.0	0.0	-0.3
Core Plus Fixed Income	13.5	19.0	1.2	1.3	-0.1	0.0	0.2	0.0	0.2
Credit Fixed Income	8.2	8.0	2.9	3.7	-0.8	-0.1	0.0	0.0	-0.1
Commodities	4.1	4.0	-0.5	-3.1	2.5	0.1	0.0	0.0	0.1
Hedge Funds	9.9	10.0	2.8	4.2	-1.4	-0.1	0.0	0.0	-0.1
Alpha Pool	2.5	3.0	1.3	1.8	-0.5	0.0	0.0	0.0	0.0
Midstream Energy	5.1	5.0	-0.4	-1.2	0.8	0.0	0.0	0.0	0.0
Core Real Estate	5.5	6.0	2.4	0.8	1.6	0.1	0.0	0.0	0.1
Private Real Assets	4.1	4.0	-0.2	-0.2	0.0	0.0	0.0	0.0	0.0
Private Equity	5.3	5.0	3.3	3.3	0.0	0.0	0.0	0.0	0.0
Private Credit	6.5	6.0	0.5	0.6	-0.1	0.0	0.0	0.0	0.0
Opportunistic	2.6	0.0	3.9	2.4	1.4	0.0	0.0	0.0	0.0
Total Cash	0.4	-3.0	0.6	1.0	-0.4	0.0	-0.1	0.0	-0.1
Total Fund	**100.0**	**100.0**	**4.6**	**4.8**	**-0.2**	**-0.2**	**0.0**	**0.0**	**-0.2**

Weighted returns shown in attribution analysis may differ from actual returns. Negative cash allocation unable to be shown in Attribution Summary table. Wtd. Index Returns calculated from benchmark returns and weightings of each component. Selection Effect includes Other Effect in the Performance Attribution table.

Verus

Attribution Effects Fiscal YTD



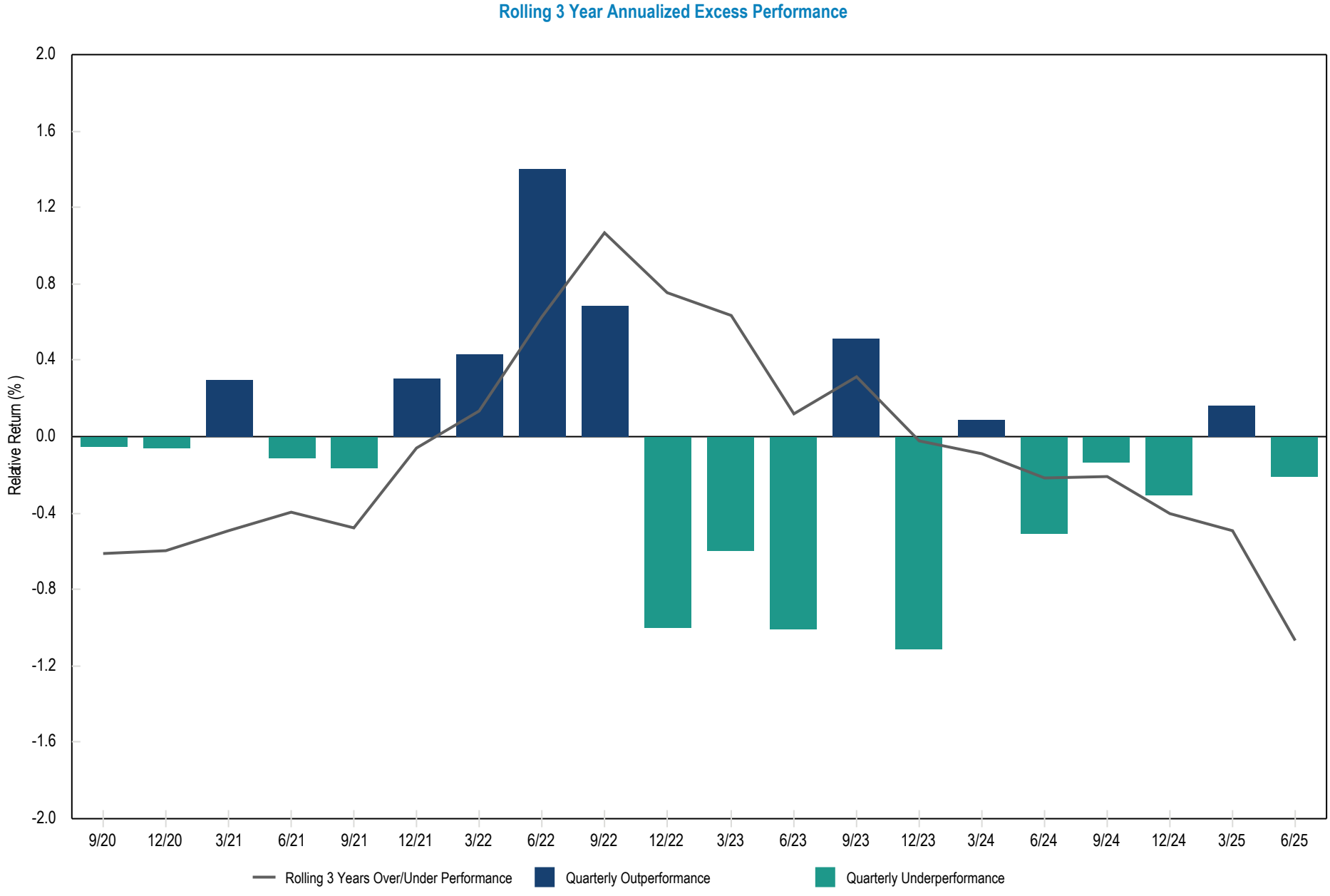
Performance Attribution

	Fiscal YTD
Wtd. Actual Return	10.9
Wtd. Index Return	11.4
Excess Return	**-0.5**
Selection Effect	-0.8
Allocation Effect	0.4
Interaction Effect	-0.1

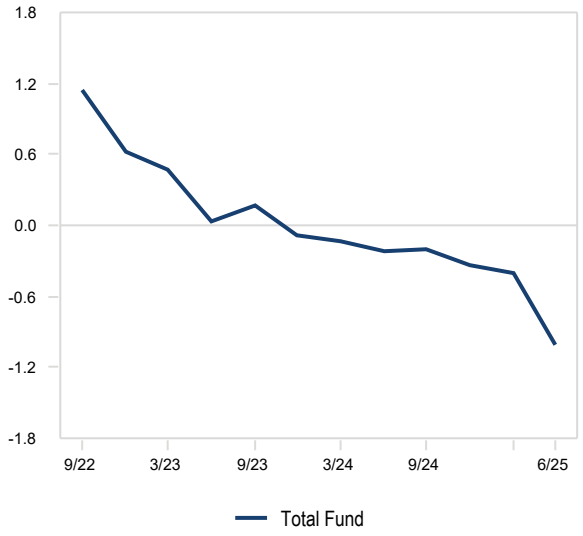
Attribution Summary FYTD

	Actual Weight (%)	Policy Weight (%)	Wtd. Actual Return	Wtd. Index Return	Excess Return	Selection Effect	Allocation Effect	Interaction Effects	Total Effects
Equity	33.1	33.0	14.6	15.9	-1.3	-0.3	0.0	0.0	-0.5
Core Plus Fixed Income	13.2	18.3	5.5	6.0	-0.4	0.0	0.4	0.0	0.3
High Yield/ Specialty Credit	1.5	2.0	4.3	4.7	-0.4	0.0	0.0	0.0	0.0
Credit Fixed Income	5.6	5.3	5.0	5.7	-0.8	-0.1	0.0	0.0	-0.1
Emerging Market Debt	1.3	1.3	4.7	4.2	0.5	0.0	0.0	0.0	0.0
Commodities	4.0	4.0	5.9	5.8	0.1	0.0	0.0	0.0	0.0
Hedge Funds	9.8	10.0	8.4	10.0	-1.6	-0.1	0.0	0.0	-0.2
Alpha Pool	3.0	3.8	6.2	7.8	-1.6	-0.1	0.0	0.0	-0.1
Midstream Energy	5.3	5.0	21.6	30.8	-9.1	-0.4	0.0	0.0	-0.4
Core Real Estate	4.7	6.7	4.1	2.7	1.5	0.1	0.2	0.0	0.3
Private Real Assets	3.4	3.3	0.4	0.4	0.0	0.0	0.0	0.0	0.0
Private Equity	4.9	5.0	9.1	9.1	0.0	0.0	0.0	0.0	0.0
Private Credit	6.3	6.0	9.6	9.7	-0.1	0.0	0.0	0.0	0.0
Opportunistic	2.6	0.0	18.4	10.0	8.4	0.0	0.2	0.0	0.2
Total Cash	1.2	-3.8	2.5	4.7	-2.1	0.1	-0.3	-0.1	-0.3
Total Fund	**100.0**	**100.0**	**10.9**	**11.4**	**-0.5**	**-0.8**	**0.4**	**-0.1**	**-0.5**

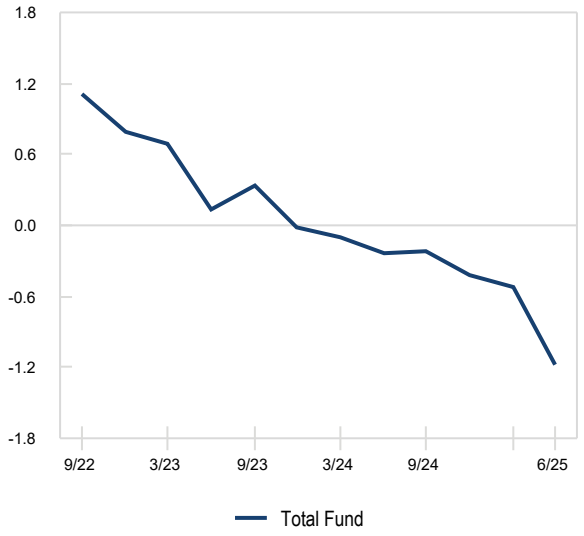
Weighted returns shown in attribution analysis may differ from actual returns. Negative cash allocation unable to be shown in Attribution Summary table. Wtd. Index Returns calculated from benchmark returns and weightings of each component. Selection Effect includes Other Effect in the Performance Attribution table.


Rolling 3 Year Annualized Excess Performance
Relative Return (%)
2.0
1.6
1.2
0.8
0.4
0.0
-0.4
-0.8
-1.2
-1.6
-2.0
9/20
12/20
3/21
6/21
9/21
12/21
3/22
6/22
9/22
12/22
3/23
6/23
9/23
12/23
3/24
6/24
9/24
12/24
3/25
6/25
Rolling 3 Years Over/Under Performance
Quarterly Outperformance
Quarterly Underperformance

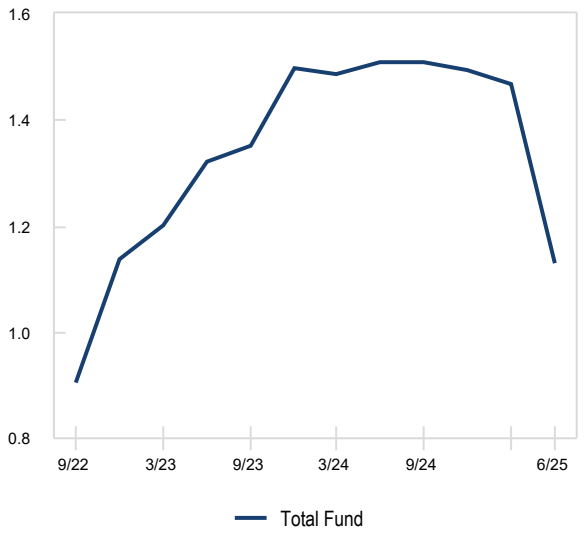
Rolling Information Ratio



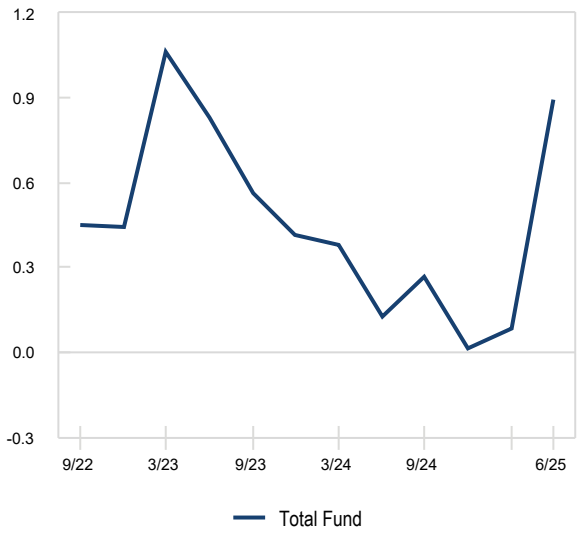
Rolling Annual Excess Benchmark Return



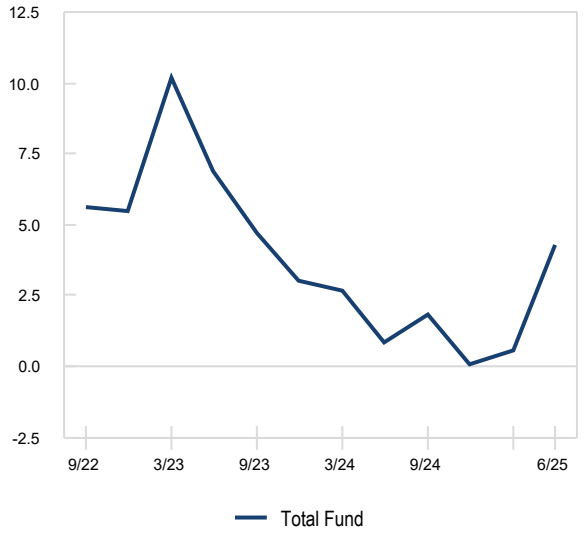
Rolling Tracking Error



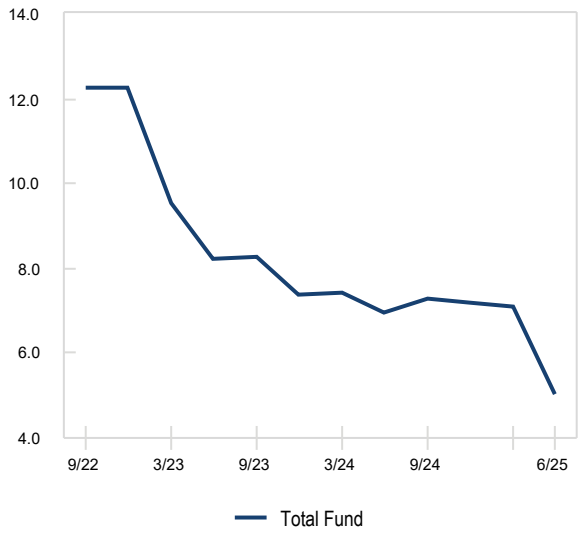
Rolling Sharpe Ratio



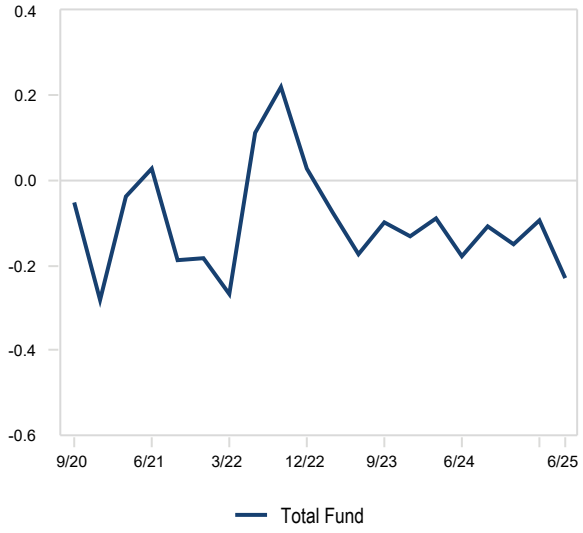
Rolling Annual Excess Risk Free Return



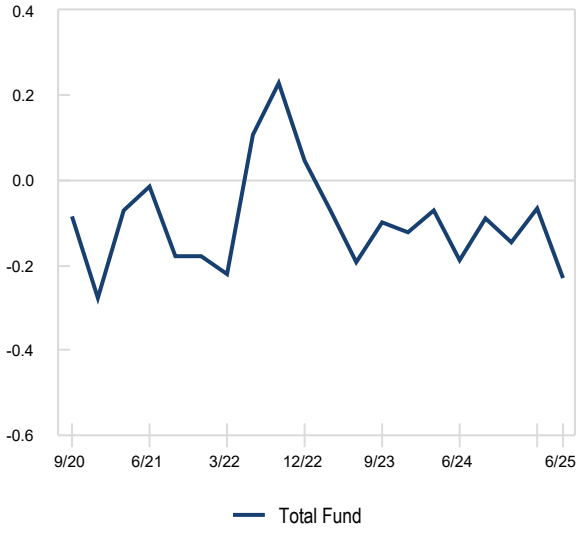
Rolling Annualized Standard Deviation



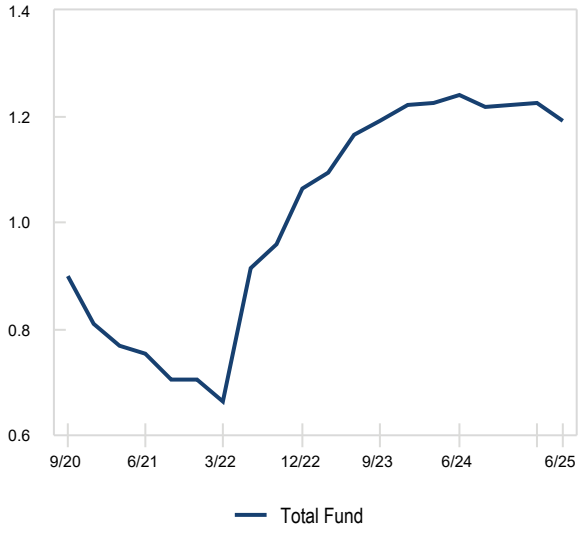
Rolling Information Ratio



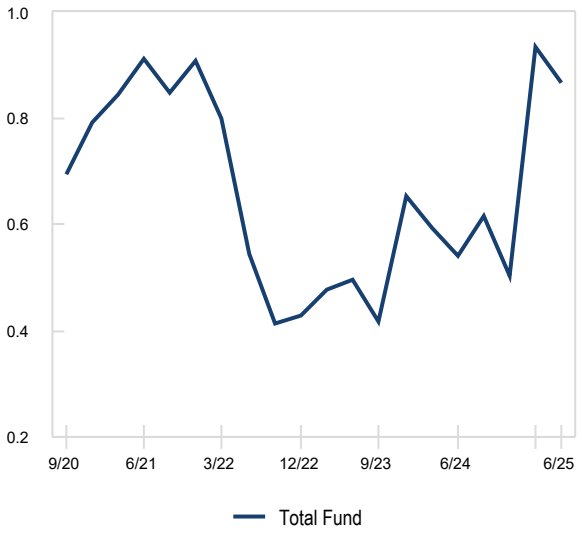
Rolling Annual Excess Benchmark Return



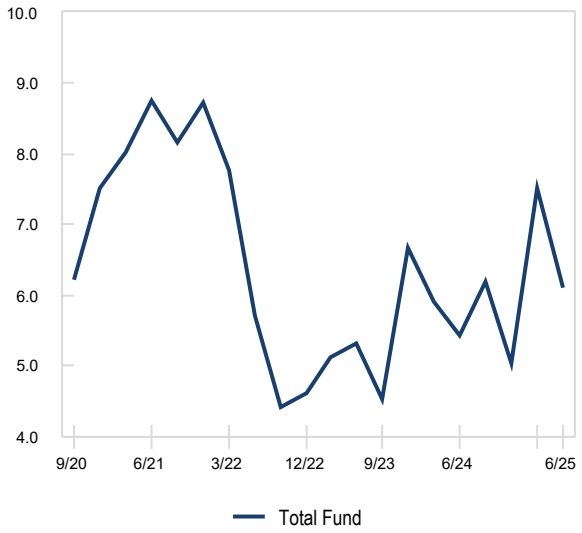
Rolling Tracking Error



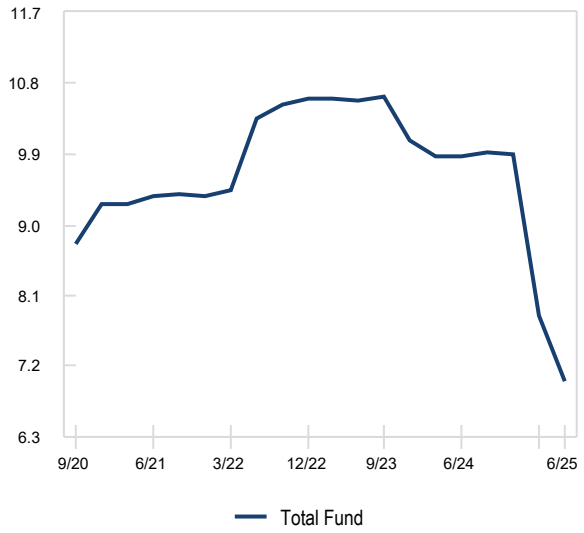
Rolling Sharpe Ratio



Rolling Annual Excess Risk Free Return



Rolling Annualized Standard Deviation



Cash Flows

	Estimated Beginning Market Value	Contributions	Withdrawals	Fees	Net Transfers	Net Investment Change	Estimated Ending Market Value
Equity	**1,955,410,651**		**-60,093**	**-132,643**	**-6,844,064**	**214,629,990**	**2,163,118,845**
Mellon DB SL Stock Index Fund	739,327,721				-150,000,000	66,082,212	655,409,933
PIMCO StocksPLUS	151,799,758					16,532,287	168,332,044
Chilton High Conviction Equity					150,000,001	10,783,573	160,783,574
AB US Small Cap Value Equity	88,372,355		-93		-25,000,000	4,497,411	67,984,676
Geneva Capital Small Cap Growth	89,616,699				8,000,000	4,965,060	102,581,759
Mellon DB SL World ex-US Index Fund	340,930,491					41,755,949	382,686,441
Cevian Capital II	50,930,437					2,664,165	53,594,602
Lazard Japanese Equity	140,780,057		-60,000	-155,935	5,155,935	14,762,928	160,482,986
American Century Non-US Small Cap	62,706,456					12,739,291	75,445,746
Dalton Japan Long Only	72,440,173			23,293	5,000,000	8,970,174	86,433,639
DFA Emerging Markets Value I	56,024,047					6,181,503	62,205,550
Mellon Emerging Markets Stock Index Fund	21,085,092					2,503,009	23,588,101
Carrhae Capital Long Master Fund Ltd	72,998,249					12,457,011	85,455,259
ABS Emerging Market Direct	68,397,281					9,735,468	78,132,749
Transition Equity	1,836					-51	1,785
Fixed Income	**1,427,497,729**	**3,267,344**	**-67,718,528**		**-2,613,820**	**24,963,261**	**1,385,395,986**
Fixed Income Beta Exposure	161,628,813	3,267,344	-67,681,372		-1,308,700	1,939,621	97,845,705
Mellon DB SL Aggregate Bond Index Fund	369,542,491				-230,000,000	244,078	139,786,570
PIMCO Core Plus	180,671,081					2,815,318	183,486,399
Aristotle Short Duration Bond Strategy	183,166,478				70,000,000	3,388,777	256,555,255
TCW Securitized Opportunities	92,714,524				-1,955,737	2,290,741	93,049,527
KKR US Broadly Syndicated Loan Fund	178,830,072				-3,617,529	3,100,981	178,313,524
Guggenheim Structured Credit					100,000,000	257,314	100,257,314
Schroders Credit					155,000,000		155,000,000
Stone Harbor Emerging Markets Debt Blend Portfolio	40,376,544				-25,000,000	507,642	15,884,186
PIMCO EMD	219,548,760				-65,000,000	10,415,505	164,964,265
Transition Fixed Income	237,313				-1,854	17,782	253,242
Commodities	**260,392,521**				**-10,000,000**	**-643,043**	**249,749,478**
Wellington Commodities	260,392,521				-10,000,000	-643,043	249,749,478
Hedge Funds	**602,493,854**				**-16,156,371**	**16,970,867**	**603,308,350**
Aristeia International Limited	78,662,412					1,015,742	79,678,154
Brevan Howard Fund	56,436,285					3,066,414	59,502,698

	Estimated Beginning Market Value	Contributions	Withdrawals	Fees	Net Transfers	Net Investment Change	Estimated Ending Market Value
D.E. Shaw Composite Fund	67,548,138					2,907,084	70,455,222
HBK Fund II	53,660,439					1,024,075	54,684,514
Hudson Bay Cap Structure Arbitrage Enhanced Fund	84,807,375					1,813,191	86,620,566
Indus Pacific Opportunities Fund	52,163,562					3,347,179	55,510,741
Pharo Macro Fund	77,545,058					4,915,831	82,460,889
PIMCO Commodity Alpha Fund	78,522,183					-1,585,558	76,936,625
Sculptor Master Fund	31,045,043				-31,511,951	466,909	
Elliott Associates	22,103,360				15,355,580		37,458,940
Alpha Pool	**155,515,649**				**1,308,700**	**1,997,920**	**158,822,269**
Hudson Bay - Alpha Pool	38,614,349				325,458	500,122	39,439,929
Davidson Kempner Institutional Partners	54,746,199				459,762	717,098	55,923,059
HBK Fund II	19,907,870				166,614	213,314	20,287,798
Garda Fixed Income Relative Value Opportunity Fund	42,247,231				356,866	567,387	43,171,484
Midstream Energy	**321,652,429**				**-6,854,203**	**-889,407**	**313,908,819**
Harvest Midstream	189,673,019				4,599,282	-892,000	193,380,301
PIMCO Midstream	131,979,410				-11,453,486	2,594	120,528,518
Core Real Estate	**350,342,334**			**-93,673**	**74,143**	**8,485,567**	**358,808,370**
ASB Allegiance Real Estate Fund	118,234,271				-3,669,443	2,016,885	116,581,713
JPMCB Strategic Property Fund	100,400,809			-93,673	-4,918,450	1,224,015	96,612,701
Blue Owl Real Estate Fund VI	29,758,038				-536,039	3,487,369	32,709,368
Sculptor Diversified REIT	48,437,900				-846,728	1,276,043	48,867,215
Hudson Bay Real Estate Opportunities	21,530,704				6,652,700		28,183,404
TPG AG Essential Housing III	18,372,444				2,088,259		20,460,703
BPC Real Estate Debt Fund LP	13,608,167				1,303,844	481,255	15,393,266
Private Real Assets	**255,367,070**				**-2,322,216**	**-384,679**	**252,660,175**
Invesco Real Estate Value-Add Fund IV	139,646					658	140,304
Landmark Real Estate Partners VIII	31,359,396					-275,181	31,084,215
Long Wharf Real Estate	32,951,932					767,444	33,719,376
Covenant Apartment Fund X	26,131,968				-501,193	29,249	25,660,024
Singerman Real Estate Opportunity Fund IV	18,703,195				3,281,250	-116,094	21,868,351
LBA Logistics Value Fund IX, L.P.	24,765,049					-123,862	24,641,187
Covenant Apartment Fund XI, LP	29,176,282				-282,686	555,038	29,448,634

	Estimated Beginning Market Value	Contributions	Withdrawals	Fees	Net Transfers	Net Investment Change	Estimated Ending Market Value
KSL Capital Partners VI	8,743,101				287,908	-897,523	8,133,486
Merit Hill Self-Storage V, LP.	19,423,646					-401,915	19,021,731
Juniper Capital IV, L.P	5,394,886					313,110	5,707,996
Landmark Real Estate Partners IX	9,143,147					793,572	9,936,719
Juniper High Noon Partners, L.P	4,247,953					425,168	4,673,121
LRAF Holdings 21 Yeti II LP	13,625,263				-1,360,002	1,427,995	13,693,257
Post Oak Energy Partners GP V, LP	30,661,607				-3,747,494	-2,809,330	24,104,783
Covenant Apartment Fund XII	900,000					-73,009	826,991
Private Equity	**325,104,462**				**-1,688,018**	**10,609,531**	**334,025,975**
Abbott VI	9,969,774					-28,167	9,941,607
Pantheon Secondary III	535,597						535,597
Pantheon V	30,817						30,817
Pantheon VI	311,635						311,635
Pantheon VII	2,976,583					399,835	3,376,418
Vista Foundation Fund IV	23,562,861					-145,280	23,417,581
Crown Global Secondaries V Master S.C.Sp	44,118,333				-3,350,000	2,211,520	42,979,853
Crown Global Secondaries VI Master S.C.Sp	4,430,264				1,200,000	215,310	5,845,574
Brighton Park Capital Fund I	41,606,915				-50,389	2,094,452	43,650,978
Warren Equity Partners Fund III	38,295,352				407,164	639,824	39,342,340
Peak Rock Capital Fund III	27,491,235				-200,935	1,551,656	28,841,956
Level Equity Growth Partners V	12,527,584				1,325,652	286,572	14,139,808
Level Equity Opportunities Fund 2021	10,310,633				1,027,124	621,615	11,959,372
Linden Capital Partners V LP	16,734,531				3,294,374	396,146	20,425,051
Rubicon Technology Partners IV L.P.	14,930,468					364,936	15,295,404
OrbiMed Private Investments IX, LP	4,199,424				500,000	-77,181	4,622,243
Brighton Park Capital Fund II, L.P	11,812,393						11,812,393
Linden Co-Investment V LP	7,073,911					172,556	7,246,467
Warren Equity Partners Fund IV	23,418,809					1,064,130	24,482,939
WEP IV TS Co-Investment, L.P.	9,693,935					-16,709	9,677,226
Parthenon Investors VII	3,226,583					89,985	3,316,568
Longreach Capital Partners	3,318,576					73,919	3,392,495
Blue Owl Strategic Equity Partners	10,311,905				-5,841,008	770,524	5,241,421
WEP TreeCo Co-Investment, L.P.	3,866,955					-76,113	3,790,842
Accel-KKR Capital Partners VII	349,389						349,389

	Estimated Beginning Market Value	Contributions	Withdrawals	Fees	Net Transfers	Net Investment Change	Estimated Ending Market Value
Private Credit	**409,812,381**		**-50**	**-301,780**	**-7,215,321**	**2,378,362**	**404,673,592**
DC Value Recovery Fund IV	15,400,945					1,271,891	16,672,836
Sixth Street TAO Partners (B)	53,630,984		-50		-439,574	-250,250	52,941,110
Brookfield Real Estate Finance Fund V	6,556,474				-102,857	-860,142	5,593,475
Magnetar Constellation Fund V	13,406,397				-2,554,068	-92,650	10,759,679
H.I.G. Bayside Loan Opportunity Fund V	39,282,302				-479,351	190,436	38,993,387
Blue Torch Credit Opportunities Fund II	13,178,986				-370,646	84,958	12,893,298
Fortress Credit Opportunites Fund V Expansion	32,268,388					867,810	33,136,198
Fortress Lending Fund II	17,646,988				-3,852,732	469,971	14,264,227
Blue Torch Credit Opportunities Fund III	33,856,667				-527,486	1,049,775	34,378,956
Fortress Lending Fund III	33,965,567				-5,851,578	700,796	28,814,785
OrbiMed Royalty & Credit Opportunities IV	14,130,229				-371,087	422,678	14,181,820
Cerberus Business Finance V	22,636,092			-301,780	-1,636,453	1,149,926	21,847,785
Silver Point Specialty Credit Fund III, L.P.	11,904,882				-381,925	312,821	11,835,778
Ares Pathfinder II	9,330,977				1,823,592	308,395	11,462,964
Oak Hill Advisors Structured Products Fund III, L.P.	17,488,491					675,134	18,163,625
ITE Rail Fund, L.P	40,980,378				-1,143,300	-4,966,483	34,870,595
Ares Senior Direct Lending Fund III LP	6,521,691				1,199,262	229,025	7,949,978
HPS Special Situations Opportunity Fund II, L.P.	9,026,498					25,836	9,052,334
Castlelake Aviation V Stable Yield, L.P.	2,068,850				1,696,241	212,956	3,978,047
Fortress Credit Opportunites Fund VI Expansion	10,452,368				319,933	99,039	10,871,340
Quantum Capital Solutions II	5,097,635				2,009,038	438,620	7,545,293
Quantum Capital Solutions II Co-Investment Fund, LP	980,593				400,793	37,819	1,419,205
Blue Torch Credit Opportunities Fund IV					3,046,878		3,046,878
Opportunistic	**162,657,094**				**-2,535,806**	**6,261,715**	**166,383,003**
Sixth Street TAO Partners (D)	87,543,401				-2,535,806	1,512,691	86,520,286
Aristeia Select Opportunities II	55,479,201					3,499,103	58,978,303
River Birch International - Opportunistic Investment	4,330,108					148,835	4,478,943
Hudson Bay Special Opportunities Fund LP	3,990,684					562,387	4,553,071
Pharo Opportunities Fund SPC	11,313,700					538,700	11,852,400
Cash	**220,887,245**	**10,485,351**	**-50,529,711**	**-185**	**66,846,977**	**2,818,481**	**250,828,300**
Short Term Investment Funds	61,355,944	10,485,351	-50,529,711	-185	111,846,977	863,865	134,342,383
BlackRock Short Duration Fund	159,531,301				-45,000,000	1,954,616	116,485,917

	Estimated Beginning Market Value	Contributions	Withdrawals	Fees	Net Transfers	Net Investment Change	Estimated Ending Market Value

	Estimated Beginning Market Value	Contributions	Withdrawals	Fees	Net Transfers	Net Investment Change	Estimated Ending Market Value
Other	**-256,726,104**	**95,977,677**	**-24,595,174**		**-12,000,000**		**-197,343,601**
Parametric Cash Overlay	22,397,706	11,780,744	-6,808,606		-12,021,000		15,348,844
Goldman Sachs Cash Account	-2,197,320	10,852,890	-11,061,293				-2,405,723
Futures Offset	-280,596,491	73,344,043	-5,233,275				-212,485,722
Collateral Cash	3,670,000		-1,492,000		21,000		2,199,000

Portfolio Reconciliation

	3 Mo	Fiscal YTD	1 Yr	3 Yrs	5 Yrs	10 Yrs
Beginning Market Value	6,190,407,316	5,838,506,052	5,838,506,052	5,061,358,140	4,409,659,712	3,546,844,420
Contributions	1,377,706,713	4,626,249,526	4,626,249,526	9,384,238,326	16,403,698,135	23,150,037,824
Withdrawals	-1,410,879,897	-4,662,345,355	-4,662,345,355	-9,498,785,480	-16,689,086,257	-23,704,898,320
Fees	-528,281	-1,761,146	-1,761,146	-3,938,235	-35,998,982	-116,644,572
Net Cash Flows	-33,173,184	-36,095,829	-36,095,829	-114,547,154	-285,388,123	-554,860,495
Net Investment Change	287,105,431	641,929,340	641,929,340	1,497,528,577	2,320,067,974	3,452,355,639
Ending Market Value	6,444,339,563	6,444,339,563	6,444,339,563	6,444,339,563	6,444,339,563	6,444,339,563
Net Change $	253,932,247	605,833,511	605,833,511	1,382,981,423	2,034,679,851	2,897,495,143

Contribution and withdrawals include transfers in and out of accounts. Ending market value is net of fees. Market value and flows do not include the Short Term Cash Account balance.

Risk Metrics

Correlation Matrix
3 Years Ending June 30, 2025

	A	B	C	D	E	F	G	H	I	J	K	L
A	1.00											
B	0.98	1.00										
C	0.93	0.96	1.00									
D	0.93	0.94	0.83	1.00								
E	0.73	0.74	0.58	0.76	1.00							
F	0.85	0.82	0.72	0.85	0.72	1.00						
G	0.79	0.75	0.65	0.79	0.65	0.99	1.00					
H	0.90	0.87	0.82	0.84	0.64	0.88	0.82	1.00				
I	0.84	0.83	0.69	0.87	0.86	0.92	0.86	0.78	1.00			
J	0.48	0.39	0.31	0.39	0.52	0.27	0.21	0.32	0.40	1.00		
K	0.41	0.39	0.42	0.33	0.15	0.22	0.15	0.40	0.26	0.17	1.00	
L	-0.09	-0.16	-0.14	-0.15	-0.17	-0.22	-0.24	-0.13	-0.20	-0.05	-0.12	1.00

A = Total Fund
B = Equity
C = Domestic Equity
D = International Developed Equity
E = Emerging Markets Equity
F = Fixed Income
G = Core Fixed Income
H = High Yield/ Specialty Credit
I = Emerging Market Debt
J = Commodities
K = Hedge Funds
L = Core Real Estate

Low Interaction
Moderate Interation
Moderate to High Interation
High Interaction

	Alpha	Beta	R-Squared	Return	Information Ratio	Excess Performance	Tracking Error	Sharpe Ratio	Excess Return	Standard Deviation	Sortino Ratio	Up Capture	Down Capture
Total Fund	0.4	0.8	1.0	8.9	-0.8	-1.2	1.5	0.6	4.4	7.0	0.9	86.4	84.1
Equity	-0.6	1.0	1.0	15.7	-0.8	-1.1	1.2	0.8	11.3	14.4	1.3	96.9	100.0
Domestic Equity	-1.5	1.0	1.0	17.4	-1.5	-1.8	1.0	0.8	13.0	16.1	1.3	97.1	103.3
International Developed Equity	0.5	0.9	1.0	15.2	-0.2	-0.2	1.8	0.7	10.8	14.5	1.2	97.7	97.3
Emerging Markets Equity	1.6	1.0	1.0	11.5	0.5	1.3	2.2	0.5	7.7	15.7	0.8	99.5	92.3
Fixed Income	0.1	1.0	1.0	4.7	0.0	0.0	0.6	0.0	0.3	6.7	0.1	98.6	98.0
Core Fixed Income	-0.2	1.0	1.0	2.3	-0.6	-0.3	0.5	-0.3	-2.0	7.0	-0.4	97.3	99.6
High Yield/ Specialty Credit	0.5	0.7	0.9	7.8	-0.8	-2.0	2.3	0.6	3.2	5.2	1.1	75.6	67.9
Emerging Market Debt	0.6	1.0	1.0	9.5	0.9	0.8	0.9	0.6	5.1	8.9	0.9	102.1	95.0
Commodities	3.7	0.8	0.8	3.9	0.8	3.7	4.5	0.0	-0.2	10.1	0.0	84.8	59.1
Hedge Funds	6.2	0.2	0.1	8.1	-0.8	-3.0	3.4	1.9	3.4	1.7	3.7	48.9	-118.5
Alpha Pool	12.0	-1.1	0.0	2.0	-3.0	-6.8	2.1	-1.2	-2.5	2.1	-1.3	23.5	-
Midstream Energy	3.6	0.8	0.9	23.5	0.0	0.6	4.5	1.2	17.9	14.9	2.3	88.6	68.7
Core Real Estate	-4.2	1.1	0.7	-10.1	-1.4	-4.6	3.4	-2.3	-14.8	6.4	-1.9	-23.8	147.8
Private Real Assets	0.0	1.0	1.0	0.4	-	0.0	0.0	-1.0	-3.9	3.9	-1.2	100.0	100.0
Private Equity	0.0	1.0	1.0	6.7	-	0.0	0.0	0.5	2.1	4.8	0.7	100.0	100.0
Private Credit	-0.1	1.0	1.0	8.5	-1.6	-0.1	0.0	0.9	3.9	4.5	2.7	99.5	100.0
Opportunistic	-	-	-	7.0	-0.3	-3.0	8.8	0.3	2.7	8.8	0.5	74.9	-

Risk Return Statistics: Last Three Years

	3 Years													
	Equity	MSCI AC World IMI (Net)	Core Plus Fixed Income	Bloomberg U.S. Aggregate Index	High Yield/ Specialty Credit	ICE BofA U.S. High Yield Index	Emerging Market Debt	50 JPM EMBI Global Div/ 50 JPM GBI EM Global Div	Commodities	Bloomberg Commodity Index Total Return	Hedge Funds	75% 3 Month T-Bill +4% / 25% MSCI ACWI (net)	Core Real Estate	NCREIF ODCE-monthly
RETURN SUMMARY STATISTICS														
Up Market Periods	23	23	19	19	25	25	23	23	19	19	25	25	29	29
Down Market Periods	13	13	17	17	11	11	13	13	17	17	11	11	7	7
Maximum Return	8.39	9.24	4.23	4.53	4.80	6.02	7.56	7.35	6.99	6.26	1.46	2.89	2.21	1.16
Minimum Return	-9.42	-9.65	-4.27	-4.32	-3.43	-4.02	-5.99	-5.62	-6.59	-8.11	-0.74	-1.96	-6.33	-4.97
Return	15.72	16.80	2.28	2.55	7.81	9.85	9.51	8.70	3.85	0.13	8.10	11.05	-10.06	-5.43
Excess Return	11.26	12.25	-1.97	-1.68	3.22	5.19	5.05	4.29	-0.16	-3.74	3.37	6.13	-14.81	-9.91
Excess Performance	-1.09	0.00	-0.27	0.00	-2.04	0.00	0.81	0.00	3.72	0.00	-2.95	0.00	-4.63	0.00
RISK SUMMARY STATISTICS														
Beta	0.98	1.00	0.97	1.00	0.74	1.00	1.02	1.00	0.85	1.00	0.17	1.00	1.12	1.00
Upside Risk	12.70	13.08	5.38	5.59	5.11	6.51	7.91	7.65	7.79	7.50	2.81	4.58	1.58	1.13
Downside Risk	8.19	8.30	4.56	4.61	2.49	3.19	5.00	4.95	6.61	7.91	0.48	1.29	6.90	4.99
RISK/RETURN SUMMARY STATISTICS														
Standard Deviation	14.41	14.72	7.02	7.20	5.23	6.69	8.95	8.75	10.15	10.90	1.74	3.65	6.41	4.87
Alpha	-0.58	0.00	-0.21	0.00	0.50	0.00	0.61	0.00	3.75	0.00	6.16	0.00	-4.15	0.00
Sharpe Ratio	0.78	0.83	-0.28	-0.24	0.61	0.77	0.57	0.49	-0.02	-0.34	1.88	1.68	-2.27	-2.00
Excess Risk	14.42	14.73	6.98	7.16	5.26	6.73	8.92	8.72	10.12	10.92	1.79	3.64	6.53	4.96
Tracking Error	1.24	0.00	0.46	0.00	2.34	0.00	0.87	0.00	4.47	0.00	3.42	0.00	3.41	0.00
Information Ratio	-0.80	-	-0.61	-	-0.84	-	0.88	-	0.80	-	-0.81	-	-1.44	-
CORRELATION STATISTICS														
R-Squared	0.99	1.00	1.00	1.00	0.91	1.00	0.99	1.00	0.83	1.00	0.13	1.00	0.73	1.00
Actual Correlation	1.00	1.00	1.00	1.00	0.95	1.00	1.00	1.00	0.91	1.00	0.36	1.00	0.85	1.00

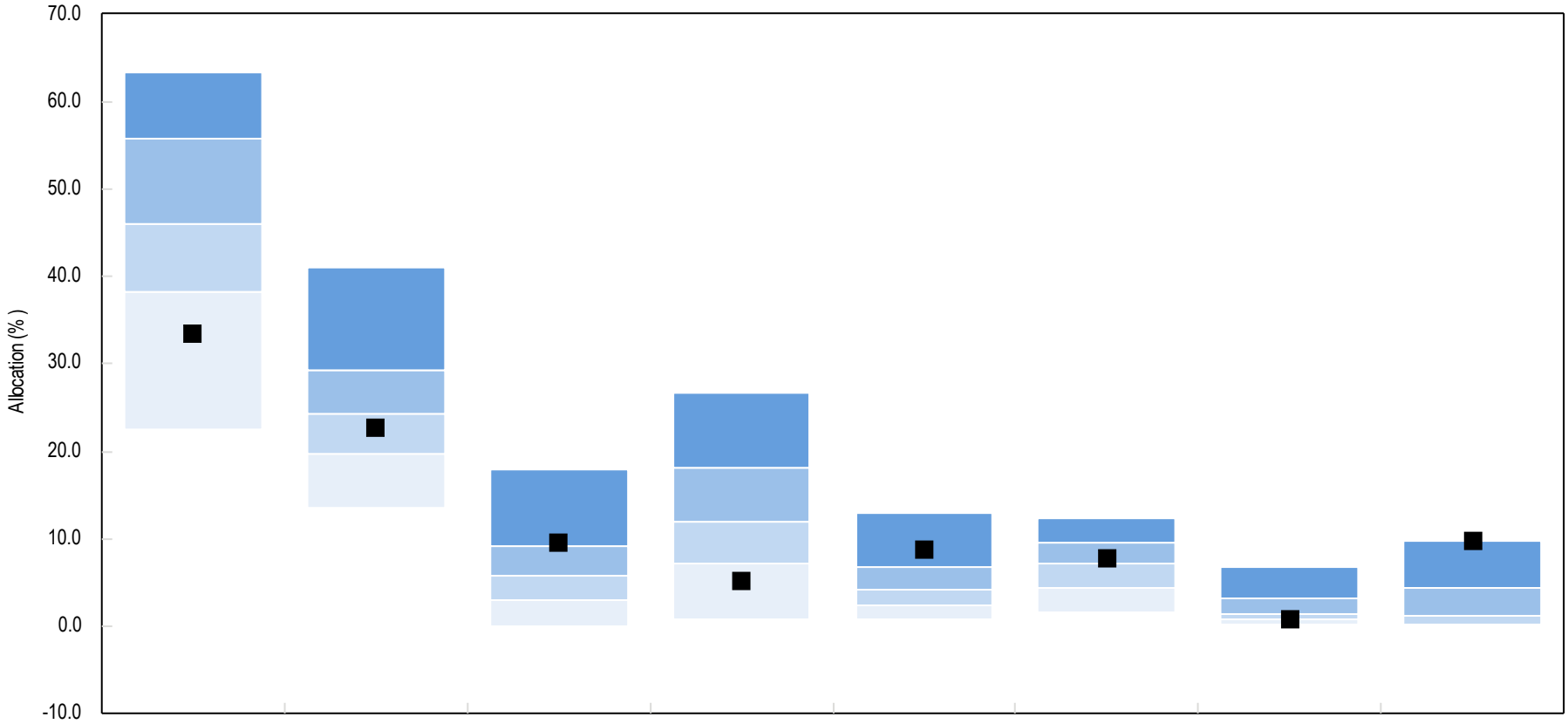
Risk Return Statistics: Last Two Years

	2 Yrs			
	Midstream Energy	Alerian Midstream Energy Index	Opportunistic	Assumed Rate of Return +3%
RETURN SUMMARY STATISTICS				
Up Market Periods	17	17	24	24
Down Market Periods	7	7	0	0
Maximum Return	12.72	14.38	10.18	0.80
Minimum Return	-5.47	-6.10	-6.31	0.80
Return	25.66	28.72	10.37	10.00
Excess Return	18.88	21.55	5.42	4.64
Excess Performance	-3.06	0.00	0.37	0.00
RISK SUMMARY STATISTICS				
Beta	0.84	1.00	-	-
Upside Risk	13.06	14.90	8.62	2.76
Downside Risk	5.46	5.98	4.94	0.00
RISK/RETURN SUMMARY STATISTICS				
Standard Deviation	12.37	14.11	9.47	0.00
Alpha	1.57	0.00	-	-
Sharpe Ratio	1.53	1.53	0.57	28.03
Excess Risk	12.37	14.11	9.48	0.17
Tracking Error	4.18	0.00	9.47	0.00
Information Ratio	-0.64	-	0.08	-
CORRELATION STATISTICS				
R-Squared	0.92	1.00	-	-
Actual Correlation	0.96	1.00	-	-

Data for unavailable for positions held for less than two years.

Peer Comparison

Total Plan Allocation vs. InvMetrics Public DB > $1B
As of June 30, 2025

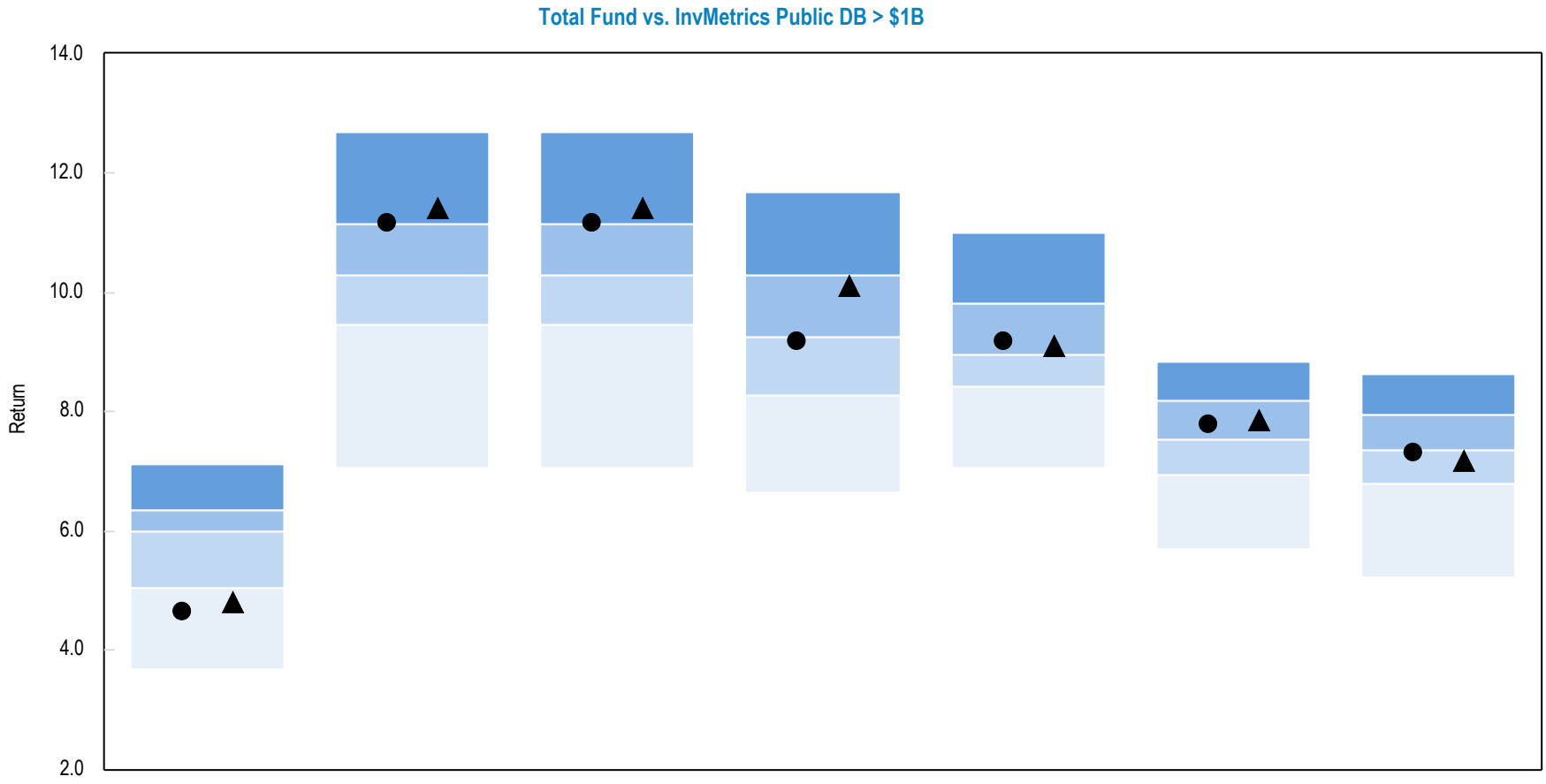


	Total Equity	Total Fixed Income	Hedge Funds	Private Equity	Real Assets/Commod	Real Estate - Private	Cash & Equivalents	Other
■ Total Fund	33.6 (86)	22.8 (57)	9.5 (21)	5.2 (83)	8.7 (19)	7.8 (40)	0.8 (70)	9.8 (1)
5th Percentile	63.4	41.1	18.0	26.7	13.0	12.3	6.7	9.8
1st Quartile	55.9	29.4	9.1	18.2	6.8	9.5	3.2	4.4
Median	46.1	24.3	5.8	12.0	4.3	7.2	1.4	1.1
3rd Quartile	38.3	19.7	2.9	7.1	2.4	4.4	0.7	0.3
95th Percentile	22.5	13.5	0.0	0.8	0.9	1.5	0.2	0.1
Population	110	111	52	100	78	93	105	18

Parentheses contain percentile rankings. Other contains Alpha Pool, Opportunistic, and Private Credit. Real Estate contains Private and Core Real Estate. Real Assets contain Commodities and Midstream.

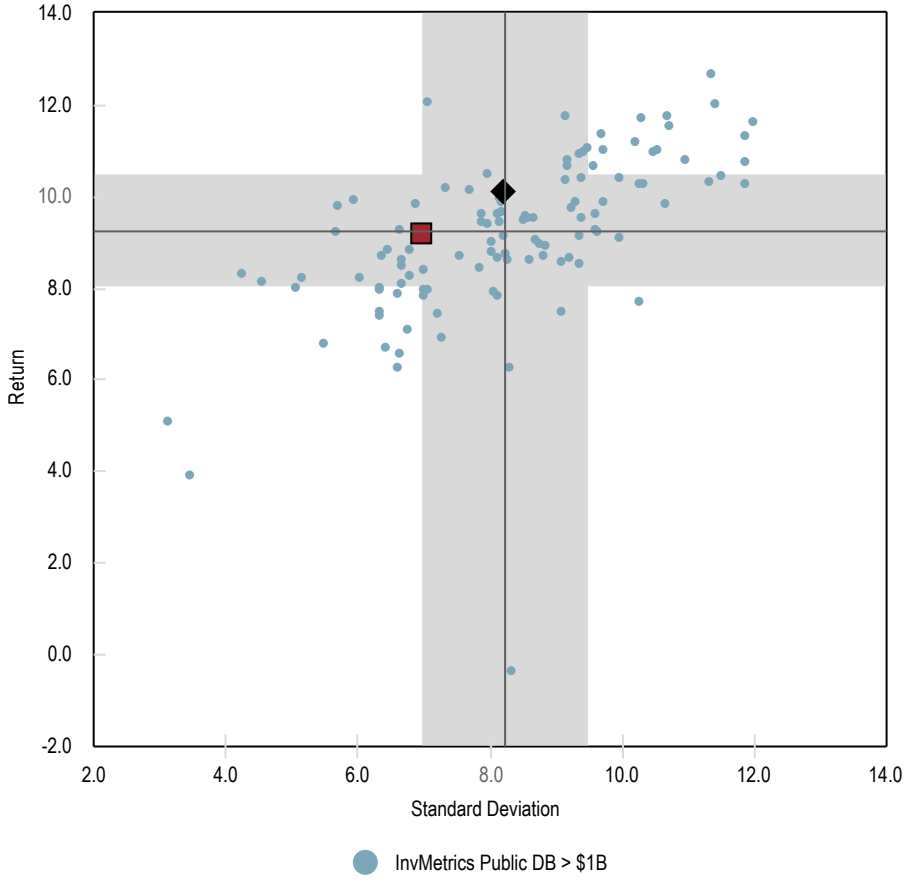
Peer Universe Comparison: Cumulative Performance (Gross of Fees)

Period Ending: June 30, 2025



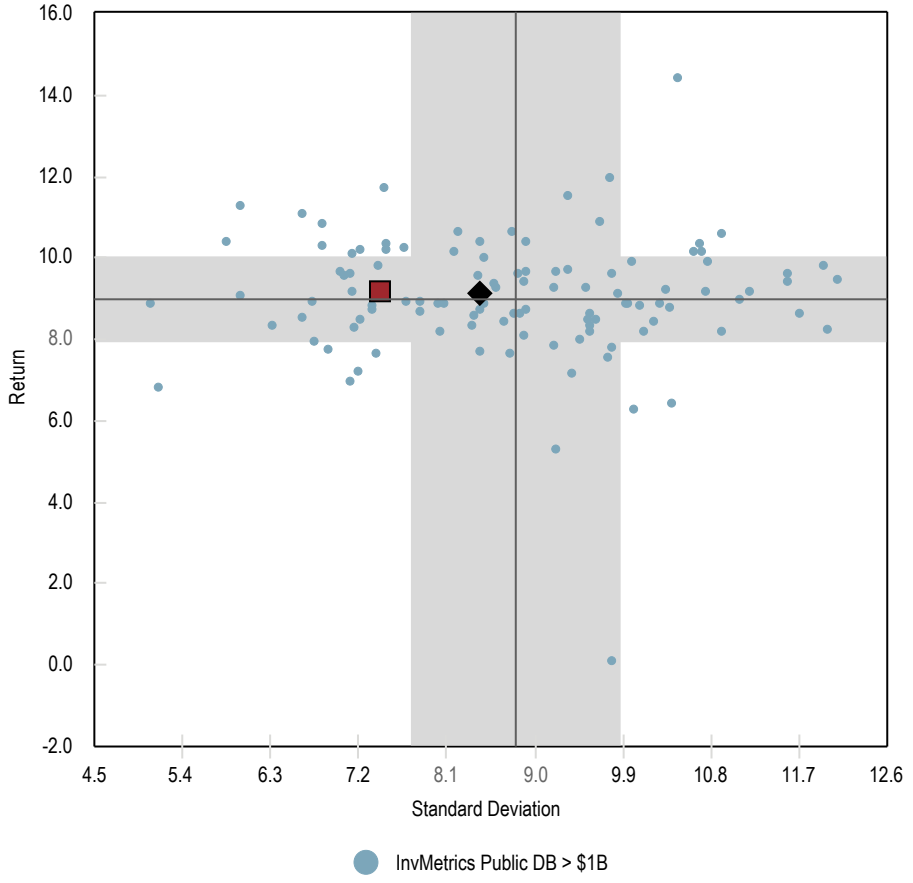
	Quarter	Fiscal YTD	1 Year	3 Years	5 Years	7 Years	10 Years
● Total Fund	4.7 (82)	11.2 (25)	11.2 (25)	9.2 (52)	9.2 (44)	7.8 (40)	7.3 (51)
▲ Policy Index	4.8 (79)	11.4 (21)	11.4 (21)	10.1 (29)	9.1 (48)	7.9 (37)	7.2 (59)
5th Percentile	7.1	12.7	12.7	11.7	11.0	8.9	8.7
1st Quartile	6.4	11.2	11.2	10.3	9.8	8.2	7.9
Median	6.0	10.3	10.3	9.3	9.0	7.5	7.3
3rd Quartile	5.1	9.5	9.5	8.3	8.4	7.0	6.8
95th Percentile	3.7	7.1	7.1	6.7	7.1	5.7	5.2
Population	117	117	117	113	110	108	106

Annualized Return vs. Annualized Standard Deviation
3 Years Ending June 30, 2025



	Return	Standard Deviation
Total Fund	9.21	6.96
Policy Index	10.12	8.20
Median	9.26	8.22
Population	113	113

Annualized Return vs. Annualized Standard Deviation
5 Years Ending June 30, 2025



	Return	Standard Deviation
Total Fund	9.19	7.42
Policy Index	9.12	8.45
Median	8.97	8.80
Population	110	110

Other

	2025 Q2	2025 Q1	2024 Q4	2024 Q3	2024 Q2	2024 Q1	2023 Q4	2023 Q3	2023 Q2	2023 Q1	2022 Q4	2022 Q3
Total Fund	**4.6**	**1.6**	**-0.4**	**4.8**	**1.2**	**3.8**	**5.1**	**-0.9**	**1.9**	**3.2**	**4.5**	**-3.1**
Policy Index	*4.8*	*1.4*	*-0.1*	*4.9*	*1.8*	*3.7*	*6.2*	*-1.4*	*2.9*	*3.8*	*5.5*	*-3.8*

	2022 Q2	2022 Q1	2021 Q4	2021 Q3	2021 Q2	2021 Q1	2020 Q4	2020 Q3	2020 Q2	2020 Q1	2019 Q4	2019 Q3
Total Fund	**-7.5**	**-0.8**	**3.6**	**0.5**	**5.5**	**3.5**	**8.8**	**4.4**	**10.7**	**-11.3**	**4.6**	**0.2**
Policy Index	*-8.9*	*-1.3*	*3.3*	*0.7*	*5.6*	*3.2*	*8.8*	*4.5*	*10.1*	*-11.1*	*4.6*	*0.8*

	2019 Q2	2019 Q1	2018 Q4	2018 Q3	2018 Q2	2018 Q1	2017 Q4	2017 Q3	2017 Q2	2017 Q1	2016 Q4	2016 Q3
Total Fund	**3.1**	**6.8**	**-6.4**	**2.3**	**0.3**	**-0.1**	**3.0**	**3.2**	**2.7**	**4.2**	**0.8**	**3.5**
Policy Index	*3.0*	*7.0*	*-5.5*	*2.2*	*0.7*	*-0.1*	*3.1*	*3.0*	*2.7*	*3.5*	*0.5*	*2.9*

Performance Return Calculations

Performance is calculated using a Time Weighted Rates of Return (TWRR) methodology. Monthly returns are linked geometrically and annualized for periods longer than one year.

Data Source

Verus is an independent third party consulting firm and calculates returns from best source book of record data. Returns calculated by Verus may deviate from those shown by the manager in part, but not limited to, differences in prices and market values reported by the custodian and manager, as well as significant cash flows into or out of an account. It is the responsibility of the manager and custodian to provide insight into the pricing methodologies and any difference in valuation.

Illiquid Alternatives

Due to the inability to receive final valuation prior to report production, closed end funds (including but are not limited to Real Estate, Hedge Funds, Private Equity, and Private Credit) performance is typically reported at a one-quarter lag. Valuation is reported at a one-quarter lag, adjusted for current quarter flow (cash flows are captured real time). Closed end fund performance is calculated using a time-weighted return methodology consistent with all portfolio and total fund performance calculations. For Private Markets, performance reports also include Verus-calculated multiples based on flows and valuations (e.g. DPI and TVPI) and manager-provided IRRs.

Manager Line Up

Investment Fund or Strategy	Fund Incepted	Data Source
AB US Small Cap Value Equity	7/7/2015	Northern Trust
Abbott Capital PE VI	3/31/2008	Abbott Capital
Accel-KKR Capital Partners VII	2/6/2025	Accel
ABS Emerging Market Direct	8/29/2024	ABS
American Century Non-US Small Cap	12/15/2020	American Century
Ares Pathfinder	10/1/2023	Ares
Aristeia International Limited	5/1/2014	Northern Trust
Aristotle Pacific Capital, LLC	1/6/2025	Aristotle
ASB Real Estate	9/30/2013	ASB
Barclays Capital Aggregate Rebalancing Overlay	6/15/2022	Parametric
BlackRock Short Duration Fund	9/8/2021	BlackRock
Blue Owl Real Estate Fund VI	3/18/2024	Blue Owl
Blue Owl Strategic Equity Partners	9/6/2024	Blue Owl
Blue Torch Credit Opportunities	7/24/2020	Blue Torch
BPC Real Estate Debt Fund LP	3/1/2025	BPC
Brevan Howard	11/1/2013	Northern Trust
Brighton Private Equity	3/28/2021	Brighton
Brighton Park Capital Fund II, L.P	9/30/2022	Brighton
Brookfield Real Estate Finance Fund V	12/18/2017	Northern Trust
Carrhae Capital Long Master Fund	8/1/2024	Carrhae
Castlelake Aviation V Stable Yield, L.P	10/24/2024	Castlelake
Cerberus Business Finance V	8/25/2023	Cerberus
Cevian Capital II	12/30/2014	Northern Trust
Chilton High Conviction Equity	5/1/2025	Chilton
Covenant Apartment Fund X	10/29/2020	Covenant
Covenant Apartment Fund XII	3/1/2025	Covenant
Crown Global Secondaries V Master S.C.Sp	2/1/2021	Crown
Crown Global Secondaries Fund VI	2/1/2021	Crown
Dalton Japan Long Only	10/31/2023	Dalton
DC Value Recovery fund IV	12/28/2015	Colony
D.E. Shaw	6/30/2013	Northern Trust
DFA Emerging Markets Value I	3/7/2014	Northern Trust
Elliot Associates	7/1/2024	Elliott
Fortress Credit Opportunities	12/17/2020	Fortress
Fortress Lending Fund II	3/15/2021	Fortress
Fortress Credit Opportunities Fund VI Expansion	10/1/2024	Fortress
Garda Fixed Income Relative Value Opp	9/30/2021	Garda
Geneva Capital Small Cap Growth	7/22/2015	Geneva
Gresham MTAP Commodity	9/3/2013	Gresham
Guggenheim	6/2/2025	Guggenheim
Harvest Midstream	9/28/2020	Harvest Midstream
HBK Fund II	11/1/2013	Northern Trust
Henderson Smallcap Growth	7/22/2015	Northern Trust
H.I.G Bayside Loan Opportunities Fund V	7/24/2019	H.I.G. Capital
Hudson Bay	6/7/2019	Northern Trust
Hudson Bay Real Estate Opportunities	1/23/2025	Hudson Bay
Hudson Bay Special Opportunities Fund	2/20/2024	Hudson Bay
Indus Pacific Opportunities	6/30/2014	Northern Trust
Invesco Real Estate III	6/30/2013	Invesco
Invesco Real Estate IV	12/18/2015	Invesco
ITE Rail Fund, L.P	2/27/224	ITE Rail
J.P. Morgan Strategic Property	7/2/2014	J.P. Morgan
Juniper High Noon Partners, L.P	3/18/2024	Juniper
Juniper Capital IV, L.P.	4/26/2023	Juniper
KKR US Broadly Syndicated Loan Fund	10/21/2024	Mellon
KSL Capital Partners VI	4/26/2023	KSL Capital
Landmark Real Estate Partners VIII	4/29/2018	Landmark
Landmark Real Estate Partners IX	4/1/2024	Landmark
Lazard Japanese Equity	11/1/2023	Lazard
LBA Logistics Value Fund IX, L.P.	2/22/2022	LBA
Level Equity Growth Partners V	11/1/2021	Level Equity
Level Equity Opportunities Fund 2021	11/1/2021	Level Equity
LGT Crown	2/1/2021	LGT
Linden Capital Partners V LP	7/19/2022	Linden
Linden Co-Investment V LP	6/30/2022	Linden
Longreach Capital Partners	5/28/2024	Long Reach
Long Wharf Real Estate	6/27/2019	Long Wharf
LRAF Holdings 21 Yeti II LP	12/6/2024	Long Wharf
Magnetar Constellation	11/14/2018	Magnetar
Mellon Aggregate Bond Index Fund	1/14/2011	Mellon
Mellon EB DV Stock Index	10/18/2017	Mellon
Mellon EB DV World ex-US Index	8/1/2018	Mellon
Merit Hill Self Storage	11/3/2023	Merit
Myriad Opportunities Offshore	5/19/2016	Northern Trust
Oak Hill Advisors	12/22/2023	Oak Hill
OrbiMed Private Investments IV, LP	11/4/2022	OrbiMed
OrbiMed Royalty & Credit Opportunities	9/12/2022	OrbiMed
Pantheon Global III	6/30/2000	Pantheon
Pantheon USA V	6/30/2005	Pantheon
Pantheon USA VI	3/31/2005	Pantheon
Pantheon USA VII	3/31/2005	Pantheon
Parametric Overlay/ Cap Efficiency Program	7/31/2020	Parametric
Peak Rock Capital Fund III	7/13/2021	Peak Rock
Pharo Opportunities Fund SPC	6/28/2024	Pharo
PIMCO Core Plus	1/21/2011	Northern Trust
PIMCO Commodity Alpha	5/4/2016	PIMCO
PIMCO EMD	2/29/2020	Northern Trust
PIMCO Midstream	10/9/2020	PIMCO
PIMCO StocksPLUS	7/14/2003	PIMCO
Post Oak Energy Partners GP V, LP	3/1/2025	Post
Fidelity Non-US Small Cap Equity	6/10/2008	Northern Trust
Quantum Capital Solutions II	11/1/2024	Quantum
Quantum Capital Solutions II Co-Investment Fund, LP	11/1/2024	Quantum
River Birch	8/3/2015	Northern Trust
Rubicon Technology Partners IV LP	11/30/2022	Rubicon
Schroders	6/10/2025	Schroders
Silver Point Specialty Credit Fund III, L.P.	10/4/2023	Singerman
Singerman Real Estate Opportunity Fund IV	10/27/2021	Sculptor
Sculptor Diversified REIT	12/2/2024	Sculptor
Sculptor Enhanced Domestic Partners	3/26/2019	Northern Trust
Short Term Cash Account	12/31/2000	Northern Trust
Short Term Investment Funds	6/30/2000	Stone Harbor
Stone Harbor Emerging Markets Debt	8/8/2012	TPG Sixth Street
TAO Contingent	4/16/2020	TCW
TCW Securitized Opportunities	2/3/2016	Northern Trust
TPG AG Essential Housing III	11/1/2024	TPG Sixth Street
Transition Equity	9/30/2010	Northern Trust
Transition Fixed Income	9/30/2010	TPG Sixth Street
TSSP Adjacent Opportunities Partners	11/17/2017	Vista Equity
Vista Equity Partners	7/24/2020	Warren
Warren Equity III	4/1/2021	Warren
Warren Equity IV	1/1/2023	Wellington
Wellington Alternative Investments	2/9/2023	Wellington
WEP IV TS Co-Investment, L.P.	8/14/2023	Northern Trust
WEP TreeCo Co-Investment, L.P	2/7/2025	WEP
Western Asset Core Plus	5/31/2004	Northern Trust
Western Asset High Yield Fixed Income	5/31/2005	Western Asset

Policy & Custom Index Composition	
Policy Index: 5/1/2025 - Present	33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 19% Core (12% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 8% Credit (1.5% Securitized (0.75% Bloomberg Non-Agency CMBS Index; 0.50% Bloomberg ABS Index; 0.25% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 4% Emerging Market Debt (2% JPM EMBI Global Div / 2% JPM GBI EM Global Div)), 4% Bloomberg Commodity Index, 10% Hedge fund (7.5% 3-Month T-bill + 3%, 2.5% MSCI ACWI (Net)), 2.5% 3-Month T-Bill + 3%, 5% Alerian Midstream Energy Index, 6% NCREIF-ODCE Net Monthly, 5% actual timeweighted Private Equity Returns*, 6% actual time-weighted Private Credit Returns*, 4% actual time-weighted Private Real Estate Returns*, 0% Assumed Rate of Return +3%, -2.5% 3-Month T-bill.
Policy Index: 1/1/2025 - Present	33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 19% Core (12% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 8% Credit (1.5% Securitized (0.75% Bloomberg Non-Agency CMBS Index; 0.50% Bloomberg ABS Index; 0.25% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 4% Emerging Market Debt (2% JPM EMBI Global Div / 2% JPM GBI EM Global Div), 4% Bloomberg Commodity Index, 10% Hedge fund (7.5% 3-Month T-bill + 3%, 2.5% MSCI ACWI (Net)), 4% 3-Month T-Bill + 3%, 5% Alerian Midstream Energy Index, 6% NCREIF-ODCE Gross Monthly, 5% actual timeweighted Private Equity Returns*, 6% actual time-weighted Private Credit Returns*, 4% actual time-weighted Private Real Estate Returns*, 0% Assumed Rate of Return +3%, -4% 3-Month T-bill.
Policy Index: 11/1/2024 - 1/1/2025	Policy Index: 33% MSCI ACWI IMI (Net), 25% Fixed Income Blend - 17% Core (14% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index). 8% Credit (1.5% Securitized (0.75% Bloomberg Non-Agency CMBS Index; 0.50% Bloomberg ABS Index; 0.25% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index, 4% Emerging Market Debt (2% JPM EMBI Global Div / 2% JPM GBI EM Global Div), 4% Bloomberg Commodity Index, 10% Hedge fund (7.5% 3-Month T-bill + 3%, 2.5% MSCI ACWI (Net)), 4% 3-Month T-Bill + 3%, 5% Alerian Midstream Energy Index, 5% NCREIF-ODCE Gross Monthly, 5% actual time-weighted Private Equity Returns*, 8% actual time-weighted Private Credit Returns*, 5% actual time-weighted Private Real Estate Returns*, 0% Assumed Rate of Return +3%, -4% 3-Month T-bill.
Policy Index: 10/1/2023 - 11/1/2024	33% MSCI ACWI IMI (Net), 15% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets Global Diversified, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +3%, 2.5% MSCI ACWI (Net), 8% 90 Day T-Bill + 3%, 5% Alerian Midstream Energy Index, 5% NCREIF-ODCE Gross Monthly, 5% actual time-weighted Private Equity Returns*, 8% actual time-weighted Private Credit Returns*, 5% actual time-weighted Private Real Estate Returns*, 0% Assumed Rate of Return +3%, -8% 90 Day T-bill.
Policy Index: 4/1/2022-9/30/23	37% MSCI ACWI IMI (Net), 14% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets Global Diversified, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +4%, 2.5% MSCI ACWI (Net), 8% 91 Day T-Bill + 4%, 5% NCREIF-ODCE Gross Monthly, 5% actual time-weighted Private Equity Returns*, 5% actual time-weighted Private Credit Returns*, 5% actual time-weighted Private Real Estate Returns*, 5% Alerian Midstream, 0% Assumed Rate of Return +3%, -8% 3-Month T-bill.
Policy Index: 7/1/2021-4/1/2022	37% MSCI ACWI IMI, 14% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 1% Bloomberg US Aggregate*, 4% Bloomberg US Aggregate, 5% Alerian Midstream, 5% 3-Month T-bill +400bps, 91 Day T-Bills, -5% 3-Month T-bill.
Policy Index: 1/1/2021-6/30/2021	37% MSCI ACWI IMI, 14% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 1% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 4% MSCI ACWI*, 1% Bloomberg US Aggregate*, 4% Bloomberg US Aggregate, 5% Alerian Midstream, 5% 3-Month T-bill +400bps, 91 Day T-Bills, -5% 3-Month T-bill.
Policy Index: 7/1/2020-12/31/2020	37% MSCI ACWI IMI, 14% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 1% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 4% MSCI ACWI*, 5% Bloomberg US Aggregate, 1% Alerian Midstream, 4% Bloomberg US Aggregate
Policy Index: 4/1/2020-6/30/2020	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 1% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 5% Bloomberg US Aggregate*.
Policy Index: 1/1/2020-3/31/2020	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 5% Bloomberg US Aggregate*.
Policy Index: 10/1/2019-12/31/2019	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 3% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 6% Bloomberg US Aggregate*.
Policy Index: 7/1/2019-9/30/2019	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 4% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 5% Bloomberg US Aggregate*.
Policy Index: 4/1/2019-6/30/2019	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 3% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 6% Bloomberg US Aggregate*.
Policy Index: 1/1/2019-3/31/2019	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 3% actual time-weighted Private Credit Returns*, 2% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 5% Bloomberg US Aggregate*.
Policy Index: 10/1/2018-12/31/2018	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 2% actual time-weighted Private Equity Returns*, 2% actual time-weighted Private Credit Returns*, 2% actual time-weighted Private Real Estate Returns*, 3% MSCI ACWI*, 6% Bloomberg US Aggregate*.
Policy Index: 7/1/2018-9/30/2018	37% MSCI ACWI IMI, 19% Bloomberg US Aggregate, 6% Ice BofA ML High Yield Master II Index, 2% JPM Emerging Markets Bond Index Global Diversified, 2% JPM Government Bond Index-Emerging Markets, 4% Bloomberg Commodity Index, 7.5% 3-Month T-bill +400bps, 2.5% MSCI ACWI, 5% NCREIF-ODCE, 3% actual time-weighted Private Equity Returns*, 2% actual time-weighted Private Credit Returns*, 1% actual time-weighted Private Real Estate Returns*, 2% MSCI ACWI*, 7% Bloomberg US Aggregate*.
Policy Index: 1/1/2017- 6/30/2018	19% Russell 3000 Index, 18% MSCI ACWI ex US, 29% Bloomberg US Aggregate, 10% NCREIF-ODCE, 4% Bloomberg Commodity Index, 7.5% 91-day T-bills + 400bps, 2.5% MSCI ACWI, 5% Russell 3000 Index + 300 bps, 5% ICE BofA ML High Yield + 200 bps.
Policy Index: 4/1/2014-12/31/2016	23% Russell 3000 Index, 29% Bloomberg US Aggregate, 22% MSCI ACWI ex US,

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 the exact opposite direction over time. Correlation is used as a measure to help maximize the benefits of diversification when constructing an investment portfolio.

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

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

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

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

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

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

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

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

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

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

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

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

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