Verus



# PERSPECTIVES THAT DRIVE ENTERPRISE SUCCESS

**PERIOD ENDING: SEPTEMBER 30, 2025**

Investment Performance Review for

## Kern County Employees' Retirement Association

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VERUSINVESTMENTS.COM

SEATTLE 206.622.3700
CHICAGO 312.815.5228
PITTSBURGH 412.784.6678
LOS ANGELES 310.297.1777
SAN FRANCISCO 415.362.3484


Verus
PERSPECTIVES
THAT DRIVE
ENTERPRISE
SUCCESS
4TH QUARTER 2025
Investment Landscape

# Verus business update

## Since our last Investment Landscape webinar:

— CIO Ian Toner, CFA, has been honored by Institutional Investor as a "Visionary Leader in the Investment Consulting Industry."

— Senior Consultant Samantha Grant, CFA, CAIA, became the newest Board member of the CFA Society of Chicago in September.

— Verus hired Callum Olsen to join our Operations team.

— Recent research, found at *verusinvestments.com/research:*

- ***State of the Core Real Estate Fund Universe***
- ***LDI for Public Sponsors***
- ***So, What Now?***

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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.

# 3rd quarter summary

### THE ECONOMY

— The Q3 real GDP growth report was not released on October 30th as previously scheduled, due to the government shutdown which continued to hamper the publication of a wide swath of data that informs investors about the health of the economy. The Atlanta Fed GDPNow indicator estimates a 3.9% Q3 quarterly annualized growth.

— U.S. inflation remained above the Fed's target, rising from 2.7% year-over-year to 3.0%. Core inflation rose slightly from 2.9% to 3.0%. The rate of inflation has increased, but price rises have been much more subdued relative to the forecasts of many economists and experts following the shift in U.S. trade policy.

### EQUITY

— Emerging market equities led during Q3 (MSCI EM +10.6%) followed by domestic (S&P 500 +8.1%) and international developed (MSCI EAFE +4.8%). Emerging markets (+27.5%) and international developed (+25.1%) have substantially outpaced the U.S. (+14.8%) year-to-date, although currency movement has fueled much of this difference.

— U.S. valuations climbed further, as earnings surprises and Federal Reserve easing generated enthusiasm. Historically, this level of valuations has coincided with zero or negative returns over the following five years; however, current market dynamics may support elevated pricing.

### FIXED INCOME

— The 10-year U.S. Treasury yield fell slightly from 4.23% to 4.14% during the quarter, although yields temporarily reached 4.00% as recession fears grew and commentary from the Federal Reserve suggested a series of rate cuts was forthcoming. Fed Chair Powell described the move as a "risk management cut". The committee appears to be placing more emphasis on the jobs side of their *maximum employment and price stability* mandate.

— Despite growing talk amongst investors of potential issues in credit markets, default activity was lower during Q3, and distressed/LME (liability management exercise) activity fell sharply from prior levels. Year-to-date, $3 out of every $4 of default activity occurred in bank loans.

### ASSET ALLOCATION ISSUES

— Investors benefited from strong positive returns across most asset classes during Q3. Global equities delivered +7.6% on earnings growth and stable economic conditions, U.S. high yield bonds generated +2.5%, and core fixed income delivered +2.0% as rates moved lower and the Federal Reserve kicked off a rate cutting cycle.

— Market-priced volatility remained low and stable. Global macroeconomic uncertainty eased as shifting trade policy has so far had minimal impact on inflation and growth relative to initial fears. Business profits were resilient, and forecasts were revised upwards while investor optimism improved.

Investors benefited from strong positive returns across most asset classes during Q3

Although risk asset valuations are generally expensive, earnings momentum and massive A.I. capital expenditures could support further gains

# What drove the market in Q3?

**"S&P 500 registers record-high close as data keeps rate cut views intact"**

**S&P 500**

| June 30th | July 31st | August 31st | September 30th | October 15th |
|---|---|---|---|---|
| 6198 | 6238 | 6460 | 6704 | 6672 |

*Article Source: Reuters, September 4th, 2025*

**"Federal Reserve lowers interest rates by 0.25 percentage points in first cut since December"**

**Federal Funds Rate (lower bound)**

| 09/2020 | 09/2021 | 09/2022 | 09/2023 | 09/2024 | 09/2025 |
|---|---|---|---|---|---|
| 0.00% | 0.00% | 3.00% | 5.25% | 4.75% | 4.00% |

*Article Source: CBS News, September 17th, 2025 – end of month figures shown*

**"Dollar drops against peers after weaker-than-expected jobs report"**

**DXY Dollar Index**

| Apr '25 | May '25 | Jun '25 | Jul '25 | Aug '25 | Sept '25 |
|---|---|---|---|---|---|
| 99.47 | 99.33 | 96.88 | 99.97 | 97.77 | 97.78 |

*Article Source: Reuters, September 5th, 2025*

**"Inflation held steady in August, in line with economist forecasts"**

**U.S. Inflation (year-over-year)**

| Jan '25 | Feb '25 | Mar '25 | Apr '25 | May '25 | Jun '25 | Jul '25 | Aug '25 | Sep '25 |
|---|---|---|---|---|---|---|---|---|
| 3.0% | 2.8% | 2.4% | 2.3% | 2.4% | 2.7% | 2.7% | 2.9% | 3.0% |

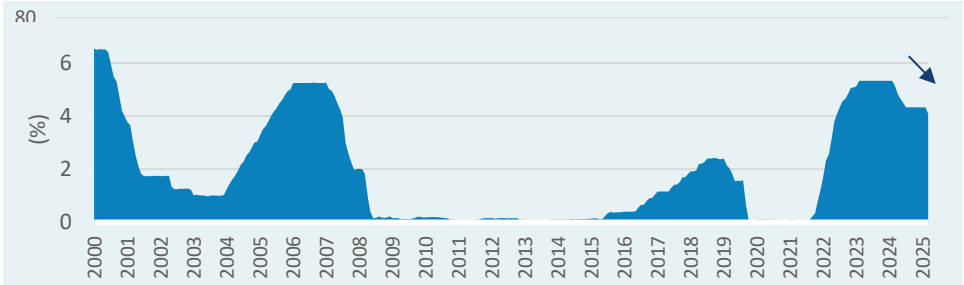
*Article Source: CBS News, September 26th, 2025*

**U.S. EQUITY PERFORMANCE**




*Source: Standard & Poor's, as of 9/30/25*

**EFFECTIVE FEDERAL FUNDS RATE**




*Source: FRED, as of 9/30/25*

**U.S. INFLATION (YOY)**




*Source: Bloomberg, as of 9/30/25*

# Economic environment

# U.S. economics summary

— The Q3 real GDP growth report was not released on October 30th as previously scheduled, due to the government shutdown which continued to hamper the publication of a wide swath of data that informs investors about the health of the economy. The Atlanta Fed GDPNow indicator estimated a 3.9% quarterly annualized growth rate as of October 27th. Second quarter growth was revised upwards from 3.0% to 3.8% on updated consumer spending data that was stronger than initially reported.

— Unemployment rose slightly from 4.1% to 4.3% in August and job creation has slowed to nearly zero. We believe that this easing of the labor market is happening for a fairly unique reason—a decline in immigration. Immigration enforcement and deportations are having a notable impact on the number of available workers, meaning the job market is likely slowing primarily for immigration reasons rather than due to weakening U.S. business conditions or layoffs.

— The Federal Reserve cut rates in September to a range of 4.00%-4.25%, citing concerns over a slowing job market. Chair Jerome Powell at the meeting described the move as a "risk management" rate cut, emphasizing the Fed's dual mandate of maximum employment and price stability.

— U.S. inflation remained above the Fed's target during Q3, rising from 2.7% year-over-year to 3.0%. Core inflation rose slightly from 2.9% to 3.0%. Although inflation has increased, price rises have been much more subdued relative to the forecasts of many economists and experts following the shift in U.S. trade policy. The types of prices that were expected to be highly exposed to tariffs, such as new cars, apparel, shoes, televisions, household furnishings, and appliances, have not overall seen broad material price rises (some category prices have fallen).

— Very poor consumer sentiment continues to be a key story of 2025, with households concerned about job prospects and personal finances. Confidence dipped in Q3 but remained above the April lows. Households expressed concerns about high prices, future job prospects, and the broader business environment.

| | Most Recent | 12 Months Prior |
|---|---|---|
| Real GDP *(YoY)* | 2.1%<br>*6/30/2025* | 3.1%<br>*6/30/2024* |
| Inflation<br>*(CPI YoY, Core)* | 3.0%<br>*9/30/2025* | 3.3%<br>*9/30/2024* |
| Expected Inflation<br>*(5yr-5yr forward)* | 2.3%<br>*9/30/2025* | 2.3%<br>*9/30/2024* |
| Fed Funds Target Range | 4.00% - 4.25%<br>*9/30/2025* | 4.75% - 5.00%<br>*9/30/2024* |
| 10-Year Rate | 4.2%<br>*9/30/2025* | 3.8%<br>*9/30/2024* |
| U-3 Unemployment | 4.3%<br>*8/31/2025* | 4.2%<br>*8/31/2024* |
| U-6 Unemployment | 8.1%<br>*8/31/2025* | 7.8%<br>*8/31/2024* |

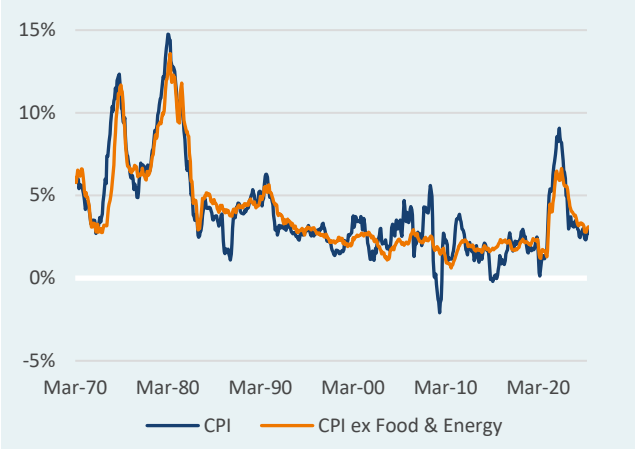
# Inflation

U.S. inflation (CPI) remained sticky and above the Fed's target during Q3, rising from 2.7% year-over-year to 3.0% in September. Excluding volatile food and energy prices, inflation rose slightly from 2.9% to 3.0%. Although inflation has increased, price rises have been much more subdued relative to the forecasts of many economists and experts following the shift in U.S. trade policy. The types of prices that were expected to be highly exposed to tariffs, such as new cars, apparel, shoes, televisions, household furnishings, and appliances, have not overall seen broad price rises. These dynamics have helped ease inflation fears but continue to baffle economists. We believe that tariff-driven inflation will eventually occur but not to the extent believed initially. There is growing evidence that some price rises will take longer to be passed through to consumers, that this pass-through will be nuanced, and that certain businesses will avoid tariffs by onshoring and/or restructuring supply chains. Some tariff costs will be absorbed by businesses, though if this presents itself as a few percentage point hit to earnings that is spread over a longer period of time, in a high earnings growth environment, it may not result in notable market turmoil.

We believe that the rate of inflation may reach a peak in the low 3.0% range, which would likely be subdued enough to not cause market panic or a Federal Reserve pivot.

Although many investors believe there *ought* to be tariff-fueled inflation, those price rises have been largely absent

**U.S. CPI (YOY)**



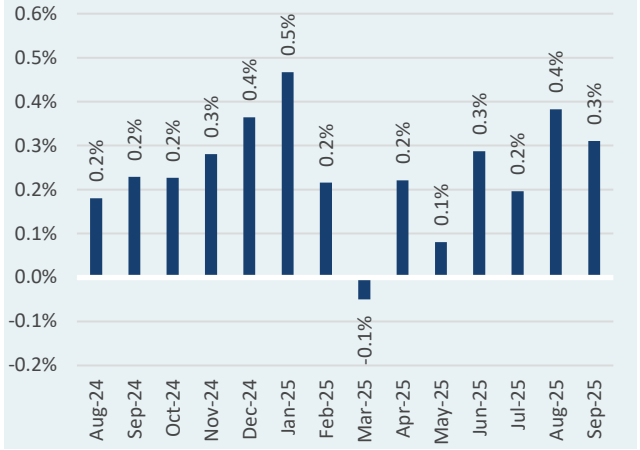

*Source: BLS, as of 9/30/25*

**WHERE IS THE TARIFF INFLATION?**

| Categories less related to tariffs: | Size of category in the overall inflation calculation | Inflation (YoY) |
|---|---|---|
| Food | 13.6% | 3.1% |
| Food away from home | 5.7% | 3.7% |
| Meats, poultry, fish, & eggs | 1.6% | 5.2% |
| Shelter | 35.4% | 3.6% |
| Tuition, other school fees, & childcare | 2.5% | 2.9% |
| Recreation services | 3.5% | 4.4% |
| Energy services | 3.3% | 6.4% |
| Medical care services | 6.8% | 3.9% |
| **Categories more related to tariffs:** | | |
| Apparel | 2.5% | -0.1% |
| Toys | 0.3% | 0.2% |
| Footwear | 0.6% | 1.3% |
| New vehicles | 4.3% | 0.8% |
| Televisions | 0.0% | -6.0% |
| Household furnishings & supplies | 3.4% | 3.0% |
| Tools, outdoor equipment & supplies | 0.9% | 4.3% |

*Source: Verus, BLS, as of 9/30/25*

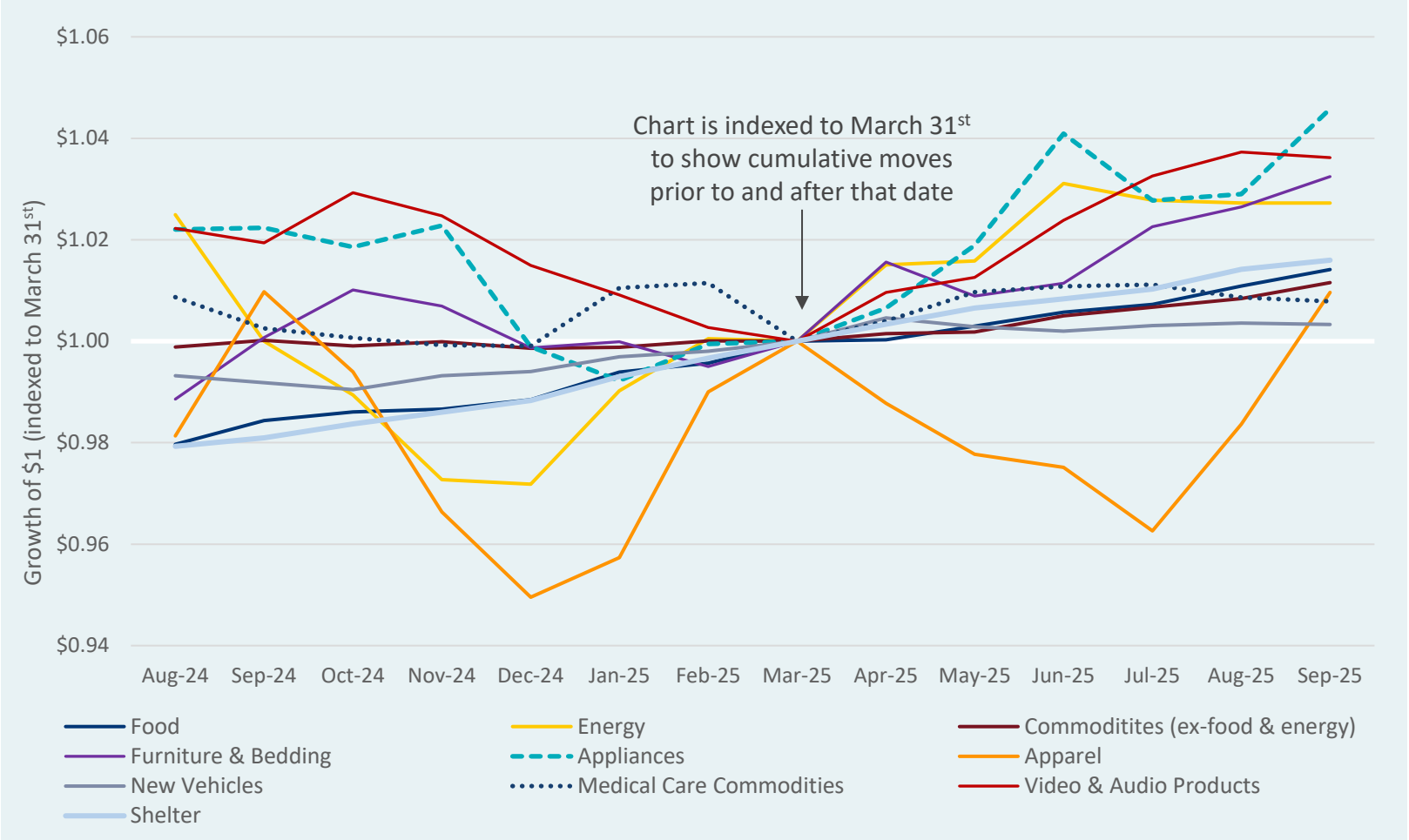
**MONTHLY PRICE MOVEMENT (CPI)**




*Source: BLS, as of 9/30/25*

# Inflation

**INFLATION TRENDS SINCE APRIL**

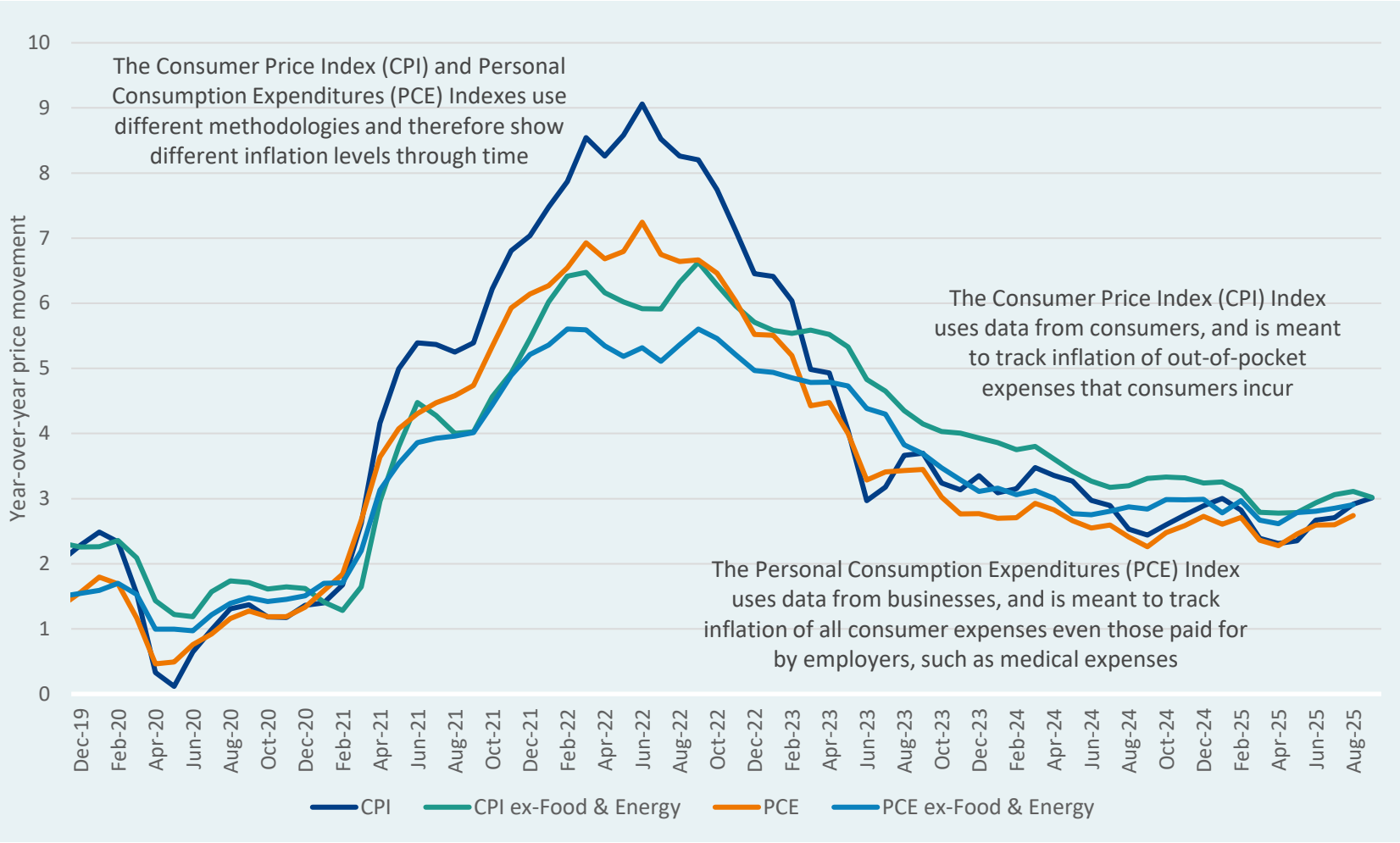



There has been a surprising absence of excess inflation following April's trade policy shift

Certain goods that were expected to show the largest price rises, such as new cars and apparel, have seen negligible price moves

*Source: Verus, FRED, as of 9/30/25*

# Has inflation settled above the Fed target?




Inflation increased slightly to 3.0%, above the Fed's 2% target

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

*Source: FRED, Verus, as of 9/30/25 or most recent release*

# GDP growth

The Q3 real GDP growth figure was not released on October 30th as previously scheduled, due to the government shutdown which continued to hamper the publication of a wide swath of data that informs investors about the health of the economy. The Atlanta Fed GDPNow indicator estimates a 3.9% quarterly annualized growth rate (as of October 27th).

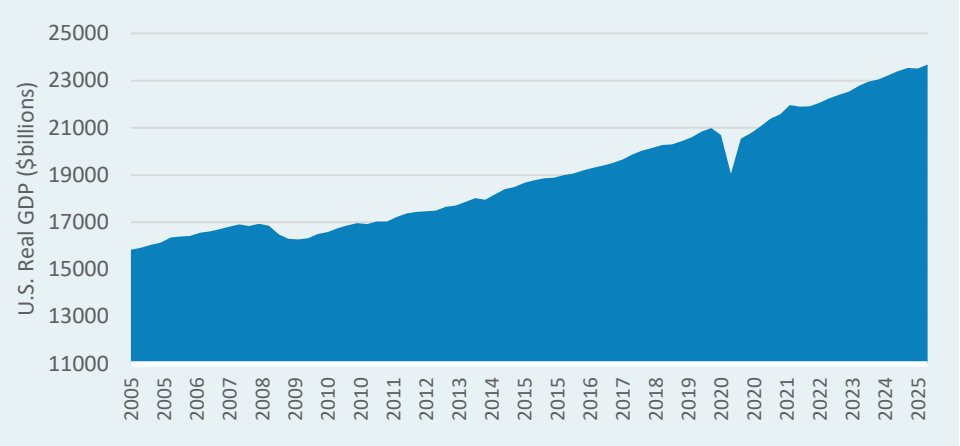
Second quarter growth was revised upwards from 3.0% to 3.8% on updated consumer spending data that was stronger than initially reported. Growth has been surprisingly resilient despite very poor consumer sentiment since April. Business investment has also been relatively strong as businesses continued to spend and invest despite trade policy uncertainty.

An interesting dynamic in the U.S. economy has occurred 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.

Economic growth has been stronger than expected

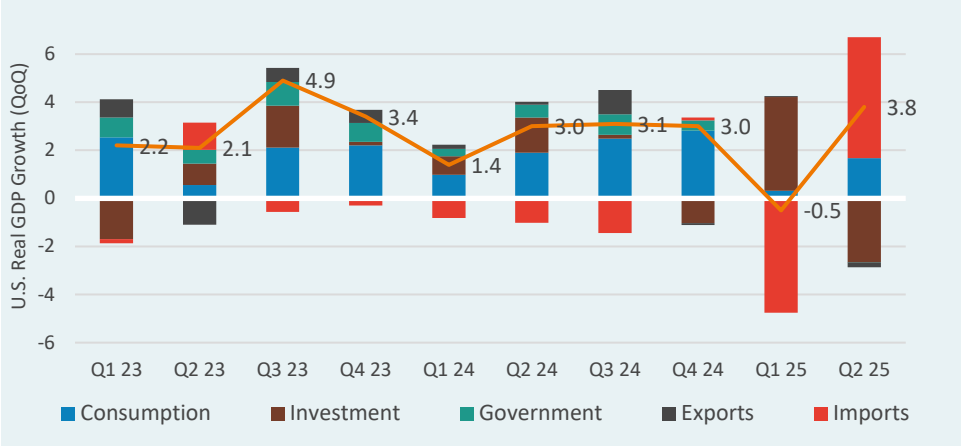
Q3 real GDP growth is expected to once again show strength

**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

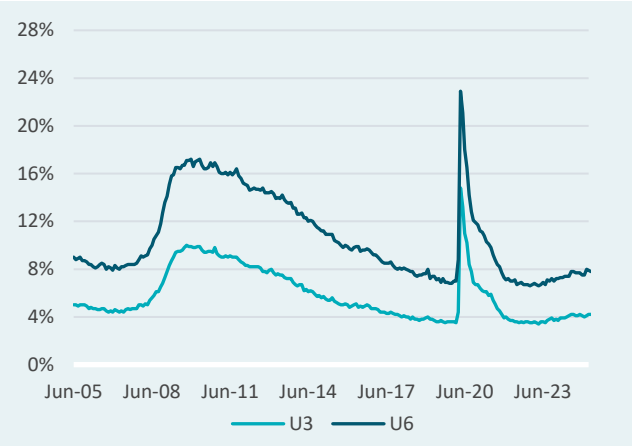
Unemployment increased during the quarter from 4.1% to 4.3% in August, and job creation slowed materially. Layoffs remain very low relative to history. Overall, businesses seem to be holding onto existing workers but hiring at a more tepid pace.

We believe the recent easing of the labor market is happening for a fairly unique reason—a sharp slowing of immigration and immigration policy changes. Immigration enforcement and deportations are having a notable impact on the number of available workers. Worksite audits and federal-local immigration cooperation are also probably leading to hesitance for undocumented workers and perhaps those with special permits to show up to work. We suspect that these dynamics are more a contribution to job market weakness rather than traditional drivers such as weakening business conditions and job cuts.

Following Covid-19 pandemic lockdowns, a general excitement to return to normal life along with excess household savings helped contribute to very strong consumer spending and a quickly growing economy. During this time, businesses were hiring aggressively. These dynamics resulted in the greatest job market mismatch in modern history, as represented by far more job openings than available workers. Since then, it appears that the labor market has slowed, now looking more similar to pre-pandemic conditions.

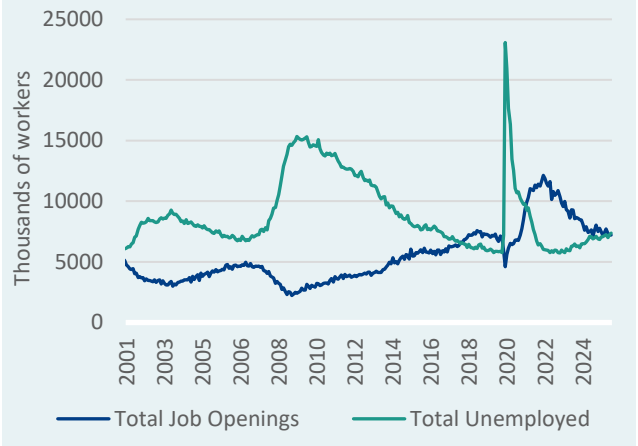
Unemployment remains relatively low, while new job creation has slowed substantially, likely due to immigration trends

**U.S. UNEMPLOYMENT**



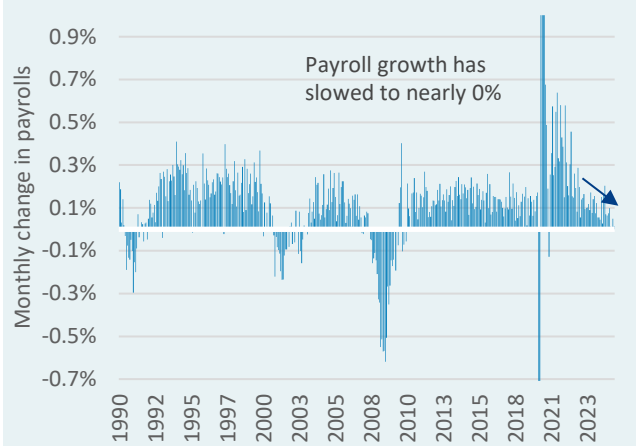

*Source: FRED, as of 8/31/25*

**JOBS AVAILABLE VS WORKERS AVAILABLE**




*Source: FRED, as of 8/31/25*

**JOB GROWTH**




*Source: Verus, FRED, as of 8/31/25*

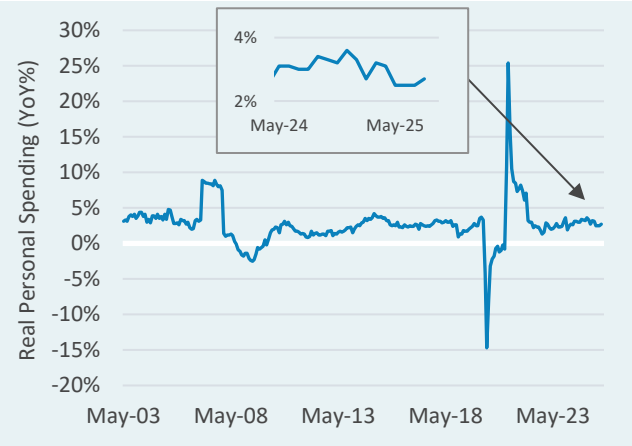
# The consumer

Personal spending increased to 2.7% year-over-year in August on an inflation-adjusted basis, while retail sales growth was also strong. Households continue to spend freely, defying expectations for a slowdown and suggesting that the economy is chugging along at a moderate rate of growth. The chances of recession have fallen, as spending has been strong, economic fears have eased, and much of the economy appears stable or trending in a stronger direction. However, the government shutdown in early October has delayed many economic data releases, which makes it difficult to know recent conditions.

Personal savings rates rose to 5.7% in April, possibly on heightened economic uncertainty and fears of recession. Since then, savings fell to 4.6%—slightly lower year-over-year.

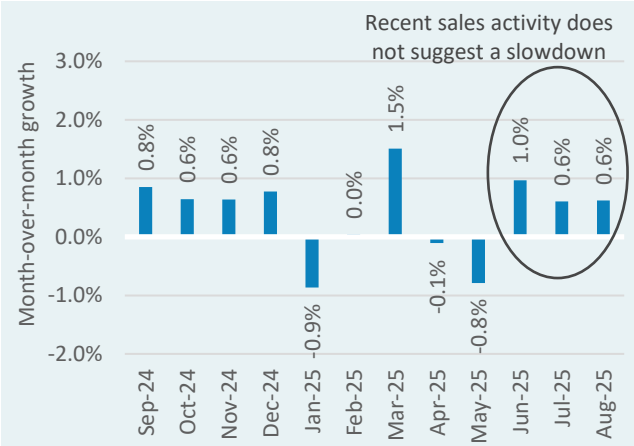
There has recently been discussion about different spending trends of high income and low income households. The U.S. may be thought of in terms of three wealth cohorts: a) lower income households, with wealth generated mostly from paychecks, b) middle income households, with wealth generated from paychecks but also from home equity, and c) upper income households with a large amount of wealth generated from markets (equities, bonds, real estate, other holdings). As the job market has weakened in 2025, with flat residential real estate prices, but booming equity and risk markets, this seems to greatly benefit upper income households that hold more of those assets. This framework may help describe particularly strong spending from upper income households.

**REAL PERSONAL SPENDING**



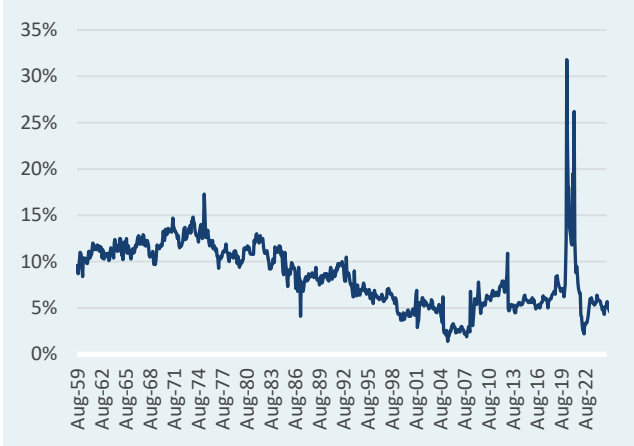

*Source: FRED, as of 8/31/25*

**RETAIL SALES**




*Source: Verus, FRED, as of 8/31/25*

**PERSONAL SAVINGS RATE**



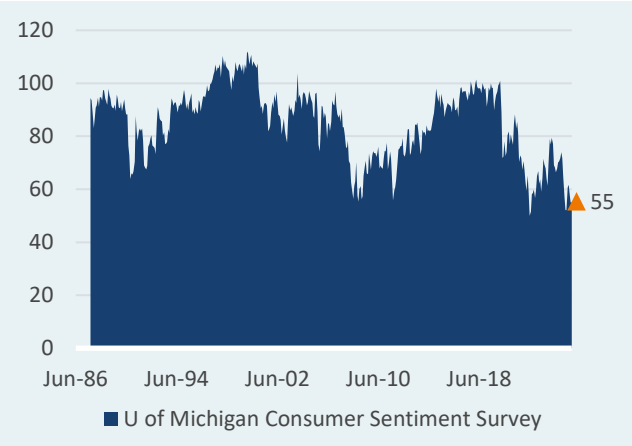

*Source: FRED, as of 8/31/25*

# Sentiment

Very poor consumer sentiment continues to be a key story of 2025. Confidence dipped in Q3, but remained above the April lows. Households expressed concerns about high prices, future job prospects, and the broader business environment. Tariff fears are likely having a significantly negative impact, which suggests that if tariff effects continue to be muted, a rebound in consumer sentiment could follow.

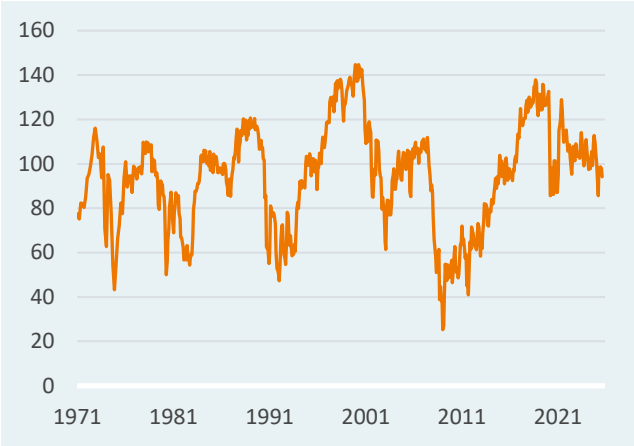
In contrast to household sentiment, small businesses felt more optimistic during the quarter, at levels substantially higher than recent years. According to the NFIB, the greatest concern among employers is labor quality, with many employers struggling to find qualified workers, particularly in construction, manufacturing, and transportation sectors. In construction, nearly half of businesses reported having at least one position that they have been unable to fill. According to the survey this has been a persistent issue, and has improved slightly from one year ago—perhaps a sign of recent labor market softening. It is not yet obvious that immigration policy shifts are having a large impact on the overall small business community, as demonstrated by fewer businesses reporting unfilled employment positions and also fewer businesses listing 'labor quality' as their top business concern.

**CONSUMER SENTIMENT (UNIV. OF MICHIGAN)**




*Source: University of Michigan, as of 9/30/25*

**CONSUMER CONFIDENCE (CONFERENCE BOARD)**




*Source: Conference Board, as of 9/30/25*

**NFIB SMALL BUSINESS SENTIMENT**




*Source: NFIB, as of 9/30/25*

# Housing

Home price gains have moderated in 2025, up +1.5% in August year-over-year. Home sales activity has remained incredibly low for an extended period of time as affordability is historically poor and many potential sellers have been hesitant to sell and forego their existing low mortgage rate. This has depressed the quantity of buyers and also the quantity sellers in the marketplace. However, August may have marked a change in trend with mortgage rates falling, sending new home sales up +20.5% month-over-month, although existing home sales showed less change.

Building permits and construction activity for single-family and multi-family homes is materially lower than one year prior. High construction costs, unsold existing inventory, and concerns around the labor market may be tempering builder optimism.

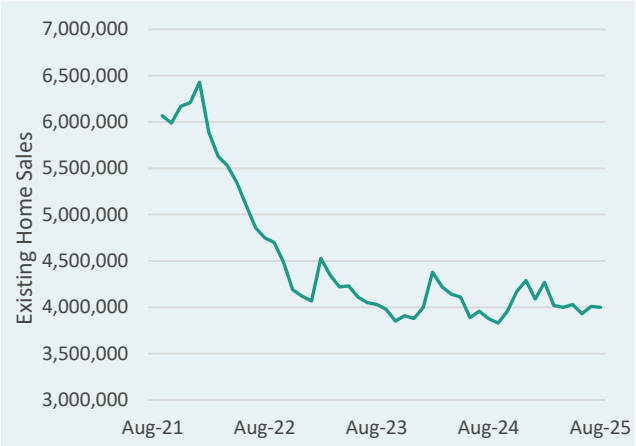
After multiple years of stagnant or falling rent prices, Redfin reported that median asking rent was up +2.6% in August from one year prior, although rent costs are still below the July 2022 peak. Less new construction may be adding some price support in terms of the supply/demand balance. Severe unaffordability of homeownership is also likely pushing more households into the rental market.

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



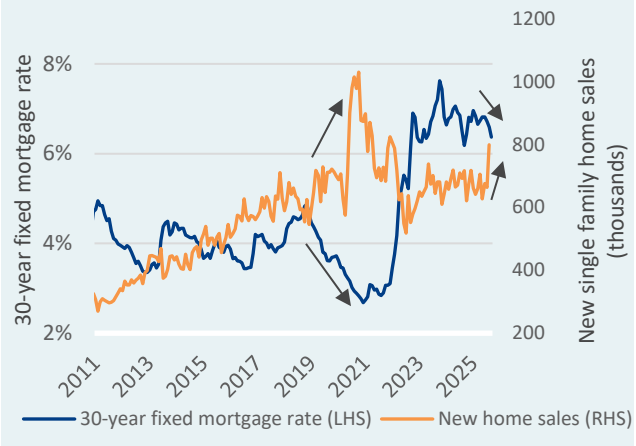

*Source: Freddie Mac, as of 9/30/25*

**EXISTING HOME SALES**




*Source: National Association of Realtors, as of 8/31/25*

**RATES DROP & NEW HOME SALES JUMP**




*Source: Verus, FRED, as of 8/31/25*

# International economics summary

- Economic growth expectations for calendar year 2025 remain weak, ranging from 0.2% real GDP growth in Germany, to 0.9% in Japan, 1.0% in the Eurozone, 1.5% in the U.S., and 4.8% in China. These estimates initially moved lower alongside new trade conflicts and barriers but then modestly improved amidst some recent trade de-escalations and recognition that frictions from trade negotiations have been less than feared.
- After seven consecutive rate cuts, the ECB held rates steady at 2.00%. While central bankers have messaged the potential for a prolonged pause given a more resilient economic situation than many investors expected, sub-2% inflation expectations could lead to further cuts.
- The BOE cut rates in Q3 to 4.00%, and continued to act cautiously despite holding a restrictive monetary stance. Inflationary pressures have created hesitance, but weaker growth prospects could lead to additional rate cuts.
- The U.S. and Russia continued negotiations focused on addressing the Ukraine war, with the U.S. shifting focus towards a ceasefire rather than ramping up military aid to Ukraine. On October 16, President Trump and President Putin reportedly held a "productive" discussion and announced plans for a summit in Budapest. However, concerns that neither side is ready for serious peace talks left the summit on hold.
- Since April's implementation of tariffs, the U.S. has reduced trade barriers on many trade partners, but this mainly has come in the form of temporary relief and pauses. Policy uncertainty remains a major global concern for investors and central banks.
- A ceasefire agreement between Iran and Israel was achieved after the U.S. executed a direct attack on Iranian nuclear facilities. The ceasefire has largely held since taking effect in June. In October, the U.S. then also brokered a ceasefire between Israel and Hamas. Through mid-October, that agreement remained fragile with violations from each side reported.

| | GDP (Real, YoY) | Inflation (CPI, YoY) | Unemployment |
|---|---|---|---|
| United States | 2.1% *6/30/2025* | 3.0% *9/30/2025* | 4.3% *8/31/2025* |
| Eurozone | 1.3% *9/30/2025* | 2.2% *9/30/2025* | 6.3% *9/30/2025* |
| Japan | 1.7% *6/30/2025* | 2.9% *9/30/2025* | 2.6% *8/31/2025* |
| Canada | 0.9% *7/31/2025* | 2.4% *9/30/2025* | 7.1% *9/30/2025* |
| BRICS Nations | 4.9% *6/30/2025* | 1.3% *9/30/2025* | 5.0% *9/30/2025* |
| Brazil | 2.2% *6/30/2025* | 5.2% *9/30/2025* | 5.6% *8/31/2025* |
| Russia | 1.1% *6/30/2025* | 8.0% *9/30/2025* | 2.2% *9/30/2025* |
| India | 7.8% *6/30/2025* | 1.5% *9/30/2025* | 8.5% *12/31/2017* |
| China | 4.8% *9/30/2025* | -0.3% *9/30/2025* | 5.2% *9/30/2025* |

*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.*

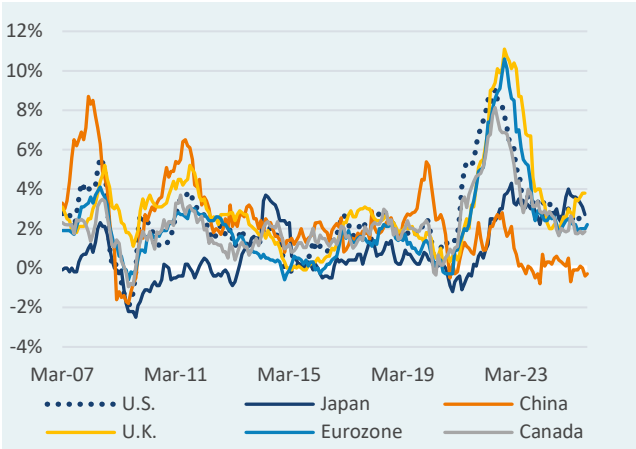
# International economics

The Eurozone grew at a 1.3% YoY in Q1. The region is expected to slow to 1.0% growth in 2025, according to the European Commission. Inflation moved lower to 2.2%, allowing central banks to ease policy. So far, European economies have shown resilience despite shifting U.S. trade policy.

In March, the U.S. imposed 25% tariffs on Mexico and Canada for non-USMCA goods ( ~15% of trade with both nations). Mexico and Canada retaliated with counter-tariffs, which were lifted September 1 to match the United States' USMCA exemptions. As of mid-October, negotiations are in final stages for reducing tariffs on non-USMCA goods (e.g., steel, aluminum, autos, lumber). Many expect a deal with Canada to be signed in November. The U.S. has threatened 30% tariffs on Mexico, which were delayed to November 1. Following early-2025 tariff announcements, the U.S. has secured long-term trade deals with the U.K. and E.U., with temporary deals or pauses in place with many other trade partners. The administration has cited business onshoring, national defense, improving foreign terms of trade, and immigration and drug control as goals of new trade policies. In May, the U.S. and U.K. signed the Economic Prosperity Deal, reducing overall tariffs to ~5-10% with duty-free access for key sectors. In July, the U.S. and European Union reached a 6-year framework capping tariffs at 15% with liquefied natural gas/energy exemptions. Both nations initially faced U.S. tariff threats of 40%-60%.

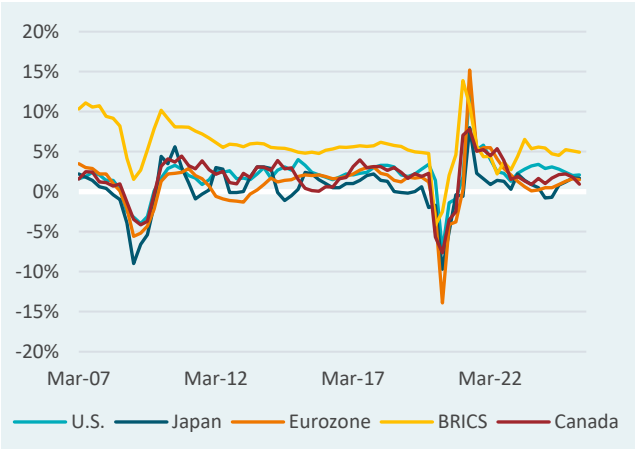
Trade negotiations with China were dramatic in April with tariff rates reaching 145% on Chinese goods and 125% on U.S. goods. However, multiple temporary deals have reduced tariffs while a framework is worked out. Chinese rare earth minerals have been front and center, as China's recent export bans on these materials have had severe impacts on the West's high-tech, auto, defense, and advanced manufacturing industries.

**INFLATION (CPI YEAR-OVER-YEAR)**



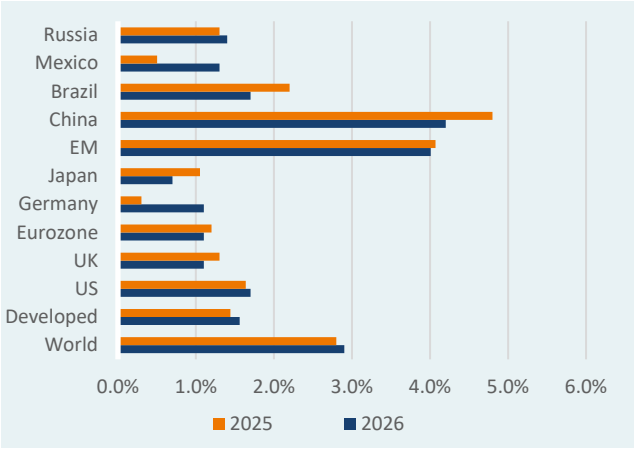

*Source: BLS, Verus, as of 9/30/25 or most recent date*

**REAL GDP GROWTH (YEAR-OVER-YEAR)**




*Source: BLS, Verus, as of 9/30/25 or most recent date*

**GDP GROWTH EXPECTATIONS**




*Source: Bloomberg, as of 9/30/25*

# Fixed income rates & credit

# Fixed income environment

— The 10-year U.S. Treasury yield fell slightly from 4.23% to 4.14% during the quarter, although yields temporarily reached 4.00% as recession fears grew and commentary from the Federal Reserve suggested a series of rate cuts was forthcoming.

— The Federal Reserve cut rates in September to a target range of 4.00%-4.25%, signaling concerns about a softening job market and persistent but contained inflation. Fed Chair Powell described the move as a "risk management cut". The FOMC appears to be placing more emphasis on the jobs side of their *maximum employment and price stability* mandate.

— Despite possible future tariff-fueled inflation, talk amongst investors of U.S. dollar debasement due to the fiscal path of the country, and possible inflationary impacts if the Federal Reserve were to lose some independence, the market appears not to be pricing any longer-run excess inflation. This is indicated by the 10-year TIPS breakeven inflation rate that is effectively unchanged year-to-date, as well as the 5-year, 5-year forward inflation rate.

— The U.S. yield curve showed further steepening, now reflecting a more normal upward sloping shape. The 10-year Treasury minus 2-year Treasury yield was 0.56% as of September 30th. Both the 10-year and 2-year yields fell slightly during the quarter.

— Longer duration credit performed in line with shorter duration credit as the market priced interest rate cuts into the curve. Long duration corporate bonds returned +2.4%, while high yield bonds added +2.5% and bank loans added +1.8%.

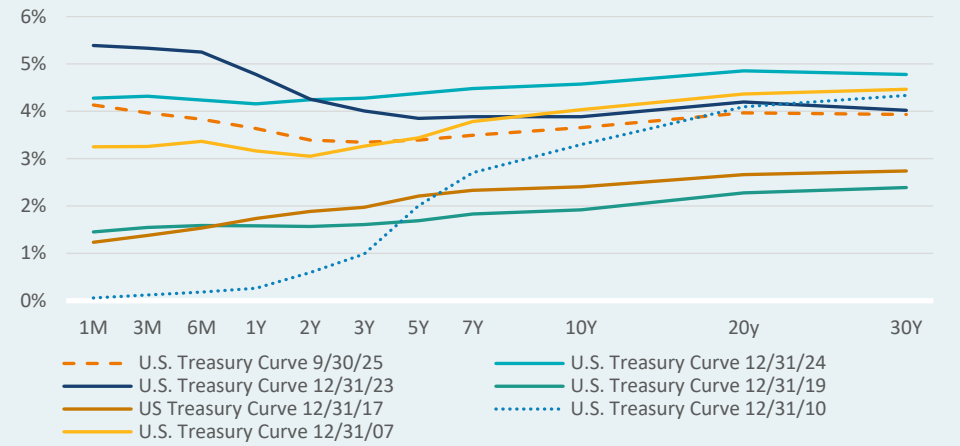
— Credit spreads tightened evenly across asset classes, with BB- and B-rated credits seeing the most compression. High yield bond spreads tightened by 17 bps to 2.7%, while investment grade spreads fell to 0.7%. Leveraged loan spreads likewise tightened 17 bps to 4.3%. As of quarter end, BB- and B-rated bonds neared pre-Liberation Day tights while bank loans were at seven-month lows.

| | QTD Total Return | 1 Year Total Return |
|---|---|---|
| Core Fixed Income (Bloomberg U.S. Aggregate) | 2.0% | 2.9% |
| Core Plus Fixed Income (Bloomberg U.S. Universal) | 2.1% | 3.4% |
| U.S. Treasuries (Bloomberg U.S. Treasury) | 1.5% | 2.1% |
| U.S. Treasuries: Long (Bloomberg U.S. Treasury 20+) | 2.4% | -4.8% |
| U.S. High Yield (Bloomberg U.S. Corporate HY) | 2.5% | 7.4% |
| Bank Loans (Morningstar LSTA Leveraged Loan) | 1.8% | 7.0% |
| Emerging Market Debt Local (JPM GBI-EM Global Diversified) | 2.8% | 7.4% |
| Emerging Market Debt Hard (JPM EMBI Global Diversified) | 4.8% | 8.5% |
| Mortgage-Backed Securities (Bloomberg MBS) | 2.4% | 3.4% |

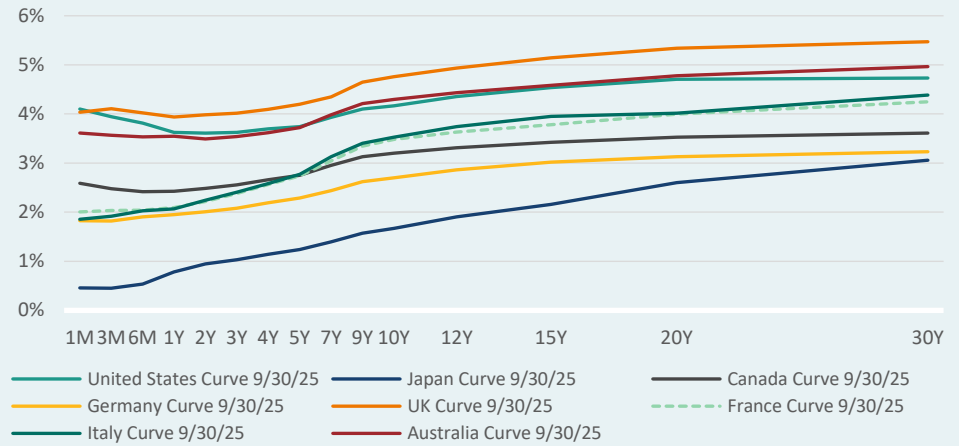
*Source: Standard & Poor's, J.P. Morgan, Bloomberg, as of 9/30/25*

# Yield environment

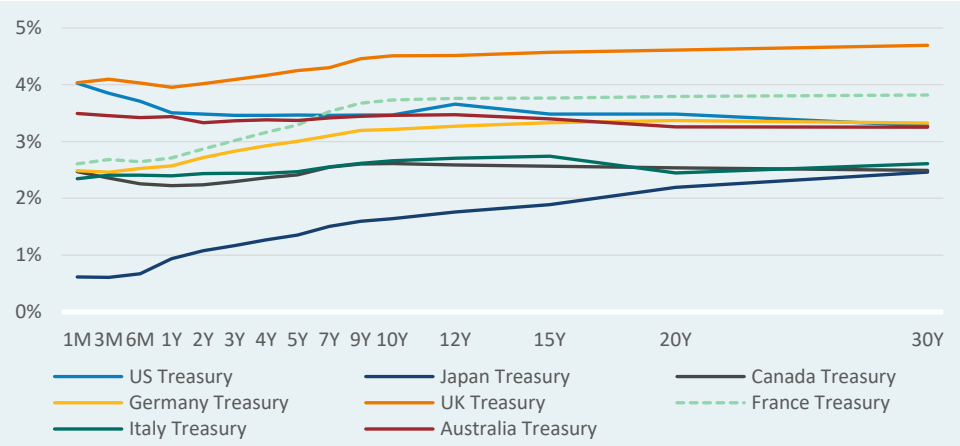
### U.S. YIELD CURVE



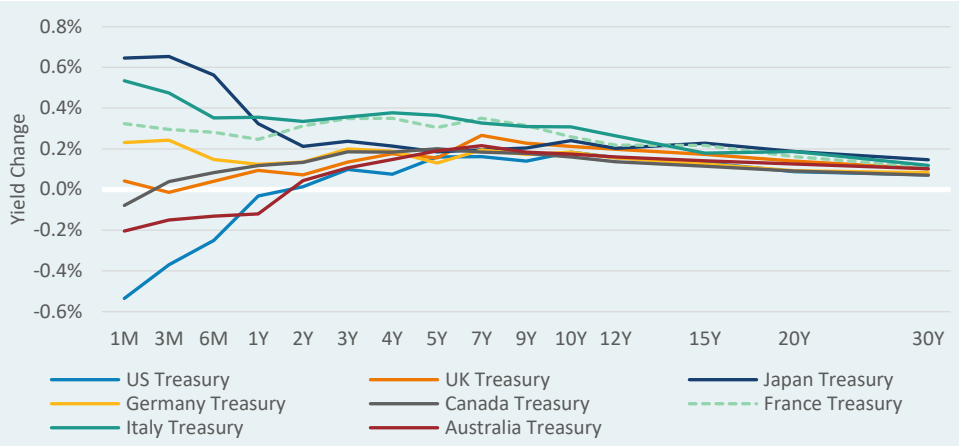

### GLOBAL GOVERNMENT YIELD CURVES




### YIELD CURVE CHANGES OVER LAST FIVE YEARS




### IMPLIED CHANGES OVER NEXT YEAR




*Source: Bloomberg, as of 9/30/25*

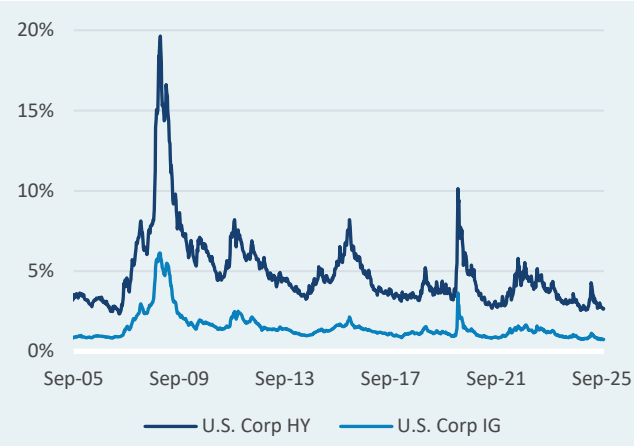
# Credit environment

During Q3, credit saw positive returns, reversing the rapid market moves and dislocation of early Q2. Shorter duration credit assets such as bank loans and high yield returned +1.8% and +2.5% respectively. Long duration, higher quality credit returned 2.4% on the quarter, keeping pace as the market priced in Fed rate cuts. This quarter marked the 12th and 13th consecutive quarter of positive returns for high yield and bank loans, respectively, fueled by lower issuance and robust nominal yields.

Within the high yield bond market, lower quality credits outperformed BB- and B-rated names during July and August, but lagged slightly towards quarter end. Bonds rated CCC, including distressed, returned +3.5%, compared to +2.2% and +2.3% for BB- and B- rated bonds, respectively. Year-to-date, bonds rated BB and CCC returned +7.5%, while B rated returned +7.0%. Lower quality bank loans consistently lagged in Q3 compared to higher quality loans.

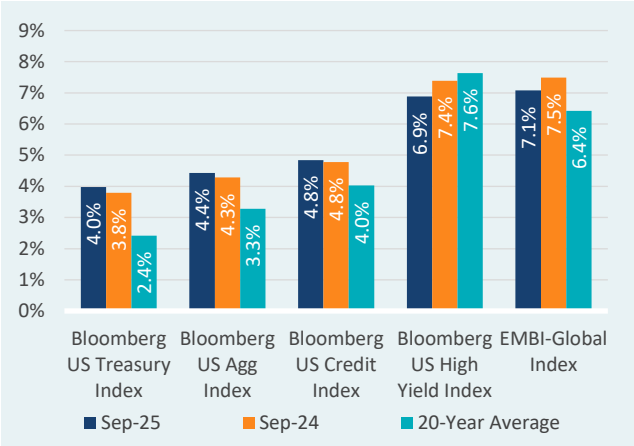
High yield bond spreads tightened again, ending the quarter 26 bps lower at 2.7%. Investment grade spreads also tightened by 18 basis points, ending the quarter at 0.7%. Bank loan spreads moved 17 bps lower to 4.3%. Since April's trade announcements, BB- and B-rated bond spreads have fallen by 18 and 26 bps, respectively, while CCC spreads remained wider at 126 bps. Bank loan spreads also tightened, at 3 basis points off multi-year tights and the lowest level in seven months. Pricing continues to reflect confidence in the U.S. corporate debt market, with very little noticeable impact from tariffs.

**SPREADS**




*Source: Barclays, Bloomberg, as of 9/30/25*

**YIELD TO MATURITY**




*Source: Morningstar, as of 9/30/25*

**CREDIT SPREAD (OAS)**

| Market | 9/30/2025 | 9/30/2024 |
|---|---|---|
| Long U.S. Corp | 0.9% | 1.1% |
| U.S. Inv Grade Corp | 0.7% | 0.9% |
| U.S. High Yield | 2.7% | 3.0% |
| U.S. Bank Loans* | 4.3% | 4.7% |

*Source: Barclays, Credit Suisse, Bloomberg, as of 9/30/25*
**Discount margin (4-year life)*

# Default & issuance

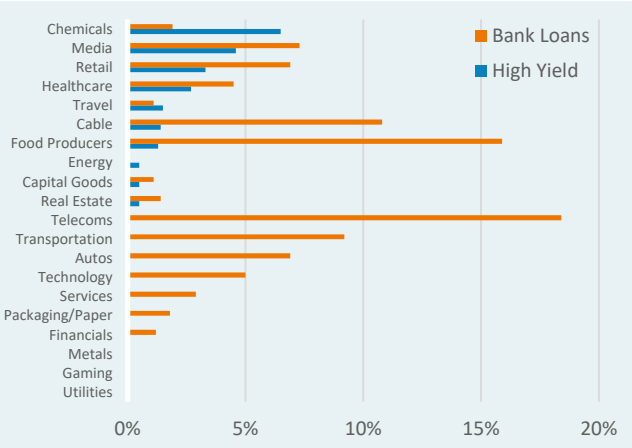
Default/distressed activity was lower during Q3, with 7 companies defaulting on payments of $9.6 billion. This occurred alongside $2.4 billion of distressed/LME (liability management exercise) activity, a sharp decrease from prior levels. Year-to-date activity is also relatively lower, with 42 defaults/LMEs totaling $42.4 billion compared to 58 defaults/LMEs totaling $55.6 billion over the first 9 months of 2024, and 69 actions totaling $67.3 billion over the same period in 2023. Despite recent concerns over loan quality and "cockroaches" in credit markets, default and distress activity is very low.

Most defaults in Q3 occurred across bank loans. Year-to-date, loans represented $3 of every $4 of defaults, and 21 of the previous 22 months have seen loans outpace that of bonds. September was the first month of no distressed/LME activity in over 3 years. Also, $2.4 billion of activity in July and August was the lowest in four years, compared to a quarterly average of $8.8 billion.

High yield bond default activity moderated, ending September at 1.4% year-over-year, well below the post-Global Financial Crisis average of 2.5%. Loan default rates fell from Q2 levels, ending September 0.5% lower at 3.5% year-over-year. This is elevated relative to the post-Global Financial Crisis average of 2.4%. Notably, the difference between high yield bond and loan default rates is now 2%, after peaking at 3% in Q4 2024.

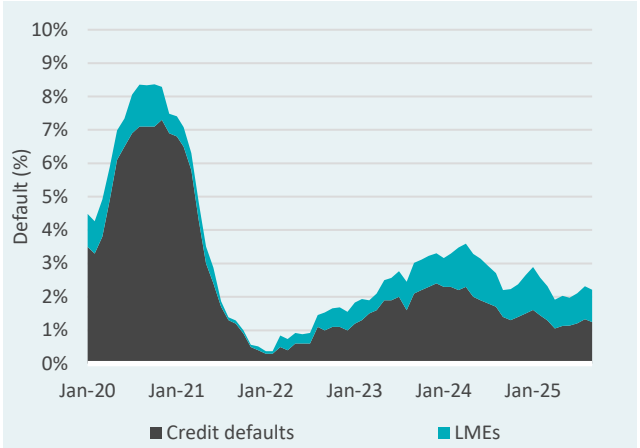
Quarterly issuance of high yield bonds was up slightly, totaling $122 billion, compared to $77 billion in Q2 and $68 billion in Q1. Bank loan issuance rose sharply to $372 billion, compared to $103 billion in Q2 and $337 billion in Q1. This represented a 1% year-over-year growth in supply.

**PAST 12 MONTHS (PAR DEFAULT RATE)**



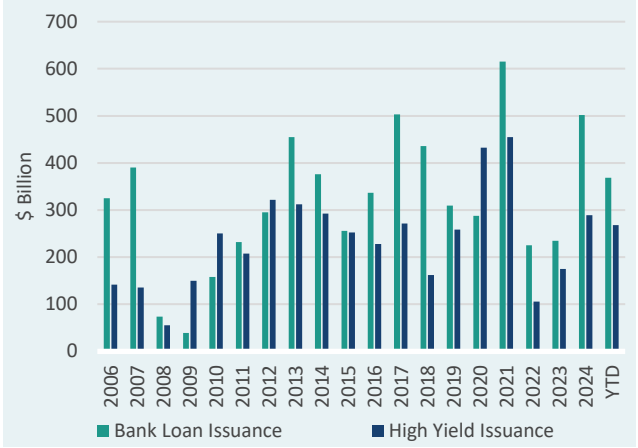

*Source: BofA Global Research, ICE, LCD /Pitchbook, as of 9/30/25*

**U.S. HIGH YIELD: DEFAULTS + LME (PAST YEAR)**




*Source: BofA Merrill Lynch, as of 9/30/25 – par weighted*

**DEVELOPED MARKET USD ISSUANCE**




*Source: BofA Merrill Lynch, as of 9/30/25*

*NOTE: "LME" stands for liability management exercise, which is effectively a renegotiation of debt terms but without an official default*

# Equity

# Equity environment

— Emerging market equities led during Q3 (MSCI EM +10.6%) followed by domestic equities (S&P 500 +8.1%) and international developed (MSCI EAFE +4.8%). Emerging markets (+27.5%) and international developed (+25.1%) have substantially outpaced the U.S. (+14.8%) year-to-date although much of this was due to currency movements.

— U.S. valuation multiples climbed even higher, generating fears that A.I. optimism may be overdone. Historically, this level of valuations has coincided with zero or negative returns over the subsequent five years. However, valuations may be a product of the environment, given very strong earnings forecasts, possible A.I. productivity gains, and evolving index sector composition which implies naturally higher multiples.

— Business investment in artificial intelligence has been massive, and a large portion of economic growth year-to-date has been driven by data center buildouts. Microsoft, Alphabet, Amazon, and Meta plan to spend $320 billion on A.I. in 2025. The U.S. is leading in A.I. investment by a significant margin though Chinese competition has been strong.

— Chinese equities roared back to life over the past year (MSCI China +31.0% vs. MSCI EM ex-China +12.2%), fueled by significant advancements in artificial intelligence, semiconductors, and robotics. Beijing has enacted interest rate cuts, relaxed bank reserve requirements, and injected liquidity into the economy which has helped support asset prices.

— Market-priced volatility remained low and stable, mostly in a 14-17% range. This was consistent with an upward trending equity market, sanguine economic conditions that far exceeded expectations earlier in the year, positive earnings surprise, and investor optimism.

| | QTD TOTAL RETURN | | 1 YEAR TOTAL RETURN | |
|---|---|---|---|---|
| | (unhedged) | (hedged) | (unhedged) | (hedged) |
| U.S. Large Cap (S&P 500) | 8.1% | | 17.6% | |
| U.S. Small Cap (Russell 2000) | 12.4% | | 10.8% | |
| U.S. Equity (Russell 3000) | 8.2% | | 17.4% | |
| U.S. Large Value (Russell 1000 Value) | 5.3% | | 9.4% | |
| U.S. Large Growth (Russell 1000 Growth) | 10.5% | | 25.5% | |
| Global Equity (MSCI ACWI) | 7.6% | 8.2% | 17.3% | 17.6% |
| International Large (MSCI EAFE) | 4.8% | 6.1% | 15.0% | 15.5% |
| Eurozone (EURO STOXX 50) | 4.6% | 5.1% | 19.3% | 15.3% |
| U.K. (FTSE 100) | 5.6% | 7.5% | 17.9% | 17.4% |
| Japan (TOPIX) | 8.4% | 12.2% | 17.7% | 26.8% |
| Canada (S&P/TSX) | 9.2% | 11.8% | 22.1% | 27.8% |
| Emerging Markets (MSCI Emerging Markets) | 10.6% | 12.4% | 17.3% | 19.0% |

*Source: Standard & Poor's, FTSE, MSCI, STOXX, JPX, as of 9/30/25 – performance quoted from perspective of U.S. dollar investor*

# Domestic equity

U.S. equities produced strong gains in Q3 (S&P 500 +8.1%), achieving multiple new all-time highs and marking the best Q3 since 2020. Substantial investments in artificial intelligence fueled investor optimism (but also some skepticism), upside earnings surprise, and expectations for Federal Reserve rate cuts contributed to investor enthusiasm. On multiple occasions during Q3, the market rallied on bad economic data releases, which was reminiscent of *bad news is good news* environments of the past. In these environments, investors perceive evidence of a weaker economy as raising the chances of Fed rate cuts, and therefore see this as a positive for stock valuations.

Year-over-year Q3 earnings growth of the S&P 500 is expected to be +8.0%, according to FactSet, as of October 3rd. This would mark the ninth consecutive positive quarter for the index. Calendar year 2025 earnings growth estimates were revised upwards from +9.0% to +10.9%. Analysts expect +13.8% earnings growth in 2026.

Investment in A.I. has been massive, and responsible for a large portion of economic growth. Microsoft, Alphabet, Amazon, and Meta plan to spend $320 billion on A.I. in 2025. Domestic businesses are leading spending by a significant margin. This begs the question of when and how commensurate return on investment will be generated.

U.S. equities delivered substantial gains again in Q3, on A.I. investment, positive earnings surprise, and Fed rate cut hopes

**S&P 500 PRICE INDEX**



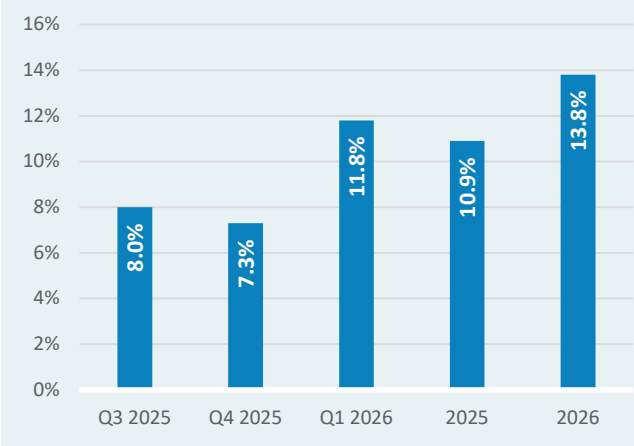

*Source: Standard &Poor's, as of 9/30/25*

**S&P 500 DIVIDEND YIELD**




*Source: Bloomberg, as of 9/30/25*

**S&P 500 EARNINGS FORECASTS (YOY)**




*Source: Factset, Verus, as of 10/3/25*

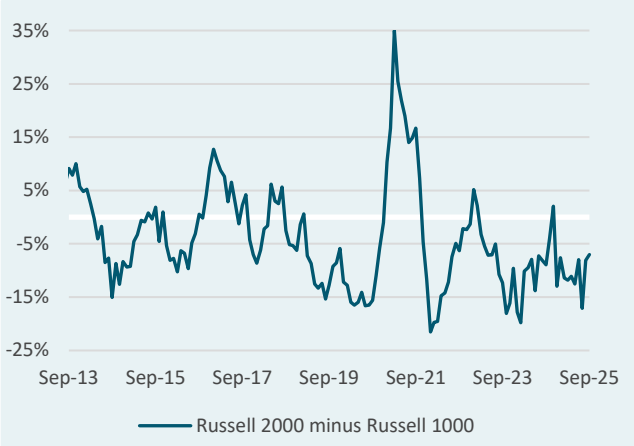
# Domestic equity size & style

Small cap equities outperformed large caps during Q3 (FTSE Russell 2000 +12.4% vs. FTSE Russell 1000 +8.0%) but still lag materially year-to-date (+10.4% vs. +14.6%). Value stocks underperformed growth during the quarter (Russell 1000 Value +5.3% vs. Russell 1000 Growth +10.5%) and also year-to-date (+11.7% vs 17.2%) as artificial intelligence investments and Fed easing further fueled enthusiasm for mega-cap tech-focused growth stocks.

As Fed rate cuts begin, some investors expect that this will ignite a comeback regarding small cap stocks. We have some doubts around this claim. First, small cap stocks have historically been sensitive to interest rate changes, but mega cap growth stocks have also shown to be very sensitive to interest rate changes. Therefore, it is not obvious that small caps will see outsized benefits from rate cuts relative to large caps (especially as mega cap growth stocks make up a bigger portion of large cap indexes). Next, small cap stocks are not cheap, historically speaking, which makes it difficult to claim that unloved small cap indexes will benefit from significant revaluation. Overall, issues plaguing small caps, namely older less profitable, lower quality businesses, are unlikely to be resolved by a handful of rate cuts. We continue to believe that skilled small cap active management can help investors navigate some of these broader index concerns.

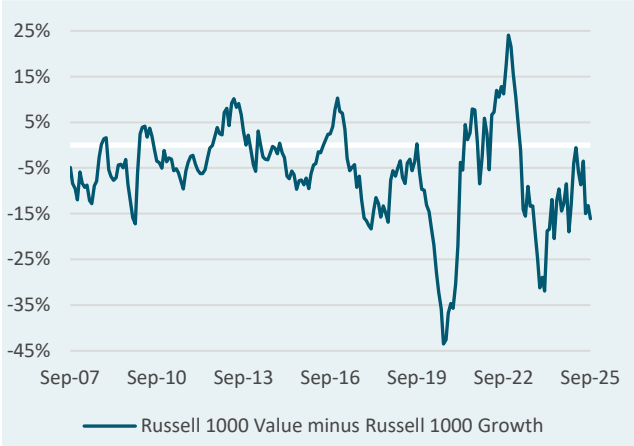
Small caps outperformed large caps during Q3, but still lag materially in 2025

**VALUE VS. GROWTH 1-YR ROLLING RELATIVE PERFORMANCE**




*Source: FTSE, as of 9/30/25*

**SMALL VS. LARGE 1-YR ROLLING RELATIVE PERFORMANCE**




*Source: FTSE Russell, as of 9/30/25*

**1-YEAR SIZE & STYLE PERFORMANCE**

| | Value | Core | Growth |
|---|---|---|---|
| Large Cap | 9.4% | 17.7% | 25.5% |
| Mid Cap | 7.6% | 11.1% | 22.0% |
| Small Cap | 7.9% | 10.8% | 13.6% |

*Source: FTSE Russell, as of 9/30/25*

# International developed equity

Emerging market equities led during Q3 (MSCI EM +10.6%) followed by domestic equities (S&P 500 +8.1%) and international developed (MSCI EAFE +4.8%). Emerging markets (+27.5%) and international developed (+25.1%) have substantially outpaced the U.S. (+14.8%) year-to-date.

Regional developed equity performance was generally strong. Japanese equities led (MSCI Japan +8.0%) followed by the United Kingdom (MSCI UK +5.9%) and the European Union (MSCI Euro +4.5%).

Japanese equities have shown exceptional positive momentum in recent months, with investors seeing progress on multiple fronts—after decades of deflation prices are now rising which is lifting incomes and generating household spending, a variety of aggressive government reforms are showing effectiveness in improving capital efficiency and protecting shareholder rights, and hardline conservative Sanae Takaichi became the first female prime minister of Japan in October. Her initial election momentum resulted in a nearly +5% single day jump in the Nikkei 225 Index, given her pro-market vision and belief in easier fiscal and monetary policy.

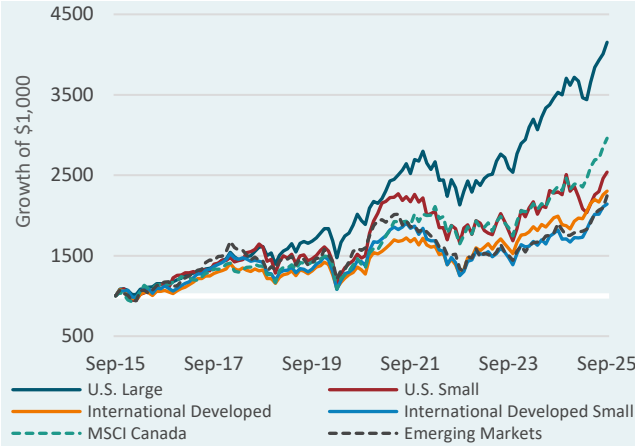
Non-U.S. markets have substantially outperformed domestic stocks year-to-date, although much of this outperformance was caused by foreign currency movements (because few U.S. investors hedge currency risk, this showed as an extreme impact on performance). The MSCI EAFE Index returned +25.1% year-to-date for unhedged U.S. investors, but only +12.9% for local investors in these regional markets.

**INTERNATIONAL DEVELOPED EQUITY**



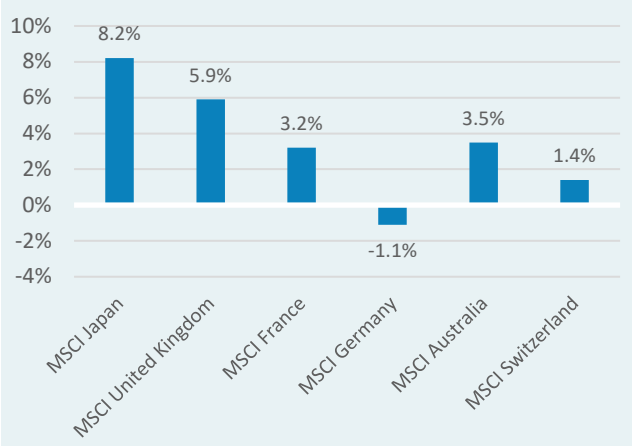

*Source: MSCI, as of 9/30/25*

**CUMULATIVE PERFORMANCE (10 YEARS)**




*Source: Verus, as of 9/30/25*

**REGIONAL RETURNS (QUARTER-TO-DATE)**




*Source: MSCI Indices, as of 9/30/25*

# Emerging market equity

Emerging market equities led global markets in Q3 (MSCI EM +10.6%) and also lead year-to-date (+27.5%). Regional markets continue to show much less sensitivity to tariffs imposed by the U.S. administration than many investors had expected. For example, Mexican equities are up +48.2% year-to-date in U.S. dollar terms, while Chinese equities are up +41.9%—two countries that have clashed especially intensely with the United States regarding trade.

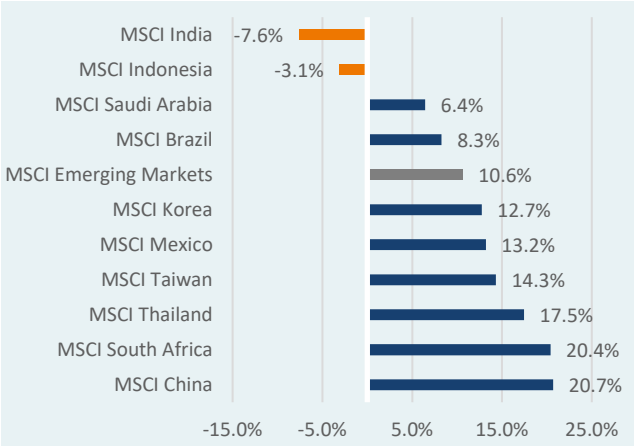
Despite longer-term underperformance, Chinese equities have roared back to life over the past year (MSCI China +31.0% vs. MSCI EM ex-China +12.2%), helped by significant advancements in artificial intelligence, semiconductors, and robotics. Beijing has enacted interest rate cuts, relaxed bank reserve requirements, and liquidity injections into the economy which has so far appeared successful in supporting stock prices. If market gains lead to a sustained rise in consumer spending, this could help to turn around a slowing economy and result in a policy win for the Chinese Communist Party. There have been extensive discussions amongst institutional investors in recent years about ex-China emerging market equity mandates. These recent large swings in performance represent the performance tracking error that can result from removing China altogether from a portfolio.

**EMERGING MARKET EQUITY**




*Source: MSCI, as of 9/30/25*

**MSCI EM 2025 Q3 COUNTRY RETURNS (USD)**




*Source: Verus, Bloomberg, as of 9/30/25*

**CHINA RECOVERY**




*Source: MSCI, as of 9/30/25*

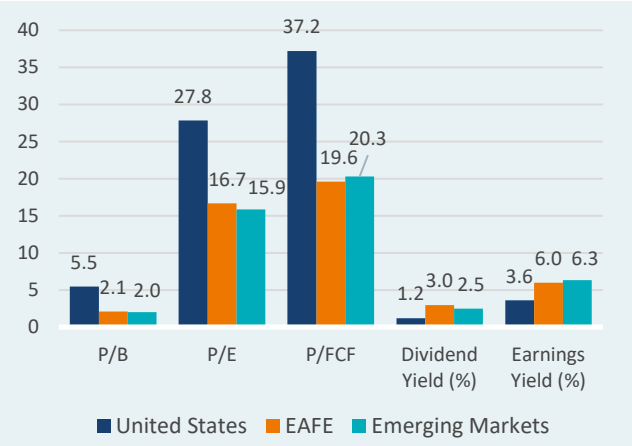
# Equity valuations

U.S. equity P/E multiples climbed higher during Q3, on earnings outperformance and enthusiasm for upcoming Fed rate cuts. International markets, despite large gains year-to-date, continue to broadly trade at valuation levels closer to longer-term average levels.

Historically, this U.S. valuation level has coincided with near-zero or negative returns over the following five years. However, current valuations are partly a product of evolving index sector composition (high growth tech-focused businesses tend to command higher multiples). Additionally, A.I. investments and innovation may unlock significant future productivity gains, and earnings forecasts remain very strong. In other words, history may not provide an accurate guide to future performance.

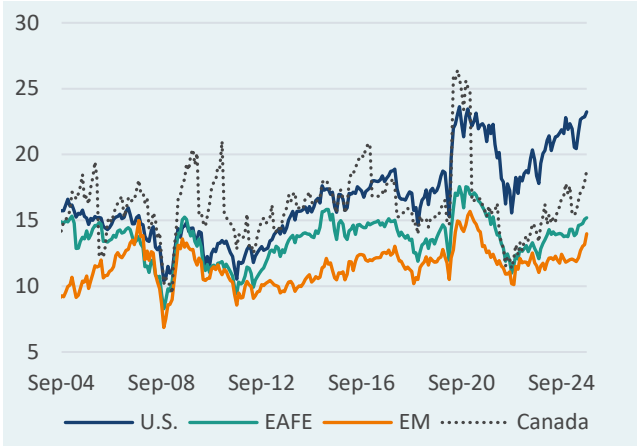
The "Magnificent 7" stocks continued to show strong earnings momentum and drew attention to higher market concentration. While most discussions have centered on the market cap size of these seven businesses and whether those valuations are tenable, it is worth noting that the valuations of the remaining 493 stocks in the index are materially elevated above the 20-year average. The Magnificent 7 set of businesses continue to show impressive earnings growth, while delivering innovative solutions across businesses lines with wide competitive moats. In short, there is an argument that the valuations of the Magnificent 7 are less concerning than the valuations of the remainder of the index.

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



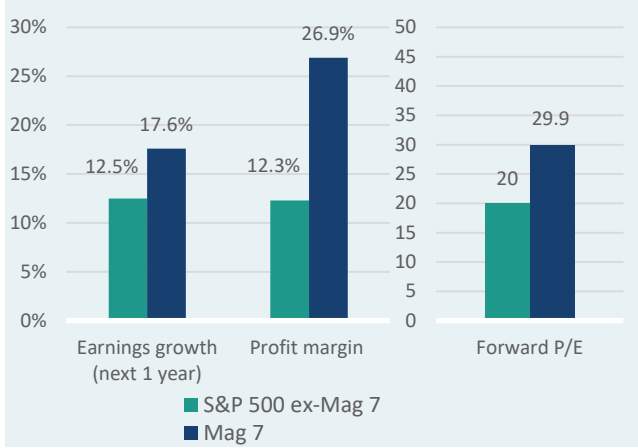

*Source: MSCI, Verus, as of 9/30/25 – trailing P/E*

**FORWARD P/E**




*Source: MSCI, Canada shown as S&P/TSX, as of 9/30/25*

**S&P "493" VS. MAGNIFICENT 7**



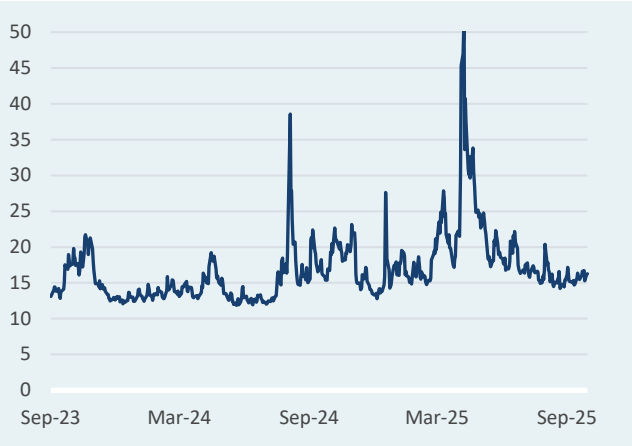

*Source: Yardeni.com, Verus, as of 10/16/25*

# Market volatility

Market-priced volatility (Cboe VIX Index) remained low and very stable during the quarter, mostly in a 14-17% range. Substantial global macroeconomic uncertainty eased as shifting trade policies have had a minimal impact on inflation and growth relative to what was initially feared. Business profits were resilient and forecasts have been consistently revised upwards while investor optimism improved. Equities continued their march upwards, which tends to coincide with lower price volatility. Past 12-month volatility has also been below average, historically speaking.

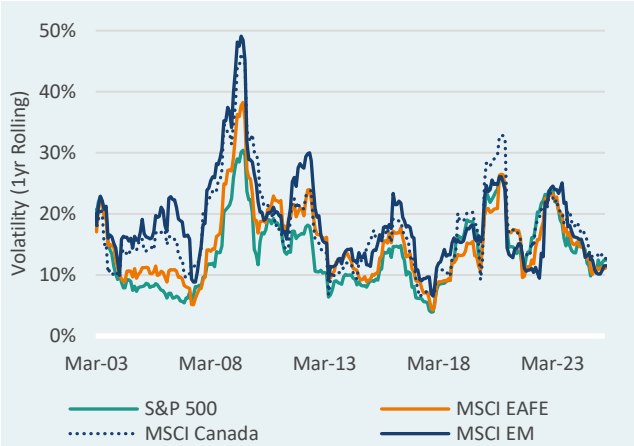
Implied bond market volatility has shown a multi-year trend downward, as investors received greater clarity around inflation risks and the path to Fed funds rate normalization. Although there remains much talk about "bond vigilantes" and whether a new risk premium is warranted for U.S. Treasury debt due to the uncertain fiscal path of the country, these effects are not obviously visible in recent U.S. yield movements. Global developed sovereign yields often fluctuate in a similar fashion, but in 2025 U.S. long-term yields seem to have decoupled, moving materially lower while other yields have moved upwards (an opposite direction from the one we might expect given the theories mentioned).

**U.S. IMPLIED VOLATILITY (VIX)**



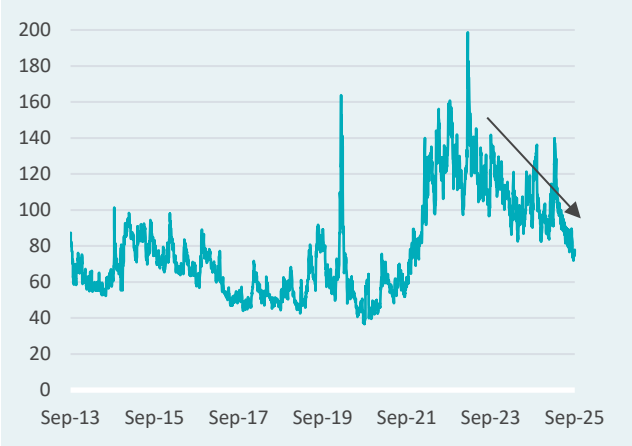

*Source: Cboe, as of 9/30/25*

**REALIZED VOLATILITY**



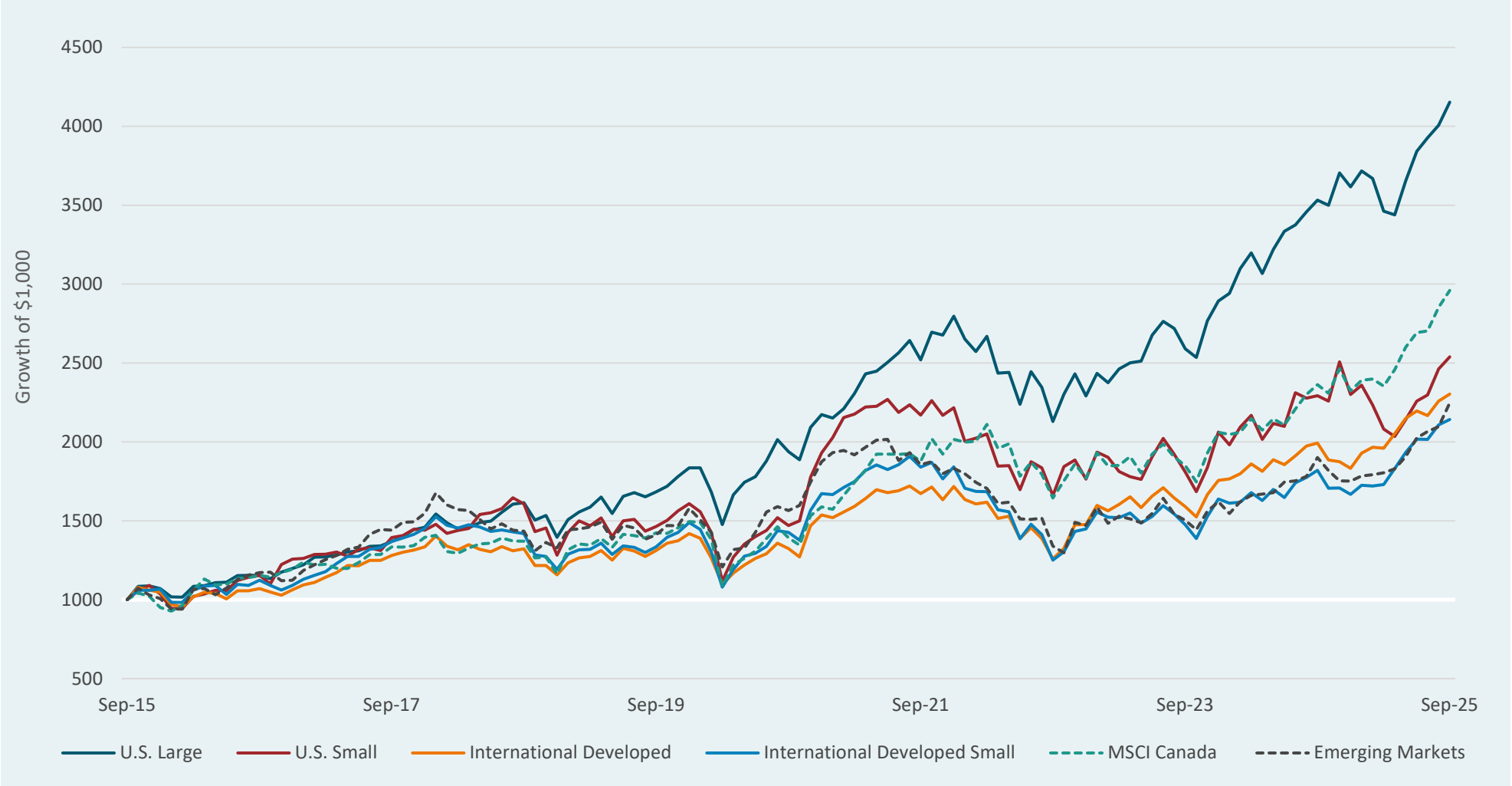

*Source: Standard & Poor's, MSCI, Verus, as of 9/30/25*

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




*Source: BofA, as of 9/30/25*

# Long-term equity performance




*Source: Standard & Poor's, FTSE, MSCI, Verus, as of 9/30/25*

# Other assets

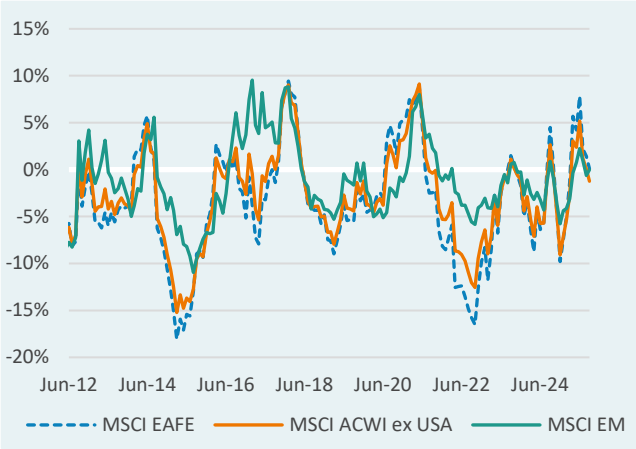
# Currency

The U.S. dollar was fairly stable during the quarter, rising by a modest +1% from Q2 levels. Despite significant volatility throughout, the dollar was relatively unchanged over the past full year, resulting in less impact on the performance of those portfolios without a currency hedging program in place.

Predicting the direction of currency markets is incredibly difficult and we believe most investors should avoid making investment decisions based on these views. While upcoming Federal Reserve rate cuts might suggest further deterioration in U.S. dollar value, the domestic economy has continued to show surprisingly resilient growth, defying expectations. Further inflationary impacts of tariffs may also lift the dollar if this inflation lifts interest rates and alters the path of the Fed. At the same time, the dollar has recently broken below a long-term trend line which could suggest a continued path lower. Overall, the picture remains mixed and it is fairly easy to make a case for either appreciation or depreciation in the future.

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)**



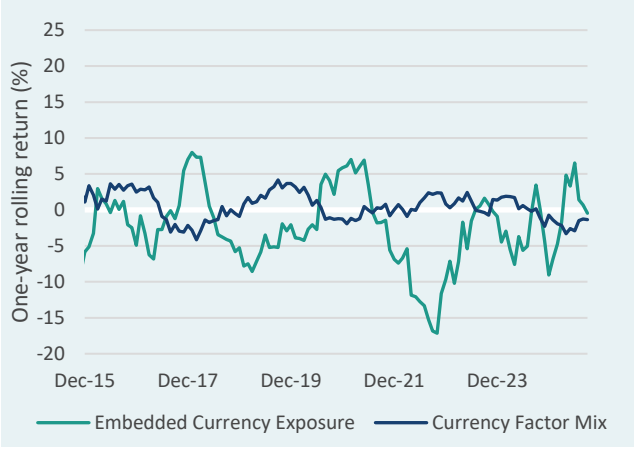

*Source: MSCI, Verus, as of 9/30/25*

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




*Source: Bloomberg, DXY Index, Verus, as of 9/30/25*

**EMBEDDED CURRENCY VS CURRENCY FACTORS**

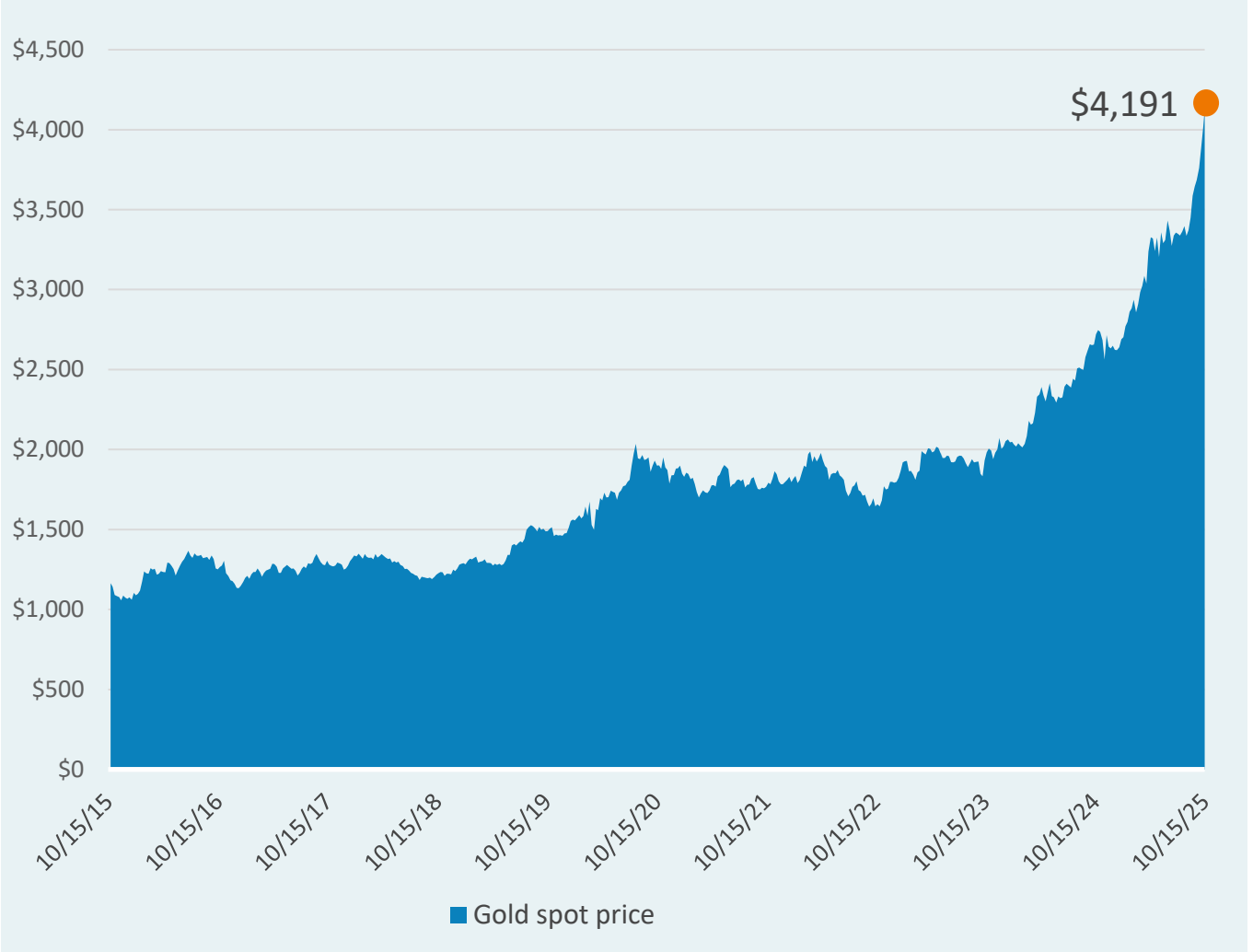



*Source: MSCI, Verus, as of 9/30/25 "Embedded Currency Exposure" is the currency return impact from not hedging currency risk*

# The gold rally continues

In 2025, the price of gold has continued to skyrocket, up a whopping +57% year-to-date. A wide variety of factors can influence the price of gold, including government purchase trends, interest rate fluctuations which impact the opportunity cost of holding the metal (gold provides no yield, which means it is more costly to hold during higher interest rate environments), investor demand for safe-haven assets, and fears of inflation and/or currency debasement. This makes it especially difficult to pin down why gold has moved so dramatically in recent years.

Much of the recent commentary around gold's rally has pinned this trend on rising risks of inflation and currency debasement. We are skeptical of this story, at least in terms of describing year-to-date performance, given that inflation expectations have not moved higher during that time (neither TIPS Breakeven Rates nor 5-year 5-year forward inflation), and the U.S. dollar is slightly higher since the passing of the "One Big Beautiful Bill Act" in July.




*Source: Verus, Bloomberg, price as of morning 10/15/25*

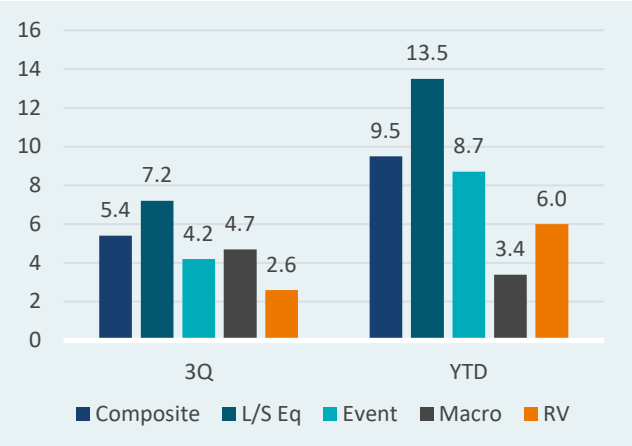
# Hedge funds

Hedge funds (+5.4%) posted their strongest quarterly return since Q1 2021, with all strategy types positive as equities, bonds, and commodities traded higher. Macro (+4.7%), long/short equity (+7.2%), and event driven (+4.2%) strategies all posted standout returns. Macro hedge funds showed their best monthly return in September since March of 2022, driven by trend following and commodity strategies that have benefited from the sustained rally in gold and other commodities.

The U.S. dollar's recent decline and gains in emerging market equity and debt markets have generated tailwinds for emerging market hedge funds (+16.3%) year-to-date—well ahead of the broader HFRI Composite (+9.5%). The most recent notable period of outperformance came in 2017, another year characterized by rallies across emerging market assets.

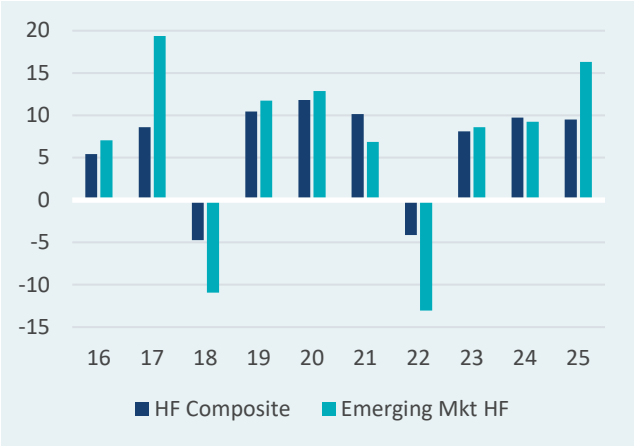
On the credit side, convertible arbitrage managers outperformed peers in the corporate and asset backed composites. Convert issuance has been very strong in 2025, with a total volume of $81 billion through mid-September—the most since 2020, per Reuters. Convert issuance is favored by tech and related companies as a source of cheaper funding. If A.I. and other tech stocks continue to outperform, investors might expect further strength in the convert markets.

**HEDGE FUNDS RETURNS (%)**



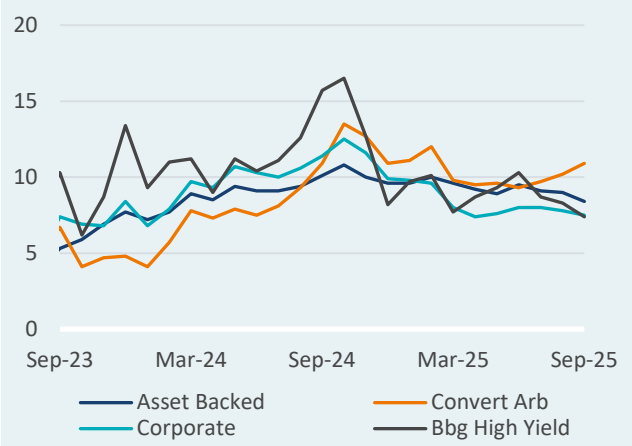

*Source: MPI, HFR*

**CALENDAR YEAR RETURNS FOR HFRI**




*Source: MPI, HFR*

**12M ROLLING RETURNS FOR RV CREDIT**




*Source: MPI, HFR*

# Appendix

# Periodic table of returns

BEST ↑ ↓ WORST

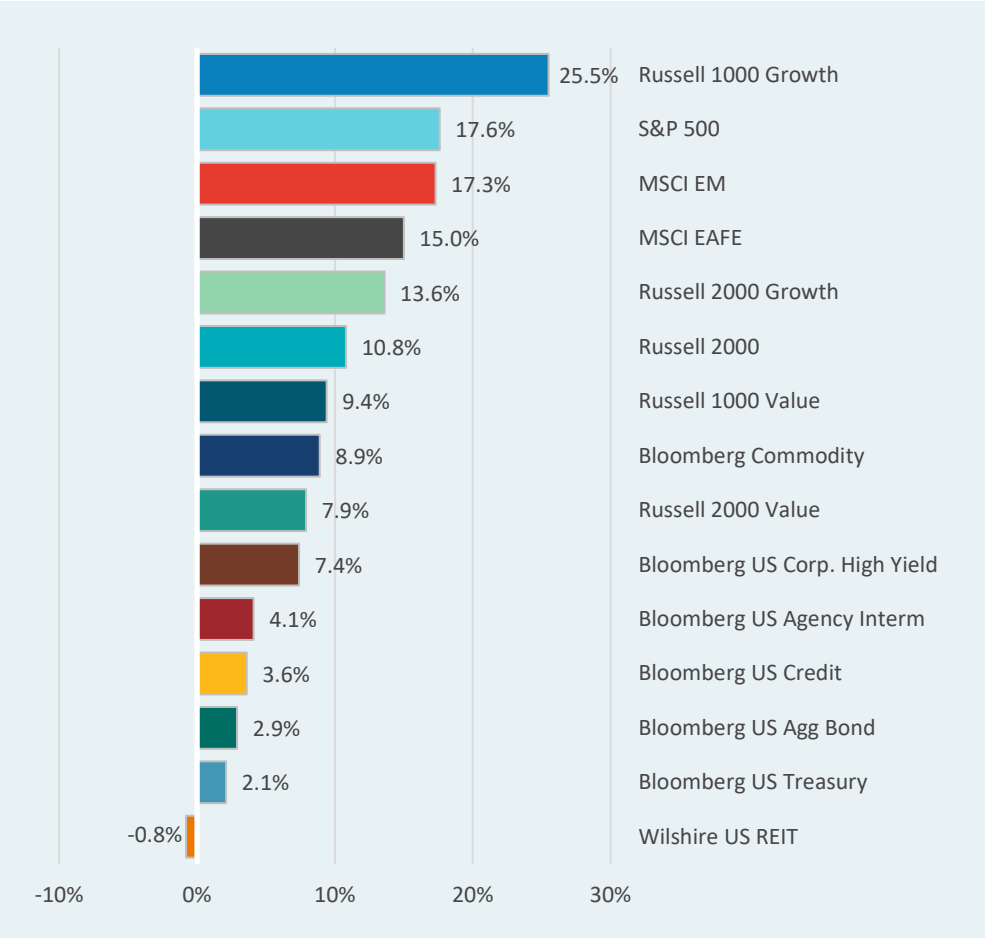
| | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | YTD | 5-Year | 10-Year |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Emerging Markets Equity | 34.5 | 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 | 27.5 | 17.6 | 18.8 |
| International 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 | 25.1 | 16.0 | 15.0 |
| Large Cap Growth | 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 | 17.2 | 14.6 | 10.7 |
| 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 | 14.6 | 13.9 | 9.9 |
| 60/40 Global Portfolio | 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 | 14.2 | 11.6 | 9.8 |
| 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 | 11.7 | 11.5 | 9.2 |
| Small Cap Growth | 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 | 11.7 | 11.2 | 8.2 |
| Small Cap Equity | 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 | 10.4 | 8.4 | 8.0 |
| Commodities | 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 | 9.4 | 7.4 | 7.7 |
| Small Cap Value | 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 | 9.0 | 7.0 | 4.9 |
| Hedge Funds of Funds | 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 | 6.3 | 6.0 | 4.5 |
| US Bonds | 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 | 6.1 | 3.6 | 4.0 |
| Real Estate | 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 | 3.4 | 3.0 | 2.0 |
| Cash | 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 | -0.4 | 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

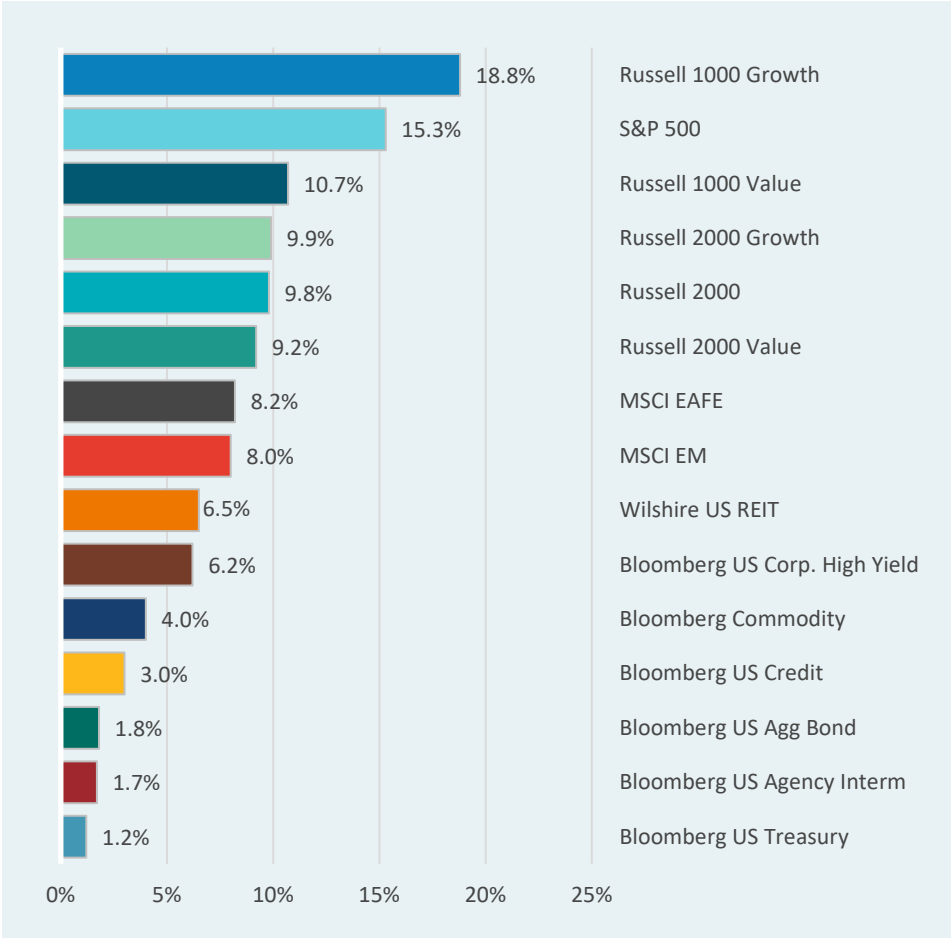
*Source Data: Morningstar, Inc., Hedge Fund Research, Inc. (HFR), National Council of Real Estate Investment Fiduciaries (NCREIF). Indices used: Russell 1000, Russell 1000 Value, Russell 1000 Growth, Russell 2000, Russell 2000 Value, Russell 2000 Growth, MSCI EAFE, MSCI EM, Bloomberg US Aggregate, 90-Day T-Bills, Bloomberg Commodity, NCREIF Property, HFRI FOF, MSCI ACWI, Bloomberg Global Bond. NCREIF Property Index performance data as of 6/30/25.*

# Major asset class returns

**ONE YEAR ENDING SEPTEMBER**




**TEN YEARS ENDING SEPTEMBER**



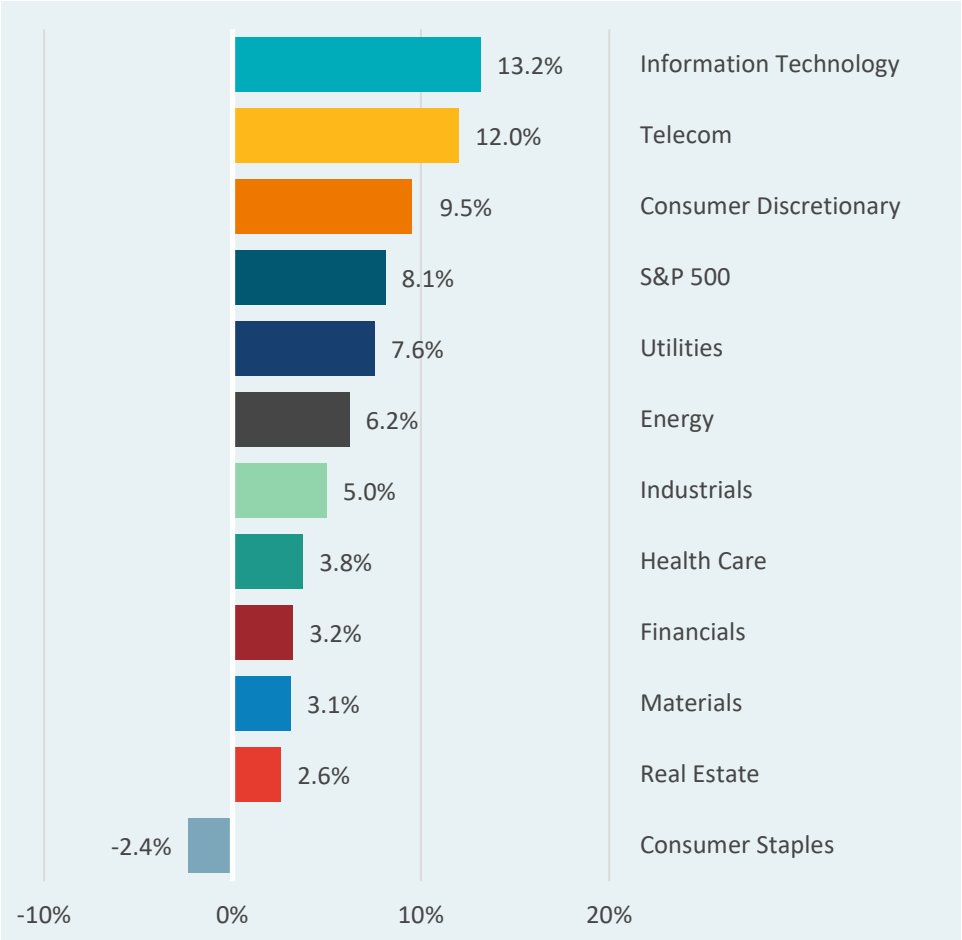

**Only publicly traded asset performance is shown here. Performance of private assets is typically released with a 3- to 6-month delay.*

*Source: Morningstar, as of 9/30/25*

*Source: Morningstar, as of 9/30/25*

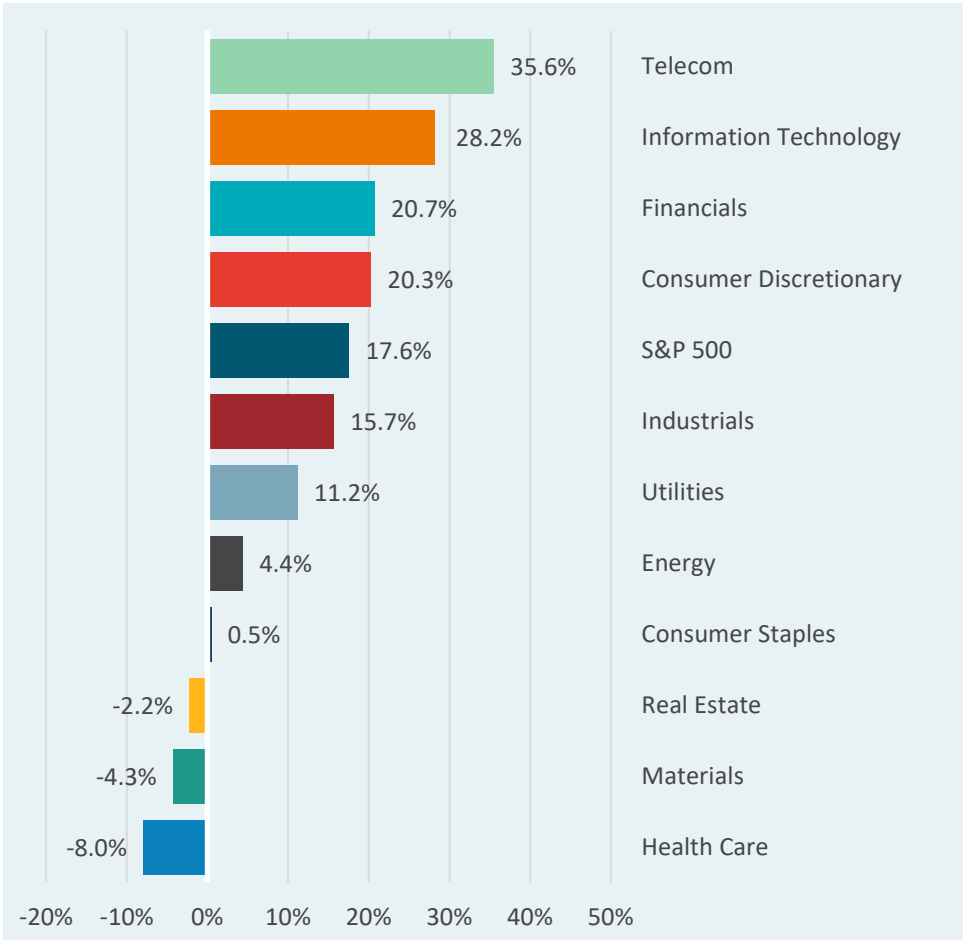
# S&P 500 sector returns

**QTD**




*Source: Morningstar, as of 9/30/25*

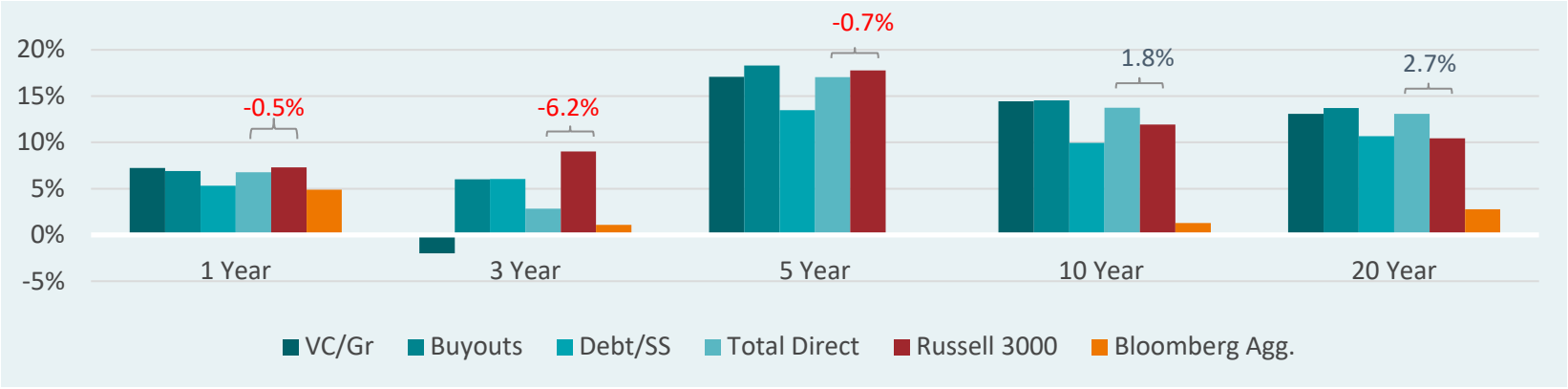
**ONE YEAR ENDING SEPTEMBER**




*Source: Morningstar, as of 9/30/25*

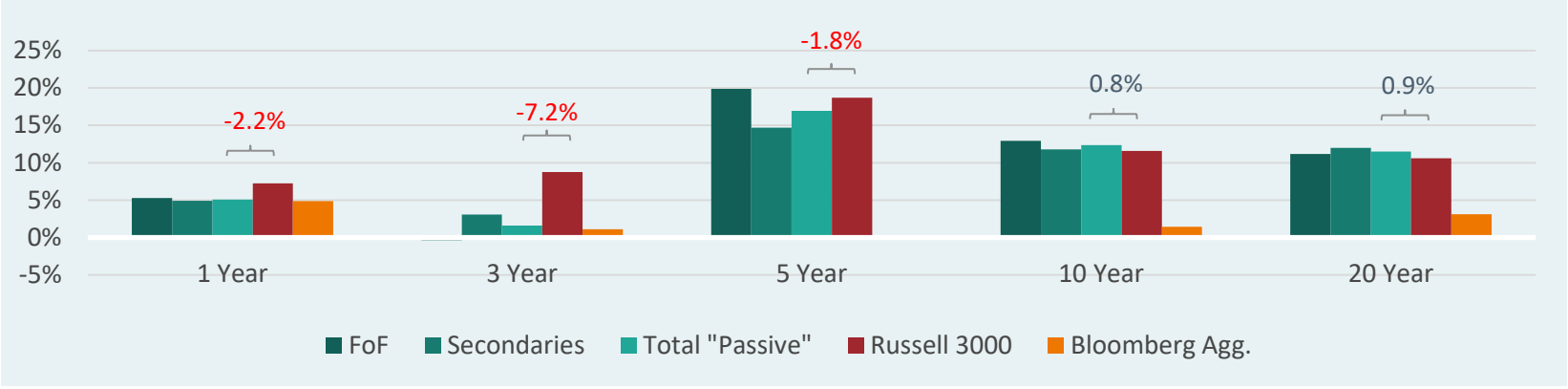
# Private equity vs. traditional assets performance

**DIRECT PRIVATE EQUITY FUND INVESTMENTS**




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

**"PASSIVE" STRATEGIES**

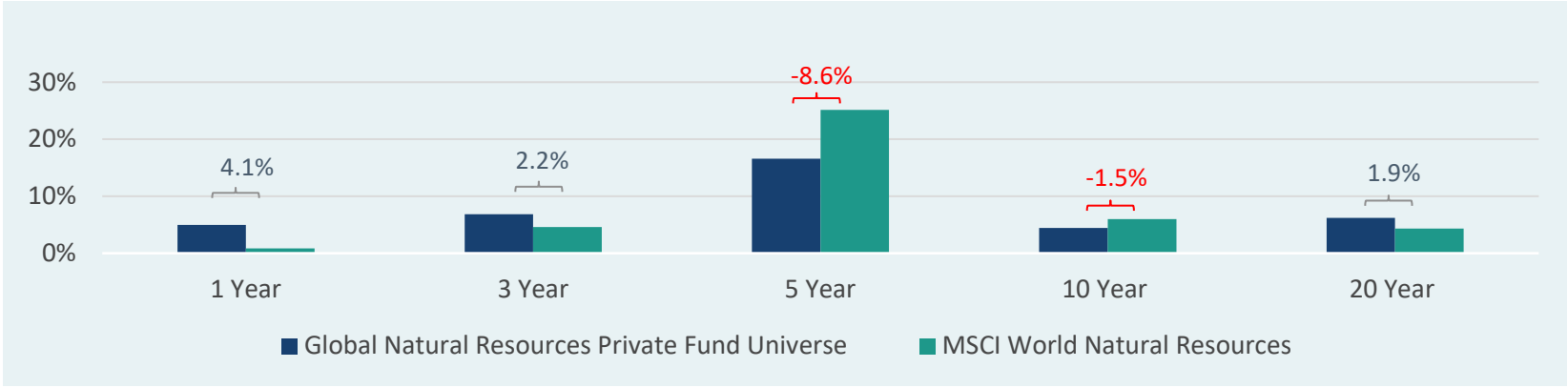



"Passive" strategies vs public equities has been mixed

*Sources: FTSE PME: U.S. Direct Private Equity and "Passive" returns are as of March 31, 2025. Public Market Equivalent returns resulted from "Total Passive" and Total Direct's identical cash flows invested into and distributed from respective traditional asset comparable.*

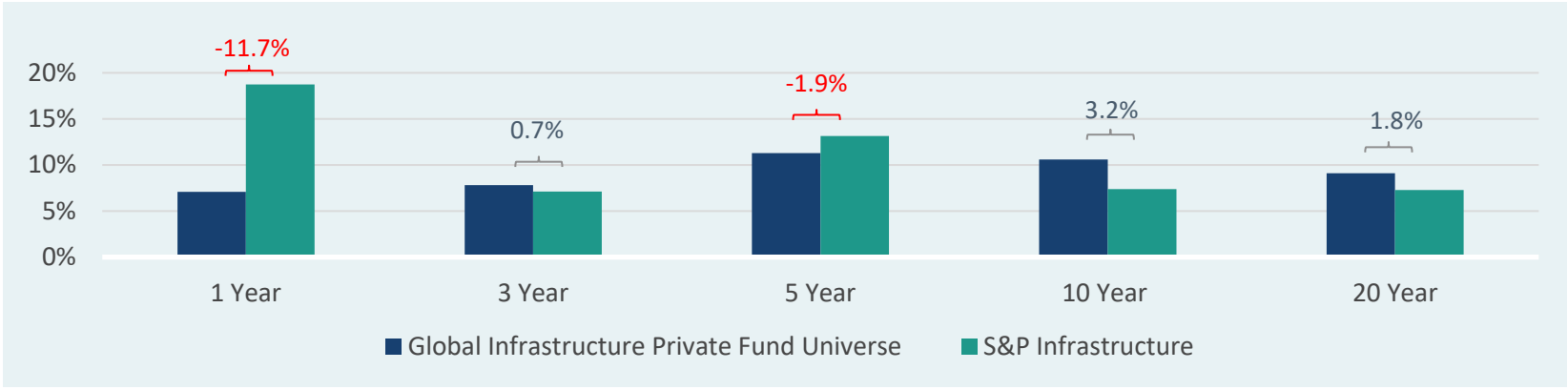
# Private vs. liquid real assets performance

**GLOBAL NATURAL RESOURCES FUNDS**




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

**GLOBAL INFRASTRUCTURE FUNDS**

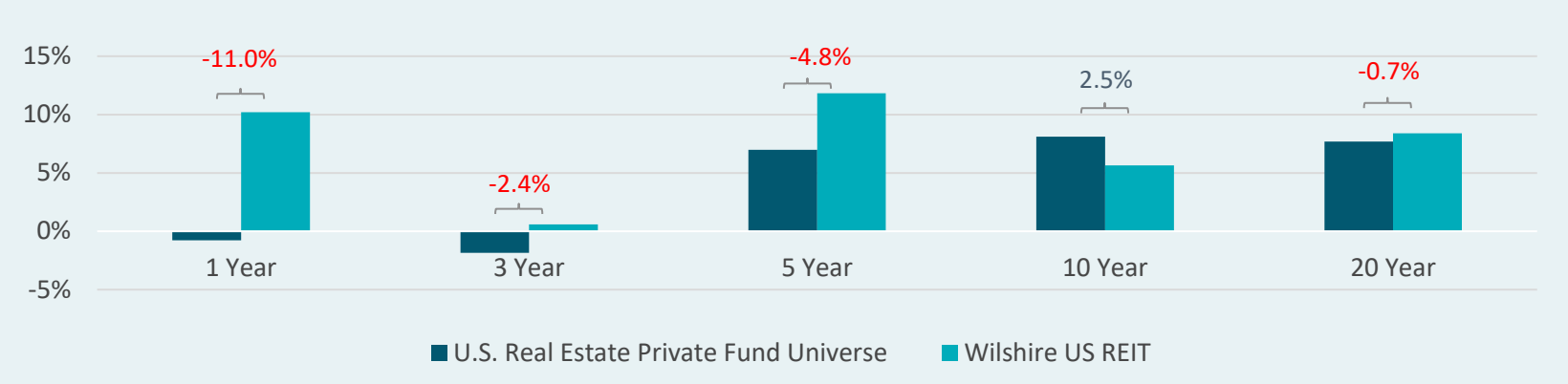



Infra. funds vs S&P Infra. has been mixed

*Sources: FTSE PME: Global Natural Resources (vintage 1999 and later, inception of MSCI World Natural Resources benchmark) and Global Infrastructure (vintage 2002 and later, inception of S&P Infrastructure benchmark) universes as of March 31, 2025. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real assets universes.*

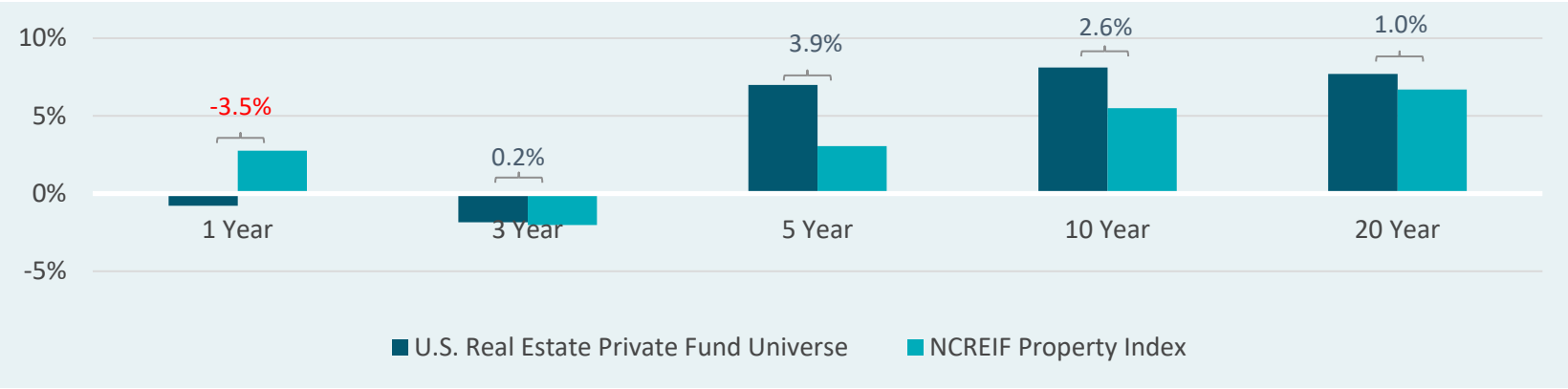
# Private vs. liquid and core real estate performance

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




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

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




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

*Sources: FTSE PME: U.S. Real Estate universes as of March 31, 2025. Public Market Equivalent returns resulted from identical cash flows invested into and distributed from respective liquid real estate universes.*

# Detailed index performance

| DOMESTIC EQUITY | Month | QTD | YTD | 1 Year | 3 Year | 5 Year | 10 Year |
|---|---|---|---|---|---|---|---|
| **Index** | | | | | | | |
| S&P 500 | 3.6% | 8.1% | 14.8% | 17.6% | 24.9% | 16.5% | 15.3% |
| S&P 500 Equal Weighted | 1.1% | 4.8% | 9.9% | 7.8% | 16.4% | 14.0% | 12.1% |
| DJ Industrial Average | 2.0% | 5.7% | 10.5% | 11.5% | 19.6% | 13.0% | 13.5% |
| Russell Top 200 | 4.1% | 8.7% | 15.7% | 19.6% | 26.8% | 17.0% | 16.3% |
| Russell 1000 | 3.5% | 8.0% | 14.6% | 17.7% | 24.6% | 16.0% | 15.0% |
| Russell 2000 | 3.1% | 12.4% | 10.4% | 10.8% | 15.2% | 11.6% | 9.8% |
| Russell 3000 | 3.5% | 8.2% | 14.4% | 17.4% | 24.1% | 15.7% | 14.7% |
| Russell Mid Cap | 0.9% | 5.3% | 10.4% | 11.1% | 17.7% | 12.7% | 11.4% |
| **Style Index** | | | | | | | |
| Russell 1000 Growth | 5.3% | 10.5% | 17.2% | 25.5% | 31.6% | 17.6% | 18.8% |
| Russell 1000 Value | 1.5% | 5.3% | 11.7% | 9.4% | 16.9% | 13.9% | 10.7% |
| Russell 2000 Growth | 4.2% | 12.2% | 11.7% | 13.6% | 16.7% | 8.4% | 9.9% |
| Russell 2000 Value | 2.0% | 12.6% | 9.0% | 7.9% | 13.5% | 14.6% | 9.2% |

| FIXED INCOME | Month | QTD | YTD | 1 Year | 3 Year | 5 Year | 10 Year |
|---|---|---|---|---|---|---|---|
| **Index** | | | | | | | |
| Bloomberg US TIPS | 0.4% | 2.1% | 6.9% | 3.8% | 4.9% | 1.4% | 3.0% |
| Bloomberg US Treasury Bills | 0.3% | 1.1% | 3.2% | 4.4% | 4.8% | 3.0% | 2.1% |
| Bloomberg US Agg Bond | 1.1% | 2.0% | 6.1% | 2.9% | 4.9% | -0.4% | 1.8% |
| Bloomberg US Universal | 1.1% | 2.1% | 6.3% | 3.4% | 5.6% | 0.1% | 2.3% |
| **Duration** | | | | | | | |
| Bloomberg US Treasury 1-3 Yr | 0.3% | 1.1% | 4.0% | 3.9% | 4.4% | 1.5% | 1.7% |
| Bloomberg US Treasury 20+ Yr | 3.6% | 2.4% | 5.1% | -4.8% | -0.7% | -8.7% | -0.5% |
| Bloomberg US Treasury | 0.8% | 1.5% | 5.4% | 2.1% | 3.6% | -1.3% | 1.2% |
| **Issuer** | | | | | | | |
| Bloomberg US MBS | 1.2% | 2.4% | 6.8% | 3.4% | 5.0% | -0.1% | 1.4% |
| Bloomberg US Corp. High Yield | 0.8% | 2.5% | 7.2% | 7.4% | 11.1% | 5.5% | 6.2% |
| Bloomberg US Agency Interm | 0.3% | 1.3% | 4.7% | 4.1% | 4.7% | 1.0% | 1.7% |
| Bloomberg US Credit | 1.4% | 2.6% | 6.9% | 3.6% | 6.9% | 0.3% | 3.0% |

| INTERNATIONAL EQUITY | Month | QTD | YTD | 1 Year | 3 Year | 5 Year | 10 Year |
|---|---|---|---|---|---|---|---|
| **Index** | | | | | | | |
| MSCI ACWI | 3.6% | 7.6% | 18.4% | 17.3% | 23.1% | 13.5% | 11.9% |
| MSCI ACWI ex US | 3.6% | 6.9% | 26.0% | 16.4% | 20.7% | 10.3% | 8.2% |
| MSCI EAFE | 1.9% | 4.8% | 25.1% | 15.0% | 21.7% | 11.1% | 8.2% |
| MSCI EM | 7.2% | 10.6% | 27.5% | 17.3% | 18.2% | 7.0% | 8.0% |
| MSCI EAFE Small Cap | 1.6% | 6.2% | 28.4% | 17.7% | 19.6% | 8.5% | 7.9% |
| **Style Index** | | | | | | | |
| MSCI EAFE Growth | 2.5% | 2.2% | 18.5% | 7.8% | 17.8% | 6.6% | 7.9% |
| MSCI EAFE Value | 1.3% | 7.4% | 31.9% | 22.5% | 25.6% | 15.7% | 8.2% |
| **Regional Index** | | | | | | | |
| MSCI UK | 1.3% | 5.9% | 26.3% | 17.7% | 21.9% | 15.4% | 7.2% |
| MSCI Japan | 2.4% | 8.0% | 20.7% | 16.4% | 21.2% | 9.0% | 8.2% |
| MSCI Euro | 3.6% | 4.5% | 31.9% | 19.5% | 27.5% | 13.4% | 8.8% |
| MSCI EM Asia | 7.5% | 10.9% | 26.4% | 16.4% | 19.1% | 6.3% | 8.8% |
| MSCI EM Latin America | 6.5% | 10.2% | 43.1% | 20.4% | 13.9% | 13.5% | 7.6% |

| OTHER | Month | QTD | YTD | 1 Year | 3 Year | 5 Year | 10 Year |
|---|---|---|---|---|---|---|---|
| **Index** | | | | | | | |
| Bloomberg Commodity | 2.2% | 3.6% | 9.4% | 8.9% | 2.8% | 11.5% | 4.0% |
| FTSE NAREIT Equity REITS | 1.1% | 4.8% | 4.5% | -2.0% | 10.8% | 9.3% | 6.6% |
| Morningstar LSTA US LL | 0.5% | 1.8% | 4.6% | 7.0% | 9.8% | 7.0% | 5.5% |
| S&P Global Infrastructure | 1.5% | 3.7% | 19.7% | 16.8% | 17.8% | 13.6% | 8.9% |
| Alerian MLP Infrastructure | -4.1% | -2.0% | 4.9% | 10.7% | 22.0% | 32.2% | 7.6% |
| **Emerging Market Debt** | | | | | | | |
| JPM EMBI Global Div | 1.8% | 4.8% | 10.7% | 8.5% | 12.3% | 2.3% | 4.2% |
| JPM GBI-EM Global Div | 1.4% | 2.8% | 15.4% | 7.4% | 11.2% | 2.3% | 3.5% |
| **Hedge Funds** | | | | | | | |
| HFRI Composite | 2.4% | 5.7% | 9.8% | 11.3% | 10.0% | 8.8% | 6.4% |
| HFRI FOF Composite | 1.6% | 4.0% | 6.9% | 9.1% | 8.0% | 6.1% | 4.6% |
| **Currency (Spot vs. USD)** | | | | | | | |
| Euro | 0.4% | -0.4% | 13.3% | 5.4% | 6.2% | 0.0% | 0.5% |
| Pound Sterling | -0.4% | -2.1% | 7.4% | 0.5% | 6.4% | 0.8% | -1.2% |
| Yen | -0.6% | -2.6% | 6.3% | -2.9% | -0.7% | -6.5% | -2.1% |

*Source: Bloomberg, HFRI, as of 9/30/25*

# 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: September 30, 2025

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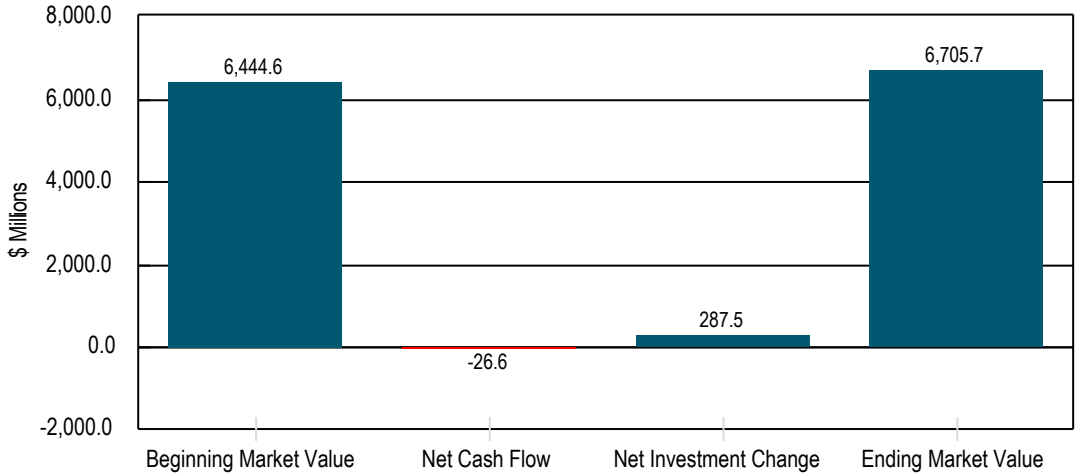
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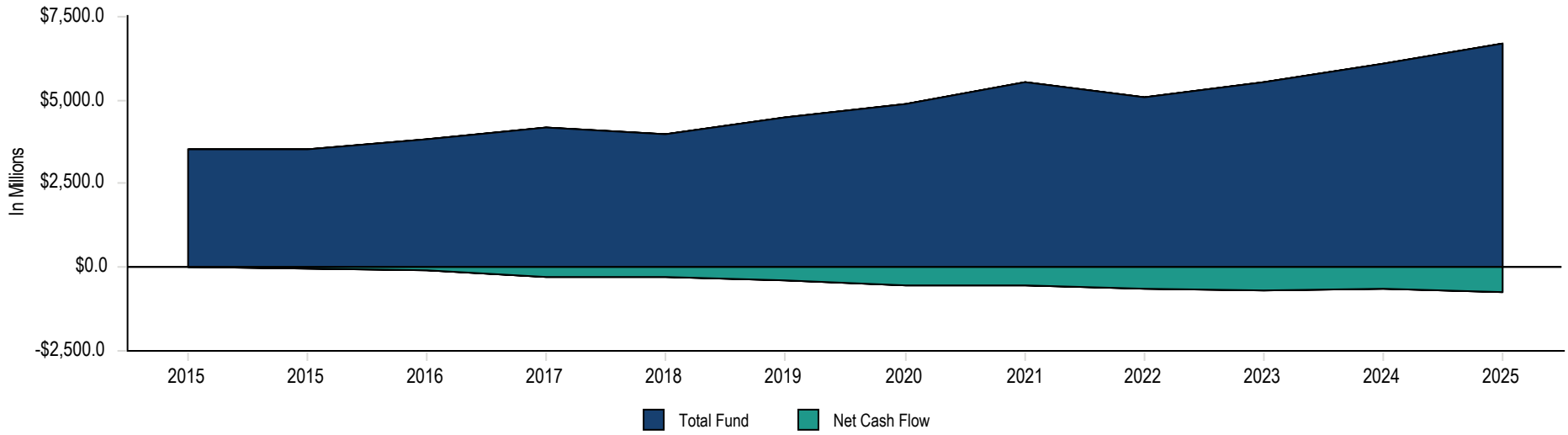
## Portfolio Reconciliation

| | Last Three Months |
|---|---|
| Beginning Market Value | $6,444,640,714 |
| Net Cash Flows | -$26,614,943 |
| Net Investment Change | $287,466,179 |
| Ending Market Value | $6,705,698,761 |

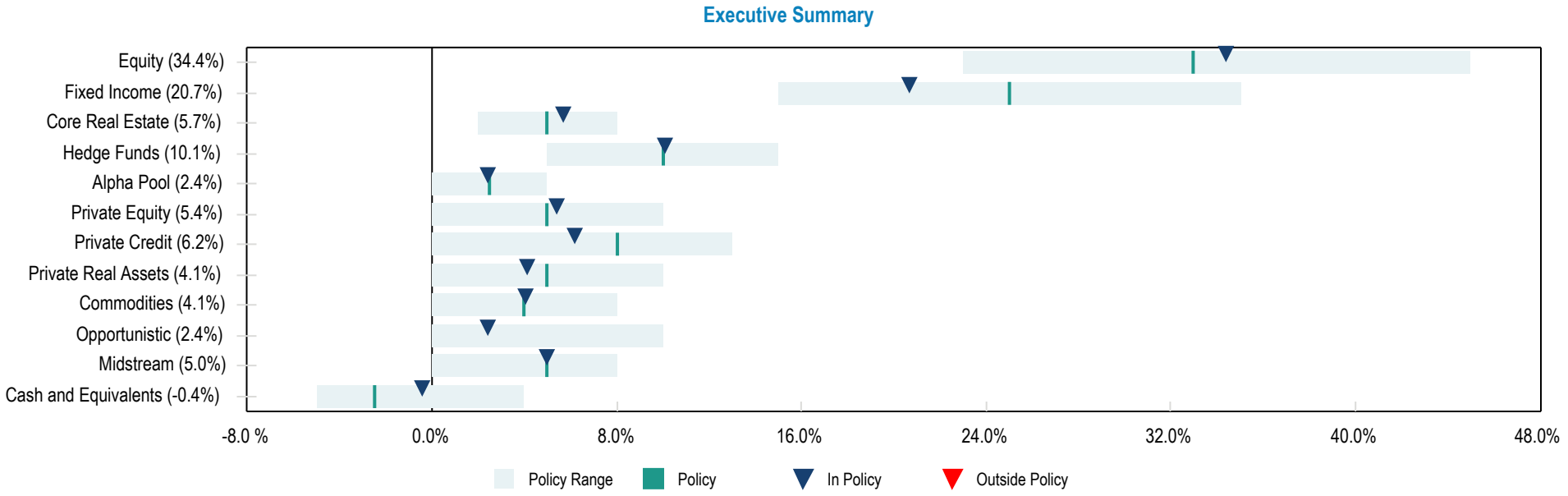
## Change in Market Value
## Last Three Months

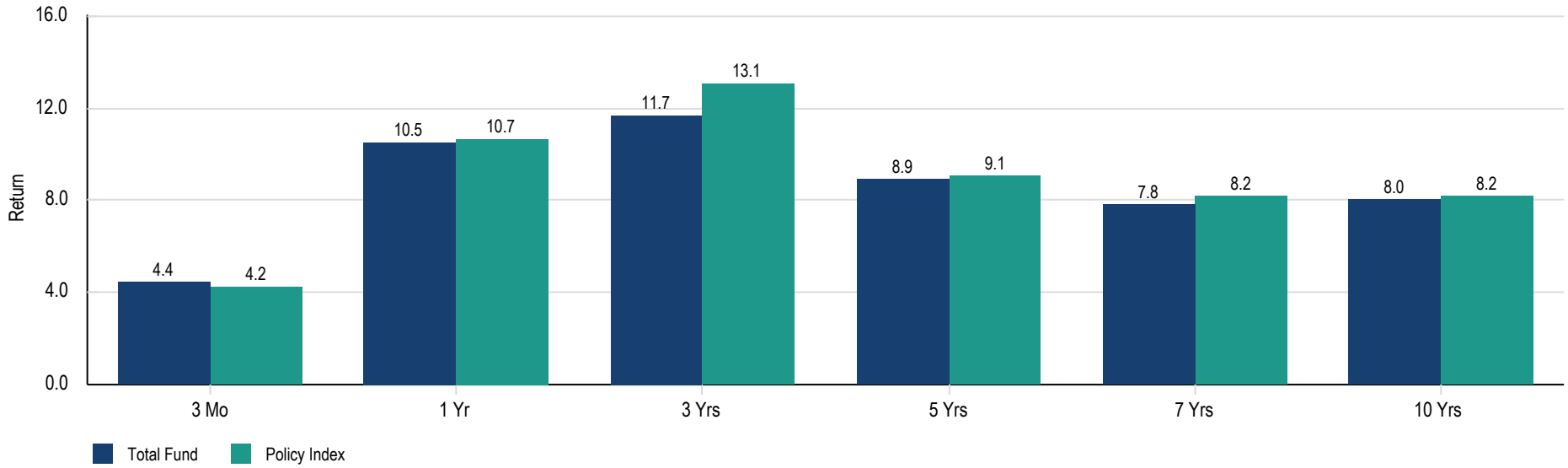


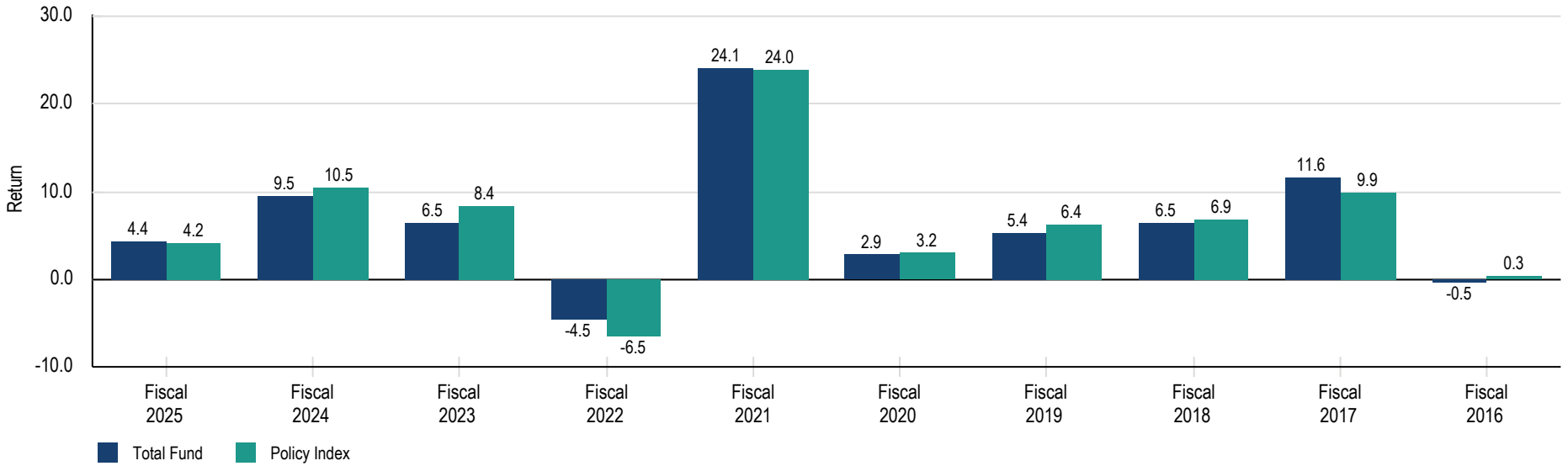

## Market Value History



| | Current Balance ($) | Current Allocation (%) | Policy Allocation (%) | Excess Allocation (%) | Policy Range (%) | Within IPS Range? |
|---|---|---|---|---|---|---|
| Equity | 2,304,846,019 | 34.4 | 33.0 | 1.4 | 23.0 - 45.0 | Yes |
| Fixed Income | 1,388,417,375 | 20.7 | 25.0 | -4.3 | 15.0 - 35.0 | Yes |
| Core Real Estate | 381,136,861 | 5.7 | 5.0 | 0.7 | 2.0 - 8.0 | Yes |
| Hedge Funds | 678,251,707 | 10.1 | 10.0 | 0.1 | 5.0 - 15.0 | Yes |
| Alpha Pool | 162,794,253 | 2.4 | 2.5 | -0.1 | 0.0 - 5.0 | Yes |
| Private Equity | 362,491,756 | 5.4 | 5.0 | 0.4 | 0.0 - 10.0 | Yes |
| Private Credit | 414,613,828 | 6.2 | 8.0 | -1.8 | 0.0 - 13.0 | Yes |
| Private Real Assets | 275,257,800 | 4.1 | 5.0 | -0.9 | 0.0 - 10.0 | Yes |
| Commodities | 273,822,376 | 4.1 | 4.0 | 0.1 | 0.0 - 8.0 | Yes |
| Opportunistic | 161,199,707 | 2.4 | 0.0 | 2.4 | 0.0 - 10.0 | Yes |
| Midstream | 332,573,246 | 5.0 | 5.0 | 0.0 | 0.0 - 8.0 | Yes |
| Cash and Equivalents | -29,706,168 | -0.4 | -2.5 | 2.1 | -5.0 - 4.0 | Yes |
| **Total** | **6,705,698,761** | **100.0** | **100.0** | **0.0** | | |




16.0
12.0
8.0
4.0
0.0
Return
4.4
4.2
10.5
10.7
11.7
13.1
8.9
9.1
7.8
8.2
8.0
8.2
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
4.4
4.2
9.5
10.5
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
Fiscal 2025
Fiscal 2024
Fiscal 2023
Fiscal 2022
Fiscal 2021
Fiscal 2020
Fiscal 2019
Fiscal 2018
Fiscal 2017
Fiscal 2016
Total Fund
Policy Index

| | Market Value | % of Portfolio | 3 Mo | Fiscal YTD | 1 Yr | 3 Yrs | 5 Yrs | 10 Yrs | Fiscal 2025 | Fiscal 2024 | Fiscal 2023 | Fiscal 2022 | Fiscal 2021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Fund** | **6,705,698,761** | **100.0** | **4.5** | **4.5** | **10.9** | **12.0** | **9.2** | **8.4** | **11.2** | **9.7** | **6.7** | **-4.2** | **24.4** |
| *Policy Index* | | | *4.2* | *4.2* | *10.7* | *13.1* | *9.1* | *8.2* | *11.4* | *10.5* | *8.4* | *-6.5* | *24.0* |
| *InvMetrics Public DB > $1B Rank* | | | *33* | *33* | *29* | *61* | *42* | *48* | *30* | *57* | *71* | *37* | *89* |
| **Equity** | **2,304,846,019** | **34.4** | **7.7** | **7.7** | **15.6** | **21.7** | **13.4** | **12.0** | **14.8** | **17.1** | **15.9** | **-14.9** | **41.2** |
| *MSCI AC World IMI Index (Net)* | | | *7.7* | *7.7* | *16.8* | *22.5* | *13.3* | *11.6* | *15.9* | *18.4* | *16.1* | *-16.5* | *40.9* |
| Domestic Equity | 1,236,068,345 | 18.4 | 7.3 | 7.3 | 14.0 | 22.5 | 15.4 | 14.8 | 12.9 | 22.4 | 17.8 | -12.0 | 43.6 |
| *MSCI USA IMI* | | | *8.2* | *8.2* | *17.5* | *24.3* | *15.9* | *14.8* | *15.2* | *23.3* | *19.2* | *-13.7* | *44.4* |
| International Developed Equity | 790,186,425 | 11.8 | 6.9 | 6.9 | 17.1 | 21.4 | 11.3 | 8.6 | 17.8 | 11.0 | 17.2 | -19.6 | 37.0 |
| *MSCI World ex U.S. IMI Index (Net)* | | | *5.6* | *5.6* | *16.5* | *21.4* | *11.3* | *8.4* | *19.3* | *10.8* | *16.3* | *-17.7* | *34.8* |
| Emerging Markets Equity | 278,589,241 | 4.2 | 11.9 | 11.9 | 21.6 | 20.9 | 9.8 | 7.9 | 17.0 | 14.2 | 5.3 | -21.4 | 40.6 |
| *MSCI Emerging Markets IMI (Net)* | | | *9.9* | *9.9* | *16.0* | *18.2* | *7.6* | *8.0* | *14.3* | *13.6* | *3.2* | *-24.8* | *43.2* |
| **Fixed Income** | **1,388,417,375** | **20.7** | **2.3** | **2.3** | **4.2** | **6.8** | **1.2** | **3.4** | **7.5** | **4.2** | **3.1** | **-12.7** | **5.4** |
| *Fixed Income Custom Benchmark* | | | *2.0* | *2.0* | *4.0* | *6.7* | *1.1* | *3.0* | *7.4* | *4.8* | *1.9* | *-11.6* | *4.0* |
| Core Fixed Income | 700,958,862 | 10.5 | 1.9 | 1.9 | 2.8 | 4.6 | -0.6 | 2.2 | 5.6 | 2.5 | -0.9 | -11.2 | 1.0 |
| *Core Fixed Income Benchmark* | | | *1.8* | *1.8* | *2.2* | *4.7* | *-0.6* | *1.8* | *5.8* | *2.5* | *-0.9* | *-10.3* | *-0.3* |
| Credit Fixed Income | 687,207,871 | 10.2 | 2.7 | 2.7 | 6.1 | 10.5 | 4.2 | 4.9 | 10.1 | 7.1 | 9.3 | -14.2 | 11.6 |
| *Credit Fixed Income Benchmark* | | | *2.3* | *2.3* | *6.4* | *10.9* | *4.1* | *5.1* | *10.5* | *8.2* | *9.2* | *-15.7* | *12.2* |
| **Commodities** | **273,822,376** | **4.1** | **5.6** | **5.6** | **12.0** | **9.2** | **14.2** | **6.7** | **6.6** | **14.6** | **-6.3** | **20.1** | **43.5** |
| *Bloomberg Commodity Index Total Return* | | | *3.6* | *3.6* | *8.9* | *2.8* | *11.5* | *4.0* | *5.8* | *5.0* | *-9.6* | *24.3* | *45.6* |
| **Hedge Funds** | **678,251,707** | **10.1** | **2.5** | **2.5** | **8.7** | **8.6** | **8.3** | **7.0** | **8.9** | **9.2** | **6.9** | **2.9** | **16.3** |
| *75% (3 Month T-Bill + 3%) + 25% MSCI ACWI Net* | | | *3.3* | *3.3* | *10.0* | *11.7* | *8.1* | *7.0* | *10.0* | *11.4* | *9.4* | *-1.7* | *11.4* |
| **Alpha Pool** | **162,794,253** | **2.4** | **2.2** | **2.2** | **7.7** | **2.4** | **4.1** | **-** | **6.2** | **0.7** | **-0.9** | **1.5** | **14.5** |
| *3-Month Treasury Bill +3%* | | | *1.8* | *1.8* | *7.5* | *7.9* | *6.1* | *-* | *7.8* | *8.6* | *6.7* | *3.2* | *3.1* |
| **Midstream Energy** | **332,573,246** | **5.0** | **1.0** | **1.0** | **17.5** | **22.7** | **27.5** | **-** | **22.4** | **30.6** | **20.1** | **9.7** | **-** |
| *Alerian Midstream Energy Index* | | | *1.3* | *1.3* | *20.8* | *23.9* | *28.8* | *-* | *30.8* | *26.7* | *12.2* | *11.4* | *-* |
| **Core Real Estate** | **378,001,618** | **5.6** | **2.4** | **2.4** | **7.9** | **-9.0** | **0.3** | **3.3** | **4.9** | **-19.8** | **-11.9** | **25.6** | **6.6** |
| *NCREIF ODCE (Net)* | | | *0.5* | *0.5* | *3.2* | *-6.1* | *2.6* | *4.1* | *2.7* | *-10.0* | *-10.7* | *28.3* | *7.1* |
| **Private Real Assets** | **278,393,043** | **4.2** | **2.8** | **2.8** | **2.2** | **0.3** | **10.7** | **8.6** | **0.4** | **-6.4** | **7.9** | **38.8** | **9.6** |
| | | | *2.8* | *2.8* | *2.2* | *0.3* | *10.7* | *8.6* | *0.4* | *-6.4* | *7.9* | *38.8* | *9.6* |
| **Private Equity** | **362,491,756** | **5.4** | **5.0** | **5.0** | **12.3** | **9.7** | **14.4** | **10.6** | **9.1** | **11.9** | **-0.6** | **21.5** | **41.9** |
| | | | *5.0* | *5.0* | *12.3* | *9.7* | *14.4* | *10.6* | *9.1* | *11.9* | *-0.6* | *21.5* | *41.9* |
| **Private Credit** | **414,613,828** | **6.2** | **3.4** | **3.4** | **10.5** | **10.2** | **7.0** | **-** | **9.7** | **13.1** | **3.2** | **0.3** | **4.8** |
| | | | *3.4* | *3.4* | *10.5* | *10.2* | *7.0* | *-* | *9.7* | *13.1* | *3.2* | *0.3* | *4.8* |

*Policy Index: 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 17% Core (9% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 10% Credit (5% Securitized (2.5% Bloomberg Non-Agency CMBS Index; 1.67% Bloomberg ABS Index; 0.83% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 2.5% Emerging Market Debt ( 2.5% JPM EMBI Global Div - Hard currency only, 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. Fixed Income Beta Exposure return includes overlay cash and an implied hurdle rate also applied to the Alpha pool. Hedge fund data sourced from Albourne. 315K residual AB US Small Cap Value not shown above.*

| | Market Value | % of Portfolio | 3 Mo | Fiscal YTD | 1 Yr | 3 Yrs | 5 Yrs | 10 Yrs | Fiscal 2025 | Fiscal 2024 | Fiscal 2023 | Fiscal 2022 | Fiscal 2021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Opportunistic** | **161,199,707** | **2.4** | **5.5** | **5.5** | **11.5** | **10.1** | **12.6** | **-** | **18.4** | **2.9** | **0.6** | **-5.3** | **60.3** |
| *Assumed Rate of Return +3%* | | | *2.4* | *2.4* | *10.0* | *10.0* | *10.0* | *-* | *10.0* | *10.0* | *10.0* | *10.0* | *10.0* |
| **Cash** | **93,592,834** | **1.4** | **1.4** | **1.4** | **5.2** | **5.2** | **3.1** | **2.6** | **5.4** | **6.4** | **2.6** | **-0.1** | **0.1** |
| *3 Month T-Bill* | | | *1.1* | *1.1* | *4.4* | *4.8* | *3.0* | *2.1* | *4.7* | *5.4* | *3.6* | *0.2* | *0.1* |

*Policy Index: 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 17% Core (9% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 10% Credit (5% Securitized (2.5% Bloomberg Non-Agency CMBS Index; 1.67% Bloomberg ABS Index; 0.83% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 2.5% Emerging Market Debt ( 2.5% JPM EMBI Global Div - Hard currency only, 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. Fixed Income Beta Exposure return includes overlay cash and an implied hurdle rate also applied to the Alpha pool. Hedge fund data sourced from Albourne. 315K residual AB US Small Cap Value not shown above.*

# Performance and Attribution

# Total Fund
# Performance (Net of Fees)

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

| | Market Value | % of Portfolio | 3 Mo | Fiscal YTD | 1 Yr | 3 Yrs | 5 Yrs | 10 Yrs | Fiscal 2025 | Fiscal 2024 | Fiscal 2023 | Fiscal 2022 | Fiscal 2021 | Inception | Inception Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Fund** | **6,705,698,761** | **100.0** | **4.4** | **4.4** | **10.5** | **11.7** | **8.9** | **8.0** | **10.9** | **9.5** | **6.5** | **-4.5** | **24.1** | **7.1** | **Jun-11** |
| *Policy Index* | | | *4.2* | *4.2* | *10.7* | *13.1* | *9.1* | *8.2* | *11.4* | *10.5* | *8.4* | *-6.5* | *24.0* | *7.1* | |
| **Equity** | **2,304,846,019** | **34.4** | **7.6** | **7.6** | **15.3** | **21.4** | **13.2** | **11.6** | **14.6** | **16.9** | **15.7** | **-15.1** | **40.7** | **10.1** | **Jun-11** |
| *MSCI AC World IMI Index (Net)* | | | *7.7* | *7.7* | *16.8* | *22.5* | *13.3* | *11.6* | *15.9* | *18.4* | *16.1* | *-16.5* | *40.9* | *9.7* | |
| **Domestic Equity** | **1,236,068,345** | **18.4** | **7.2** | **7.2** | **13.8** | **22.2** | **15.1** | **14.5** | **12.7** | **22.1** | **17.6** | **-12.2** | **43.2** | **12.7** | **Jul-14** |
| *MSCI USA IMI* | | | *8.2* | *8.2* | *17.5* | *24.3* | *15.9* | *14.8* | *15.2* | *23.3* | *19.2* | *-13.7* | *44.4* | *13.0* | |
| Mellon DB SL Stock Index Fund | 708,686,830 | 10.6 | 8.1 | 8.1 | 17.6 | 24.9 | 16.4 | - | 15.1 | 24.5 | 19.6 | -10.6 | 40.8 | 14.8 | Oct-17 |
| *S&P 500 Index* | | | *8.1* | *8.1* | *17.6* | *24.9* | *16.5* | - | *15.2* | *24.6* | *19.6* | *-10.6* | *40.8* | *14.7* | |
| PIMCO StocksPLUS | 182,397,714 | 2.7 | 8.4 | 8.4 | 18.0 | 25.4 | 16.0 | 15.3 | 15.1 | 25.6 | 18.8 | -12.8 | 41.7 | 11.8 | Jul-03 |
| *S&P 500 Index* | | | *8.1* | *8.1* | *17.6* | *24.9* | *16.5* | *15.3* | *15.2* | *24.6* | *19.6* | *-10.6* | *40.8* | *11.0* | |
| Chilton High Conviction Equity | 203,240,105 | 3.0 | 7.3 | 7.3 | - | - | - | - | - | - | - | - | - | 15.0 | May-25 |
| *S&P 500 Index* | | | *8.1* | *8.1* | - | - | - | - | - | - | - | - | - | *15.0* | |
| Geneva Capital Small Cap Growth | 100,368,221 | 1.5 | -2.3 | -2.3 | -7.3 | 10.3 | 6.1 | 9.9 | 3.3 | 9.8 | 15.6 | -22.1 | 37.6 | 8.9 | Jul-15 |
| *Russell 2000 Growth Index* | | | *12.2* | *12.2* | *13.6* | *16.7* | *8.4* | *9.9* | *9.7* | *9.1* | *18.5* | *-33.4* | *51.4* | *8.1* | |
| Russell 2000 Overlay | 41,375,160 | 0.6 | - | - | - | - | - | - | - | - | - | - | - | 4.4 | Aug-25 |
| *Russell 2000 Index* | | | - | - | - | - | - | - | - | - | - | - | - | *4.2* | |
| **International Developed Equity** | **790,186,425** | **11.8** | **6.9** | **6.9** | **16.9** | **21.2** | **11.7** | **8.6** | **17.7** | **10.9** | **17.1** | **-17.8** | **36.7** | **6.5** | **Jul-14** |
| *MSCI World ex U.S. IMI Index (Net)* | | | *5.6* | *5.6* | *16.5* | *21.4* | *11.3* | *8.4* | *19.3* | *10.8* | *16.3* | *-17.7* | *34.8* | *5.9* | |
| Mellon DB SL World ex-US Index Fund | 403,386,908 | 6.0 | 5.4 | 5.4 | 16.3 | 22.0 | 12.4 | - | 19.0 | 11.7 | 17.9 | -16.1 | 35.6 | 8.4 | Jul-18 |
| *MSCI World ex U.S. IMI Index (Net)* | | | *5.6* | *5.6* | *16.5* | *21.4* | *11.3* | - | *19.3* | *10.8* | *16.3* | *-17.7* | *34.8* | *7.6* | |
| Cevian Capital II | 57,791,147 | 0.9 | 7.8 | 7.8 | 18.9 | 22.5 | 18.8 | 12.1 | 13.2 | 21.8 | 25.3 | -8.2 | 46.8 | 9.9 | Dec-14 |
| *MSCI Europe (Net)* | | | *3.6* | *3.6* | *15.1* | *22.9* | *12.2* | *8.1* | *18.4* | *11.7* | *21.8* | *-17.6* | *35.1* | *6.9* | |
| Lazard Japanese Equity | 176,749,005 | 2.6 | 10.1 | 10.1 | 18.7 | - | - | - | 14.2 | - | - | - | - | 23.2 | Nov-23 |
| *TOPIX Net Total Return Index* | | | *8.4* | *8.4* | *17.3* | - | - | - | *15.5* | - | - | - | - | *21.2* | |
| American Century Non-US Small Cap | 59,058,599 | 0.9 | 5.7 | 5.7 | 14.2 | 16.1 | - | - | 16.9 | 8.3 | 7.9 | -27.4 | - | 4.0 | Dec-20 |
| *MSCI World ex U.S. Small Cap Growth Index (Net)* | | | *5.9* | *5.9* | *17.6* | *17.9* | - | - | *22.1* | *5.6* | *9.5* | *-28.6* | - | *3.9* | |
| Dalton Japan Long Only | 93,200,766 | 1.4 | 7.8 | 7.8 | 17.2 | - | - | - | 23.5 | - | - | - | - | 23.8 | Oct-23 |
| *MSCI Japan Small Cap Index (Net)* | | | *9.2* | *9.2* | *19.8* | - | - | - | *22.9* | - | - | - | - | *23.0* | |
| **Emerging Markets Equity** | **278,589,241** | **4.2** | **11.7** | **11.7** | **21.0** | **20.3** | **9.1** | **7.1** | **16.5** | **13.8** | **4.6** | **-21.9** | **39.5** | **4.3** | **Jul-14** |
| *MSCI Emerging Markets IMI (Net)* | | | *9.9* | *9.9* | *16.0* | *18.2* | *7.6* | *8.0* | *14.3* | *13.6* | *3.2* | *-24.8* | *43.2* | *4.8* | |
| DFA Emerging Markets Value I | 66,974,895 | 1.0 | 7.7 | 7.7 | 13.9 | 18.9 | 13.1 | 9.2 | 11.9 | 16.7 | 7.9 | -12.9 | 47.6 | 6.2 | Mar-14 |
| *MSCI Emerging Markets Value (Net)* | | | *8.7* | *8.7* | *13.3* | *17.8* | *9.9* | *7.1* | *12.7* | *14.1* | *4.1* | *-18.6* | *41.6* | *4.4* | |
| Mellon Emerging Markets Stock Index Fund | 26,186,458 | 0.4 | 11.0 | 11.0 | 18.4 | 18.2 | 7.0 | - | 15.5 | 12.0 | 1.6 | -25.5 | 41.1 | 8.3 | Jun-20 |
| *MSCI Emerging Markets (Net)* | | | *10.6* | *10.6* | *17.3* | *18.2* | *7.0* | - | *15.3* | *12.5* | *1.7* | *-25.3* | *40.9* | *9.9* | |
| Carrhae Capital Long Master Fund Ltd | 98,645,219 | 1.5 | 15.4 | 15.4 | 30.4 | - | - | - | - | - | - | - | - | 34.2 | Aug-24 |
| *MSCI Emerging Markets IMI (Net)* | | | *9.9* | *9.9* | *16.0* | - | - | - | - | - | - | - | - | *21.3* | |
| ABS Emerging Market Direct | 86,782,669 | 1.3 | 11.1 | 11.1 | 17.6 | - | - | - | - | - | - | - | - | 21.6 | Aug-24 |
| *MSCI Emerging Markets IMI (Net)* | | | *9.9* | *9.9* | *16.0* | - | - | - | - | - | - | - | - | *21.4* | |
| **Fixed Income** | **1,388,417,375** | **20.7** | **2.3** | **2.3** | **4.0** | **6.6** | **1.0** | **3.1** | **7.2** | **3.9** | **2.9** | **-13.0** | **5.1** | **3.5** | **Jun-10** |
| *Fixed Income Custom Benchmark* | | | *2.0* | *2.0* | *4.0* | *6.7* | *1.1* | *3.0* | *7.4* | *4.8* | *1.9* | *-11.6* | *4.0* | *3.4* | |
| **Core Fixed Income** | **700,958,862** | **10.5** | **1.9** | **1.9** | **2.7** | **4.5** | **-0.8** | **2.0** | **5.5** | **2.4** | **-1.0** | **-11.4** | **0.8** | **2.0** | **Jul-14** |
| *Core Fixed Income Benchmark* | | | *1.8* | *1.8* | *2.2* | *4.7* | *-0.6* | *1.8* | *5.8* | *2.5* | *-0.9* | *-10.3* | *-0.3* | *1.9* | |
| Fixed Income Beta Exposure | 99,533,205 | 1.5 | 1.6 | 1.6 | 2.8 | 3.6 | - | - | 5.5 | 1.7 | -2.5 | - | - | 2.6 | Jun-22 |
| *ICE BofA 7-10 Year U.S. Treasury Index* | | | *1.8* | *1.8* | *2.3* | *3.6* | - | - | *6.2* | *0.3* | *-3.3* | - | - | *1.2* | |

*Policy Index: 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 17% Core (9% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 10% Credit (5% Securitized (2.5% Bloomberg Non-Agency CMBS Index; 1.67% Bloomberg ABS Index; 0.83% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 2.5% Emerging Market Debt ( 2.5% JPM EMBI Global Div - Hard currency only, 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. Fixed Income Beta Exposure return includes overlay cash and an implied hurdle rate also applied to the Alpha pool. Hedge fund data sourced from Albourne. 315K residual AB US Small Cap Value not shown above.*

Verus

# Total Fund
# Performance (Net of Fees)

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

| | Market Value | % of Portfolio | 3 Mo | Fiscal YTD | 1 Yr | 3 Yrs | 5 Yrs | 10 Yrs | Fiscal 2025 | Fiscal 2024 | Fiscal 2023 | Fiscal 2022 | Fiscal 2021 | Inception | Inception Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Mellon DB SL Aggregate Bond Index Fund | 142,634,460 | 2.1 | 2.0 | 2.0 | 2.9 | 4.9 | -0.5 | 1.8 | 6.1 | 2.6 | -0.9 | -10.4 | -0.4 | 2.3 | Jan-11 |
| *Bloomberg U.S. Aggregate Index* | | | *2.0* | *2.0* | *2.9* | *4.9* | *-0.4* | *1.8* | *6.1* | *2.6* | *-0.9* | *-10.3* | *-0.3* | *2.4* | |
| PIMCO Core Plus | 188,135,475 | 2.8 | 2.5 | 2.5 | 4.6 | 6.0 | 0.4 | 2.5 | 7.4 | 3.6 | -0.7 | -9.9 | 1.1 | 2.8 | Feb-11 |
| *Bloomberg U.S. Aggregate Index* | | | *2.0* | *2.0* | *2.9* | *4.9* | *-0.4* | *1.8* | *6.1* | *2.6* | *-0.9* | *-10.3* | *-0.3* | *2.4* | |
| Aristotle Short Duration Bond Strategy | 270,655,722 | 4.0 | 1.6 | 1.6 | - | - | - | - | - | - | - | - | - | 5.2 | Jan-25 |
| *Blmbg. U.S. Corporate 1-3 Year Index* | | | *1.4* | *1.4* | - | - | - | - | - | - | - | - | - | *4.6* | |
| **Credit Fixed Income** | **687,207,871** | **10.2** | **2.6** | **2.6** | **5.6** | **10.1** | **3.7** | **4.5** | **9.6** | **6.7** | **8.9** | **-14.6** | **11.1** | **-** | **May-05** |
| *Credit Fixed Income Benchmark* | | | *2.3* | *2.3* | *6.4* | *10.9* | *4.1* | *5.1* | *10.5* | *8.2* | *9.2* | *-15.7* | *12.2* | *6.0* | |
| KKR US Broadly Syndicated Loan Fund | 177,285,827 | 2.6 | 1.6 | 1.6 | - | - | - | - | - | - | - | - | - | 4.4 | Oct-24 |
| *Morningstar LSTA U.S. Leveraged Loan* | | | *1.8* | *1.8* | *7.0* | - | - | - | - | - | - | - | - | *6.2* | |
| Guggenheim Structured Credit | 168,578,027 | 2.5 | 2.0 | 2.0 | - | - | - | - | - | - | - | - | - | 2.4 | Jun-25 |
| *50% Bloomberg Non-Agency CMBS Index, 33.33% Bloomberg ABS Index, 16.67% JPM CL* | | | *1.3* | *1.3* | - | - | - | - | - | - | - | - | - | *2.0* | |
| Schroders Credit | 168,248,455 | 2.5 | 2.0 | 2.0 | - | - | - | - | - | - | - | - | - | 2.0 | Jun-25 |
| *50% Bloomberg Non-Agency CMBS Index, 33.33% Bloomberg ABS Index, 16.67% JPM CL* | | | *1.3* | *1.3* | - | - | - | - | - | - | - | - | - | *1.8* | |
| PIMCO EMD | 173,095,562 | 2.6 | 4.8 | 4.8 | 8.7 | 12.9 | 3.5 | - | 11.8 | 5.6 | 11.3 | -19.2 | 8.7 | 2.6 | Feb-20 |
| *JPM EMBI Global Diversified* | | | *4.8* | *4.8* | *8.5* | *12.3* | *2.3* | - | *10.0* | *9.2* | *7.4* | *-21.2* | *7.5* | *1.6* | |
| **Commodities** | **273,822,376** | **4.1** | **5.4** | **5.4** | **11.2** | **8.4** | **13.4** | **6.1** | **5.9** | **13.7** | **-7.0** | **19.3** | **42.5** | **1.6** | **Jul-13** |
| *Bloomberg Commodity Index Total Return* | | | *3.6* | *3.6* | *8.9* | *2.8* | *11.5* | *4.0* | *5.8* | *5.0* | *-9.6* | *24.3* | *45.6* | *0.3* | |
| Wellington Commodities | 273,822,376 | 4.1 | 5.4 | 5.4 | 11.0 | 10.0 | 13.7 | 6.9 | 5.8 | 15.5 | -5.2 | 17.2 | 40.2 | 2.4 | Sep-13 |
| *S&P GSCI Commodity Equal Weighted* | | | *5.6* | *5.6* | *10.6* | *7.4* | *12.6* | *6.1* | *4.8* | *10.4* | *-6.0* | *19.0* | *40.9* | *2.0* | |
| **Hedge Funds** | **678,251,707** | **10.1** | **2.3** | **2.3** | **8.0** | **8.3** | **8.2** | **6.8** | **8.2** | **8.9** | **7.0** | **3.4** | **16.1** | **6.0** | **Jun-13** |
| *75% (3 Month T-Bill + 3%) + 25% MSCI ACWI Net* | | | *3.3* | *3.3* | *10.0* | *11.7* | *8.1* | *7.0* | *10.0* | *11.4* | *9.4* | *-1.7* | *11.4* | *6.3* | |
| Aristeia International Limited | 81,338,827 | 1.2 | 2.1 | 2.1 | 6.9 | 5.8 | 7.0 | 7.6 | 6.9 | 5.1 | 5.5 | 1.8 | 21.6 | 5.5 | May-14 |
| Brevan Howard Fund | 60,082,109 | 0.9 | 1.0 | 1.0 | 2.3 | 1.4 | 5.7 | 6.7 | 6.3 | 3.1 | -1.0 | 15.2 | 6.1 | 6.7 | Sep-13 |
| D.E. Shaw Composite Fund | 73,371,015 | 1.1 | 4.1 | 4.1 | 21.4 | 14.5 | 18.1 | 15.1 | 19.3 | 12.9 | 11.0 | 29.0 | 19.0 | 14.6 | Jul-13 |
| HBK Fund II | 56,046,956 | 0.8 | 2.5 | 2.5 | 9.9 | 9.7 | 8.2 | 6.3 | 9.3 | 11.1 | 7.9 | 2.3 | 11.0 | 5.5 | Nov-13 |
| Hudson Bay Cap Structure Arbitrage Enhanced Fund | 88,234,504 | 1.3 | 1.9 | 1.9 | 8.4 | 6.2 | 7.9 | - | 8.6 | 4.0 | 7.7 | 7.7 | 14.2 | 9.6 | Jun-19 |
| Indus Pacific Opportunities Fund | 56,256,246 | 0.8 | 1.3 | 1.3 | 11.9 | 6.2 | 6.3 | 6.7 | 13.1 | 5.8 | -0.4 | -8.2 | 38.0 | 7.2 | Jul-14 |
| Pharo Macro Fund | 84,295,620 | 1.3 | 2.2 | 2.2 | 15.1 | 11.3 | 4.1 | - | 16.2 | 12.7 | 1.2 | -11.1 | 3.5 | 4.5 | Dec-19 |
| PIMCO Commodity Alpha Fund | 79,309,923 | 1.2 | 4.6 | 4.6 | -4.6 | 10.5 | 9.5 | - | -8.1 | 15.6 | 18.3 | 8.6 | 14.2 | 9.5 | Jun-16 |
| Elliott Associates | 49,760,635 | 0.7 | 1.4 | 1.4 | 6.9 | - | - | - | 5.5 | - | - | - | - | 5.5 | Jul-24 |
| Hawk Ridge Partners II | 49,555,872 | 0.7 | - | - | - | - | - | - | - | - | - | - | - | -0.9 | Aug-25 |
| **Alpha Pool** | **162,794,253** | **2.4** | **2.2** | **2.2** | **7.7** | **2.4** | **4.1** | **-** | **6.2** | **0.7** | **-0.9** | **1.5** | **14.5** | **4.5** | **Jul-20** |
| *3-Month Treasury Bill +3%* | | | *1.8* | *1.8* | *7.5* | *7.9* | *6.1* | - | *7.8* | *8.6* | *6.7* | *3.2* | *3.1* | *5.9* | |
| Hudson Bay - Alpha Pool | 40,174,784 | 0.6 | 1.6 | 1.6 | 6.4 | 0.1 | 3.7 | - | 5.7 | -2.8 | -1.1 | 6.7 | - | 4.2 | Aug-20 |
| Davidson Kempner Institutional Partners | 57,652,225 | 0.9 | 2.8 | 2.8 | 9.2 | 2.7 | - | - | 8.0 | 1.2 | -4.1 | -3.4 | - | 2.6 | Dec-20 |
| HBK Fund II | 20,793,260 | 0.3 | 2.2 | 2.2 | 8.2 | 3.6 | - | - | 6.4 | 4.0 | -1.0 | 1.3 | - | 3.7 | Dec-20 |
| Garda Fixed Income Relative Value Opportunity Fund | 44,173,984 | 0.7 | 2.0 | 2.0 | 6.5 | 3.7 | - | - | 4.2 | 1.8 | 3.6 | - | - | 4.2 | Sep-21 |
| **Midstream Energy** | **332,573,246** | **5.0** | **0.8** | **0.8** | **16.8** | **21.9** | **26.8** | **-** | **21.6** | **29.8** | **19.3** | **9.3** | **-** | **25.6** | **Sep-20** |
| *Alerian Midstream Energy Index* | | | *1.3* | *1.3* | *20.8* | *23.9* | *28.8* | - | *30.8* | *26.7* | *12.2* | *11.4* | - | *25.5* | |
| Harvest Midstream | 211,911,348 | 3.2 | 0.4 | 0.4 | 18.3 | 24.0 | 31.7 | - | 23.3 | 35.9 | 20.9 | 15.3 | - | 30.3 | Aug-20 |
| *Alerian Midstream Energy Index* | | | *1.3* | *1.3* | *20.8* | *23.9* | *28.8* | - | *30.8* | *26.7* | *12.2* | *11.4* | - | *25.0* | |
| PIMCO Midstream | 120,661,898 | 1.8 | 1.5 | 1.5 | 14.8 | 19.6 | - | - | 19.3 | 23.6 | 16.9 | 2.2 | - | 21.1 | Oct-20 |
| *50/25/25 Alerian Midstream/ ICE BofA US Pipeline/ ICE BofA US HY Midstream* | | | *1.7* | *1.7* | *12.7* | *16.5* | *15.5* | - | *18.6* | *17.6* | *10.1* | *-0.7* | - | *15.8* | |

*Policy Index: 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 17% Core (9% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 10% Credit (5% Securitized (2.5% Bloomberg Non-Agency CMBS Index; 1.67% Bloomberg ABS Index; 0.83% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 2.5% Emerging Market Debt ( 2.5% JPM EMBI Global Div - Hard currency only, 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. Fixed Income Beta Exposure return includes overlay cash and an implied hurdle rate also applied to the Alpha pool. Hedge fund data sourced from Albourne. 315K residual AB US Small Cap Value not shown above.*

Verus

# Total Fund
# Performance (Net of Fees)

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

| | Market Value | % of Portfolio | 3 Mo | Fiscal YTD | 1 Yr | 3 Yrs | 5 Yrs | 10 Yrs | Fiscal 2025 | Fiscal 2024 | Fiscal 2023 | Fiscal 2022 | Fiscal 2021 | Inception | Inception Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Core Real Estate** | **378,001,618** | **5.6** | **2.4** | **2.4** | **7.5** | **-9.4** | **-0.3** | **2.7** | **4.5** | **-20.2** | **-12.4** | **24.8** | **5.6** | **3.7** | **Oct-14** |
| *NCREIF ODCE (Net)* | | | *0.5* | *0.5* | *3.2* | *-6.1* | *2.6* | *4.1* | *2.7* | *-10.0* | *-10.7* | *28.3* | *7.1* | *5.0* | |
| ASB Allegiance Real Estate Fund | 117,073,782 | 1.7 | 1.1 | 1.1 | 5.0 | -12.4 | -2.3 | 1.4 | 2.8 | -23.9 | -13.3 | 23.0 | 5.4 | 3.3 | Sep-13 |
| *NCREIF ODCE* | | | *0.5* | *0.5* | *3.2* | *-6.1* | *2.6* | *4.1* | *2.7* | *-10.0* | *-10.7* | *28.3* | *7.1* | *5.5* | |
| JPMCB Strategic Property Fund | 92,749,305 | 1.4 | 0.8 | 0.8 | 4.2 | -7.1 | 1.4 | 3.4 | 3.9 | -14.9 | -11.4 | 27.9 | 5.9 | 4.4 | Jul-14 |
| *NCREIF ODCE* | | | *0.5* | *0.5* | *3.2* | *-6.1* | *2.6* | *4.1* | *2.7* | *-10.0* | *-10.7* | *28.3* | *7.1* | *5.1* | |
| Blue Owl Real Estate Fund VI | 43,312,175 | 0.6 | 7.3 | 7.3 | 28.8 | - | - | - | 12.0 | - | - | - | - | 3.5 | May-24 |
| *NCREIF ODCE* | | | *0.5* | *0.5* | *3.2* | - | - | - | *2.7* | - | - | - | - | *1.8* | |
| Sculptor Diversified REIT | 50,620,629 | 0.8 | 5.4 | 5.4 | - | - | - | - | - | - | - | - | - | 6.6 | Dec-24 |
| *NCREIF ODCE* | | | *0.5* | *0.5* | - | - | - | - | - | - | - | - | - | *3.1* | |
| Hudson Bay Real Estate Opportunities | 38,151,263 | 0.6 | 3.0 | 3.0 | - | - | - | - | - | - | - | - | - | 7.9 | Jan-25 |
| *NCREIF ODCE* | | | *0.5* | *0.5* | - | - | - | - | - | - | - | - | - | *2.2* | |
| TPG AG Essential Housing III | 20,859,829 | 0.3 | 0.0 | 0.0 | - | - | - | - | - | - | - | - | - | 4.8 | Dec-24 |
| *NCREIF ODCE* | | | *0.5* | *0.5* | - | - | - | - | - | - | - | - | - | *3.2* | |
| BPC Real Estate Debt Fund LP | 15,234,634 | 0.2 | 0.7 | 0.7 | - | - | - | - | - | - | - | - | - | 9.3 | Mar-25 |
| *NCREIF ODCE* | | | *0.5* | *0.5* | - | - | - | - | - | - | - | - | - | *2.2* | |
| **Private Real Assets** | **278,393,043** | **4.2** | **2.8** | **2.8** | **2.2** | **0.3** | **10.7** | **8.6** | **0.4** | **-6.4** | **7.9** | **38.8** | **9.6** | **10.8** | **Mar-11** |
| | | | *2.8* | *2.8* | *2.2* | *0.3* | *10.7* | *8.6* | *0.4* | *-6.4* | *7.9* | *38.8* | *9.6* | *10.5* | |
| **Private Equity** | **362,491,756** | **5.4** | **5.0** | **5.0** | **12.3** | **9.7** | **14.4** | **10.6** | **9.1** | **11.9** | **-0.6** | **21.5** | **41.9** | **11.0** | **Sep-10** |
| | | | *5.0* | *5.0* | *12.3* | *9.7* | *14.4* | *10.6* | *9.1* | *11.9* | *-0.6* | *21.5* | *41.9* | *10.9* | |
| **Private Credit** | **414,613,828** | **6.2** | **3.4** | **3.4** | **10.5** | **10.2** | **7.0** | **-** | **9.7** | **13.1** | **3.2** | **0.3** | **4.8** | **7.9** | **Jan-16** |
| | | | *3.4* | *3.4* | *10.5* | *10.2* | *7.0* | - | *9.7* | *13.1* | *3.2* | *0.3* | *4.8* | *7.9* | |
| **Opportunistic** | **161,199,707** | **2.4** | **5.5** | **5.5** | **11.5** | **10.1** | **12.6** | **-** | **18.4** | **2.9** | **0.6** | **-5.4** | **60.3** | **10.7** | **Jan-20** |
| *Assumed Rate of Return +3%* | | | *2.4* | *2.4* | *10.0* | *10.0* | *10.0* | - | *10.0* | *10.0* | *10.0* | *10.0* | *10.0* | *10.0* | |
| River Birch International | 366,299 | 0.0 | 6.2 | 6.2 | 14.9 | 38.4 | - | - | 39.7 | 31.0 | 45.1 | - | - | 41.5 | Jun-22 |
| *Assumed Rate of Return +3%* | | | *2.4* | *2.4* | *10.0* | *10.0* | - | - | *10.0* | *10.0* | *10.0* | - | - | *10.0* | |
| Sixth Street TAO Partners (D) | 78,415,296 | 1.2 | 4.9 | 4.9 | 11.4 | 11.5 | 13.8 | - | 8.3 | 11.3 | 4.4 | 9.6 | 39.6 | 13.6 | Mar-20 |
| *Assumed Rate of Return +3%* | | | *2.4* | *2.4* | *10.0* | *10.0* | *10.0* | - | *10.0* | *10.0* | *10.0* | *10.0* | *10.0* | *10.0* | |
| Aristeia Select Opportunities II | 62,396,070 | 0.9 | 5.8 | 5.8 | 7.4 | 5.7 | - | - | 35.1 | -9.7 | -7.2 | - | - | 5.5 | Jul-21 |
| *Assumed Rate of Return +3%* | | | *2.4* | *2.4* | *10.0* | *10.0* | - | - | *10.0* | *10.0* | *10.0* | *10.0* | - | *10.0* | |
| Hudson Bay Special Opportunities Fund LP | 6,958,841 | 0.1 | -4.7 | -4.7 | 20.0 | - | - | - | 65.0 | - | - | - | - | 46.7 | Feb-24 |
| *Assumed Rate of Return +3%* | | | *2.4* | *2.4* | *10.0* | - | - | - | *10.0* | - | - | - | - | *10.0* | |
| Pharo Opportunities Fund SPC | 13,063,200 | 0.2 | 10.2 | 10.2 | 27.1 | - | - | - | 18.5 | - | - | - | - | 23.6 | Jun-24 |
| *Assumed Rate of Return +3%* | | | *2.4* | *2.4* | *10.0* | - | - | - | *10.0* | - | - | - | - | *10.0* | |
| **Cash** | **93,592,834** | **1.4** | **1.3** | **1.3** | **5.0** | **5.1** | **3.0** | **2.6** | **5.2** | **6.3** | **2.5** | **-0.2** | **0.1** | **2.1** | **Apr-11** |
| *3 Month T-Bill* | | | *1.1* | *1.1* | *4.4* | *4.8* | *3.0* | *2.1* | *4.7* | *5.4* | *3.6* | *0.2* | *0.1* | *1.4* | |

*Policy Index: 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 17% Core (9% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 10% Credit (5% Securitized (2.5% Bloomberg Non-Agency CMBS Index; 1.67% Bloomberg ABS Index; 0.83% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 2.5% Emerging Market Debt ( 2.5% JPM EMBI Global Div - Hard currency only, 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. Fixed Income Beta Exposure return includes overlay cash and an implied hurdle rate also applied to the Alpha pool. Hedge fund data sourced from Albourne. 315K residual AB US Small Cap Value not shown above.*

| Vintage Year | Manager/Fund | Estimated Market Value as of 9/30/25 | 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 Equity** | | | | | | | | | | | | |
| 2008 | Abbott Capital PE VI | $8,404,721 | $50,000,000 | $50,000,000 | 100% | $0 | $88,511,543 | $9,941,607 | *1.77x* | *1.94x* | *22.5%* | 06/30/25 |
| 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 | $3,169,277 | $50,000,000 | $46,600,000 | 93% | $3,400,000 | $83,529,998 | $3,376,418 | *1.79x* | *1.86x* | *10.0%* | 06/30/25 |
| 2020 | Vista Foundation Fund IV | $24,555,927 | $25,000,000 | $21,842,032 | 87% | $3,157,968 | $30,252 | $24,555,927 | *0.00x* | *1.13x* | *7.0%* | 09/30/25 |
| 2021 | Crown Global Secondaries V Master S.C.Sp | $42,178,793 | $50,000,000 | $34,500,000 | 69% | $15,500,000 | $8,750,000 | $42,178,793 | *0.25x* | *1.48x* | *19.0%* | 09/30/25 |
| 2021 | Brighton Park Capital Fund I | $44,516,784 | $30,000,000 | $30,000,000 | 100% | $0 | $5,134,479 | $44,516,784 | *0.17x* | *1.66x* | *12.3%* | 09/30/25 |
| 2021 | Warren Equity Partners Fund III | $40,151,928 | $32,500,000 | $29,582,245 | 91% | $2,917,755 | $762,477 | $40,151,928 | *0.03x* | *1.38x* | *11.3%* | 09/30/25 |
| 2021 | Peak Rock Capital Fund III | $29,089,927 | $30,000,000 | $26,597,930 | 89% | $3,402,070 | $11,270,510 | $29,089,927 | *0.42x* | *1.52x* | *27.6%* | 09/30/25 |
| 2021 | Level Equity Growth Partners V | $14,907,797 | $15,000,000 | $12,019,949 | 80% | $2,980,051 | $2,393 | $14,907,797 | *0.00x* | *1.24x* | *14.0%* | 09/30/25 |
| 2021 | Level Equity Opportunities Fund 2021 | $12,737,184 | $15,000,000 | $9,737,446 | 65% | $5,262,554 | $0 | $12,737,184 | *0.00x* | *1.31x* | *18.7%* | 09/30/25 |
| 2022 | Linden Capital Partners V LP | $23,354,728 | $22,500,000 | $19,935,002 | 89% | $2,564,998 | $0 | $23,354,728 | *0.00x* | *1.17x* | *8.0%* | 09/30/25 |
| 2022 | Rubicon Technology Partners IV LP | $16,331,450 | $30,000,000 | $14,799,271 | 49% | $15,200,729 | $0 | $16,331,450 | *0.00x* | *1.10x* | *6.0%* | 09/30/25 |
| 2022 | OrbiMed Private Investments IX, LP | $5,103,764 | $10,000,000 | $5,349,201 | 53% | $4,650,799 | $1,098,661 | $5,103,764 | *0.21x* | *1.16x* | *29.3%* | 09/30/25 |
| 2022 | Brighton Park Capital Fund II | $17,690,521 | $30,000,000 | $20,646,147 | 69% | $9,353,853 | $3,722,467 | $17,690,521 | *0.18x* | *1.04x* | *1.1%* | 09/30/25 |
| 2022 | Linden Co-Investment V LP | $10,251,573 | $7,500,000 | $9,657,986 | 129% | -$2,157,986 | $55,503 | $10,251,573 | *0.01x* | *1.07x* | *18.5%* | 09/30/25 |
| 2022 | Warren Equity Partners Fund IV | $26,636,789 | $32,500,000 | $14,821,090 | 46% | $17,678,910 | $0 | $26,636,789 | *0.00x* | *1.80x* | *22.8%* | 09/30/25 |
| 2023 | WEP Co-Invest IV | $10,850,350 | $10,000,000 | $9,757,415 | 98% | $242,585 | $173,170 | $10,850,350 | *0.02x* | *1.13x* | *10.0%* | 09/30/25 |
| 2023 | Crown Global Secondaries Fund VI | $8,805,531 | $30,000,000 | $6,150,000 | 21% | $23,850,000 | $0 | $8,805,531 | *0.00x* | *1.43x* | *53.6%* | 09/30/25 |
| 2023 | Parthenon Investors VII | $6,970,856 | $30,000,000 | $7,611,373 | 25% | $22,388,627 | $392,741 | N/A | N/A | N/A | *N/A* | N/A |
| 2024 | Longreach Capital Partners | $3,755,530 | $15,000,000 | $4,320,870 | 29% | $10,679,130 | $421,772 | $3,318,576 | *0.10x* | *0.97x* | *N/A* | N/A |
| 2024 | Blue Owl Strategic Equity | $5,511,429 | $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 | $4,244,159 | $5,000,000 | $3,866,955 | 77% | $1,133,045 | $0 | N/A | *0.00x* | *1.10x* | *N/A* | N/A |
| 2025 | Accel-KKR Capital Partners VII | $1,947,529 | $25,000,000 | $1,947,529 | 8% | $23,052,471 | $0 | N/A | N/A | N/A | *N/A* | N/A |
| 2025 | Petershill PES II | $313,903 | $25,000,000 | $313,903 | 1% | $24,686,097 | $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** | **$362,358,498** | $765,000,000 | $491,685,354 | 64% | $273,314,646 | $350,627,651 | $344,679,539 | *0.71x* | *1.45x* | | |
| | **% of Portfolio (Market Value)** | ***5.4%*** | | | | | | | | | | |

[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.

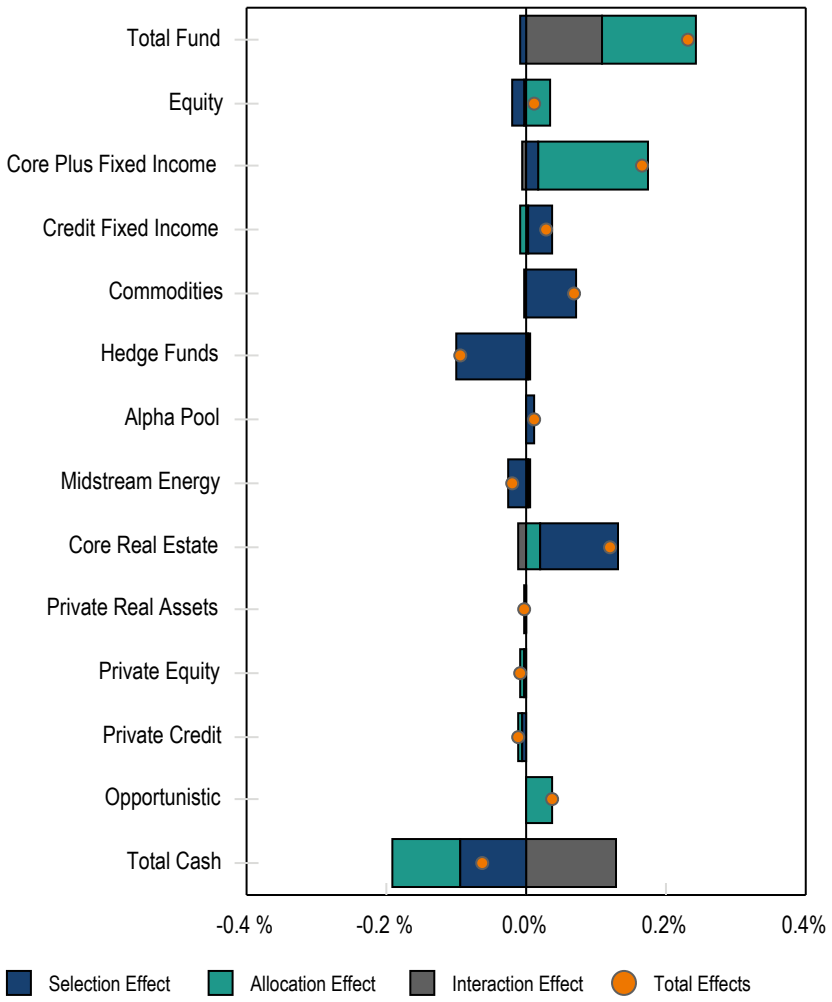
| Vintage Year | Manager/Fund | Estimated Market Value 9/30/2025 | IRR Analysis as of IRR date: Total Commitment | Capital Called | % Called | Remaining Commitment | Capital Returned | Market Value as of IRR date | Distrib./ Paid-In (DPI)[1] | Tot. Value/ Paid-In (TVPI)[2] | Net IRR Since Inception[3] | IRR Date |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Private Credit** | | | | | | | | | | | | |
| 2015 | DC Value Recovery Fund IV[4] | $10,606,346 | $74,360,749 | $73,340,099 | 99% | $1,020,650 | $44,343,375 | N/A | *0.60x* | *0.75x* | *N/A* | *N/A* |
| 2017 | Sixth Street TAO Partners (B) | $50,428,470 | $108,035,958 | $94,076,786 | 87% | $13,959,172 | $53,224,785 | $52,941,110 | *0.57x* | *1.10x* | *10.1%* | 6/30/25 |
| 2017 | Brookfield Real Estate Finance Fund V | $5,490,556 | $50,000,000 | $39,260,948 | 79% | $10,739,052 | $38,894,267 | $5,490,556 | *0.99x* | *1.13x* | *4.0%* | 9/30/25 |
| 2018 | Magnetar Constellation Fund V | $9,570,861 | $60,000,000 | $56,445,318 | 94% | $3,554,682 | $58,937,637 | $9,570,861 | *1.04x* | *1.21x* | *4.8%* | 9/30/25 |
| 2019 | H.I.G Bayside Loan Opportunity Fund V | $38,098,948 | $60,000,000 | $36,671,764 | 61% | $23,328,236 | $30,208,164 | $38,098,948 | *0.82x* | *1.86x* | *14.4%* | 9/30/25 |
| 2020 | Blue Torch Credit Opportunities Fund II | $13,114,375 | $20,000,000 | $17,296,007 | 86% | $2,703,993 | $8,935,024 | $12,893,298 | *0.52x* | *1.27x* | *10.1%* | 6/30/25 |
| 2020 | Fortress Credit Opportunites Fund V Expansion | $32,782,118 | $40,000,000 | $32,853,973 | 82% | $7,146,027 | $5,901,214 | $32,268,388 | *0.18x* | *1.18x* | *14.4%* | 6/30/25 |
| 2021 | Fortress Lending Fund II | $13,646,664 | $40,000,000 | $35,322,373 | 88% | $4,677,627 | $31,556,545 | $13,646,664 | *0.89x* | *1.28x* | *8.7%* | 9/30/25 |
| 2022 | Blue Torch Credit Opportunities Fund III | $35,071,291 | $40,000,000 | $40,000,000 | 100% | $0 | $15,535,889 | $33,856,667 | *0.39x* | *1.27x* | *16.5%* | 6/30/25 |
| 2022 | Fortress Lending Fund III | $22,840,023 | $40,000,000 | $27,538,798 | 69% | $12,461,202 | $11,609,952 | $22,840,023 | *0.42x* | *1.25x* | *11.4%* | 9/30/25 |
| 2022 | OrbiMed Royalty & Credit Opportunities IV | $18,979,678 | $30,000,000 | $18,433,980 | 61% | $11,566,020 | $4,594,099 | $18,979,678 | *0.25x* | *1.28x* | *14.1%* | 9/30/25 |
| 2023 | Cerberus Business Finance V | $24,829,655 | $30,000,000 | $25,055,642 | 84% | $4,944,358 | $4,708,341 | $21,847,785 | *0.19x* | *1.18x* | *17.5%* | 8/31/25 |
| 2023 | Silver Point – Specialty Credit Fund III | $12,617,520 | $30,000,000 | $20,339,773 | 68% | $9,660,227 | $10,989,619 | $12,617,520 | *0.54x* | *1.16x* | *15.2%* | 9/30/25 |
| 2023 | Ares Pathfinder II | $15,932,451 | $30,000,000 | $13,569,391 | 45% | $16,430,609 | $0 | $11,462,964 | *0.00x* | *1.17x* | *17.4%* | 6/30/25 |
| 2023 | Oak Hill Advisors Structured Products Fund III, L.P. | $18,247,564 | $25,000,000 | $16,098,626 | 64% | $8,901,374 | $1,127,312 | $18,163,625 | *0.07x* | *1.20x* | *14.2%* | 6/30/25 |
| 2023 | Ares Senior Direct Lending III | $8,609,478 | $30,000,000 | $8,370,419 | 28% | $21,629,581 | $747,809 | N/A | *0.09x* | *1.12x* | *N/A* | N/A |
| 2024 | ITE Rail Fund, L.P. | $40,830,388 | $40,000,000 | $34,296,307 | 86% | $5,703,693 | $1,614,150 | N/A | *0.05x* | *1.24x* | *N/A* | N/A |
| 2024 | HPS Special Situations Opportunity Fund II, L.P. | $11,341,741 | $25,000,000 | $10,693,453 | 57% | $14,306,547 | $0 | N/A | *N/A* | *N/A* | *N/A* | N/A |
| 2024 | Castlelake Aviation V Stable Yield | $5,511,269 | $30,000,000 | $3,784,265 | 13% | $26,215,735 | $490,412 | N/A | *0.13x* | *1.59x* | N/A | N/A |
| 2025 | Fortress Credit Opportunities Fund VI | $9,511,997 | $25,000,000 | $319,933 | 1% | $24,680,067 | $1,377,629 | N/A | *N/A* | *N/A* | N/A | N/A |
| 2025 | Quantum Capital Solutions II | $10,627,372 | $39,600,000 | $6,675,357 | 17% | $32,924,643 | $140,416 | N/A | *N/A* | *N/A* | N/A | N/A |
| 2025 | Quantum Capital Solutions II Co-Investment Fund, LP | $2,116,625 | $7,900,000 | $1,250,496 | 16% | $6,649,504 | $28,012 | N/A | *N/A* | *N/A* | N/A | N/A |
| 2025 | Blue Torch Credit Opportunities Fund IV | $3,808,436 | $25,000,000 | $3,796,878 | 15% | $21,203,122 | $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** | **$414,613,828** | $929,896,707 | $615,490,584 | 66% | $172,733,051 | $324,964,652 | $304,678,088 | *0.53x* | *1.20x* | | |
| | **% of Portfolio (Market Value)** | ***6.2%*** | | | | | | | | | | |

[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.
[4]Name changed from Colony Distressed Credit fund to DC Value Recovery Fund IV

| Vintage Year | Manager/Fund | Estimated Market Value 9/30/2025 | 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 | $137,986 | $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 | $30,401,054 | $60,000,000 | $46,233,098 | 77% | $13,766,902 | $27,510,293 | $31,084,215 | *0.60x* | *1.25x* | *8.9%* | 06/30/24 |
| 2018 | Long Wharf Real Estate Partners VI | $33,907,531 | $50,000,000 | $50,000,000 | 100% | $0 | $25,173,439 | $33,907,531 | *0.50x* | *1.18x* | *11.1%* | 06/30/25 |
| 2020 | Covenant Apartment Fund X | $25,796,909 | $30,000,000 | $25,507,333 | 85% | $4,492,667 | $10,513,764 | $25,796,909 | *0.41x* | *1.42x* | *8.3%* | 09/30/25 |
| 2021 | Singerman Real Estate Opportunity Fund IV | $23,667,097 | $35,000,000 | $25,952,500 | 74% | $9,047,500 | $5,074,955 | $23,667,097 | *0.20x* | *1.11x* | *8.5%* | 09/30/25 |
| 2022 | LBA Logistics Value Fund IX, L.P. | $24,445,081 | $40,000,000 | $20,615,384 | 52% | $19,384,616 | $0 | $24,445,081 | *0.00x* | *1.19x* | *-2.8%* | 09/30/25 |
| 2022 | Covenant Apartment Fund XI | $30,311,391 | $30,000,000 | $20,850,000 | 70% | $38,076,924 | $1,518,832 | $30,311,391 | *0.07x* | *1.53x* | *7.1%* | 09/30/25 |
| 2022 | KSL Capital Partners VI | $8,263,113 | $30,000,000 | $11,804,414 | 39% | $18,195,586 | $489,911 | $8,263,113 | *0.04x* | *0.74x* | *-21.3%* | 06/30/25 |
| 2023 | Merit Hill V | $24,584,832 | $30,000,000 | $31,631,775 | 105% | -$1,631,774 | $7,084,980 | $24,584,832 | *0.22x* | *1.00x* | *0.0%* | 09/30/25 |
| 2024 | Juniper Capital IV, L.P. | $6,885,930 | $30,000,000 | $6,450,368 | 22% | $23,549,632 | $59,700 | $6,885,930 | *0.01x* | *1.08x* | *9.4%* | 09/30/25 |
| 2024 | Juniper High Noon Partners, L.P. | $4,561,579 | $5,000,000 | $3,309,091 | 66% | $1,690,909 | $0 | $3,313,080 | *0.00x* | *1.38x* | *46.1%* | 12/31/24 |
| 2024 | Landmark Real Estate Partners IX | $12,274,616 | $40,000,000 | $11,556,811 | 29% | $28,443,189 | $0 | $9,936,719 | *0.00x* | *1.06x* | *11.5%* | 06/30/25 |
| 2024 | LRAF Holdings 21 Project Yeti II | $15,674,993 | $25,000,000 | $17,696,122 | 71% | $7,303,878 | $2,912,633 | $13,693,257 | *0.16x* | *1.05x* | *11.1%* | 06/30/25 |
| 2024 | Post Oak Energy Partners GP V, LP | $33,199,439 | $40,000,000 | $39,692,958 | 99% | $307,042 | $9,747,861 | $33,199,439 | *0.25x* | *1.08x* | *42.6%* | 09/30/25 |
| 2025 | Covenant Apartment Fund XII | $3,135,243 | $30,000,000 | $3,300,000 | 11% | $26,700,000 | $0 | N/A | N/A | N/A | *N/A* | N/A |
| 2025 | Sculptor Real Estate V | $1,146,251 | $50,000,000 | $1,605,924 | 3% | $48,394,076 | $131,570 | 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** | **$278,393,043** | $605,000,000 | $359,843,495 | 59% | $274,083,430 | $147,042,687 | $269,246,561 | *0.41x* | *1.18x* | | |
| | **% of Portfolio (Market Value)** | ***4.2%*** | | | | | | | | | | |

[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.

## Attribution Effects
## Last Three Months




## Performance Attribution

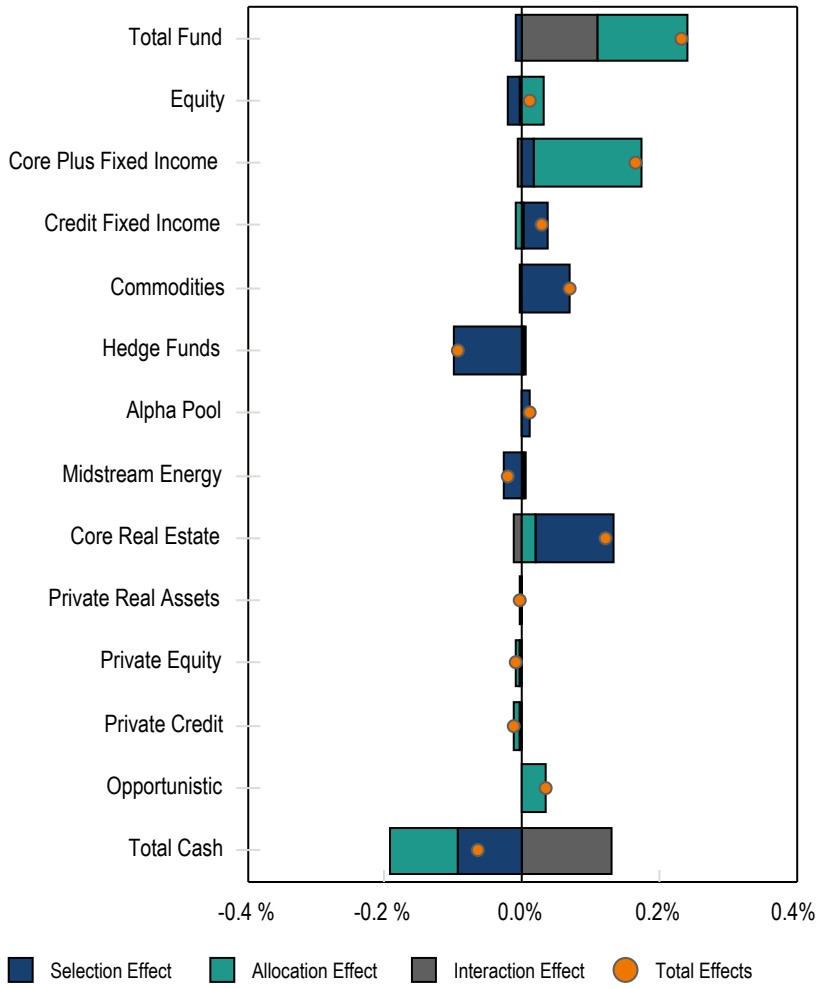
| | Last Three Months |
|---|---|
| Wtd. Actual Return | 4.4 |
| Wtd. Index Return | 4.2 |
| **Excess Return** | **0.2** |
| Selection Effect | 0.0 |
| Allocation Effect | 0.1 |
| Interaction Effect | 0.1 |

## 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 | 33.8 | 33.0 | 7.6 | 7.7 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Core Plus Fixed Income | 10.5 | 17.0 | 1.9 | 1.8 | 0.1 | 0.0 | 0.2 | 0.0 | 0.2 |
| Credit Fixed Income | 10.5 | 10.0 | 2.6 | 2.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Commodities | 3.9 | 4.0 | 5.4 | 3.6 | 1.8 | 0.1 | 0.0 | 0.0 | 0.1 |
| Hedge Funds | 9.7 | 10.0 | 2.3 | 3.3 | -1.0 | -0.1 | 0.0 | 0.0 | -0.1 |
| Alpha Pool | 2.5 | 2.5 | 2.2 | 1.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Midstream Energy | 4.8 | 5.0 | 0.8 | 1.3 | -0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Core Real Estate | 5.5 | 6.0 | 2.4 | 0.5 | 1.8 | 0.1 | 0.0 | 0.0 | 0.1 |
| Private Real Assets | 4.0 | 4.0 | 2.8 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Private Equity | 5.4 | 5.0 | 4.9 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Private Credit | 6.4 | 6.0 | 3.3 | 3.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Opportunistic | 2.5 | 0.0 | 5.5 | 2.4 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Cash | 0.7 | -2.5 | 4.8 | 1.1 | 3.7 | -0.1 | -0.1 | 0.1 | -0.1 |
| **Total Fund** | **100.0** | **100.0** | **4.4** | **4.2** | **0.2** | **0.0** | **0.1** | **0.1** | **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.*

## Attribution Effects Fiscal YTD




## Performance Attribution

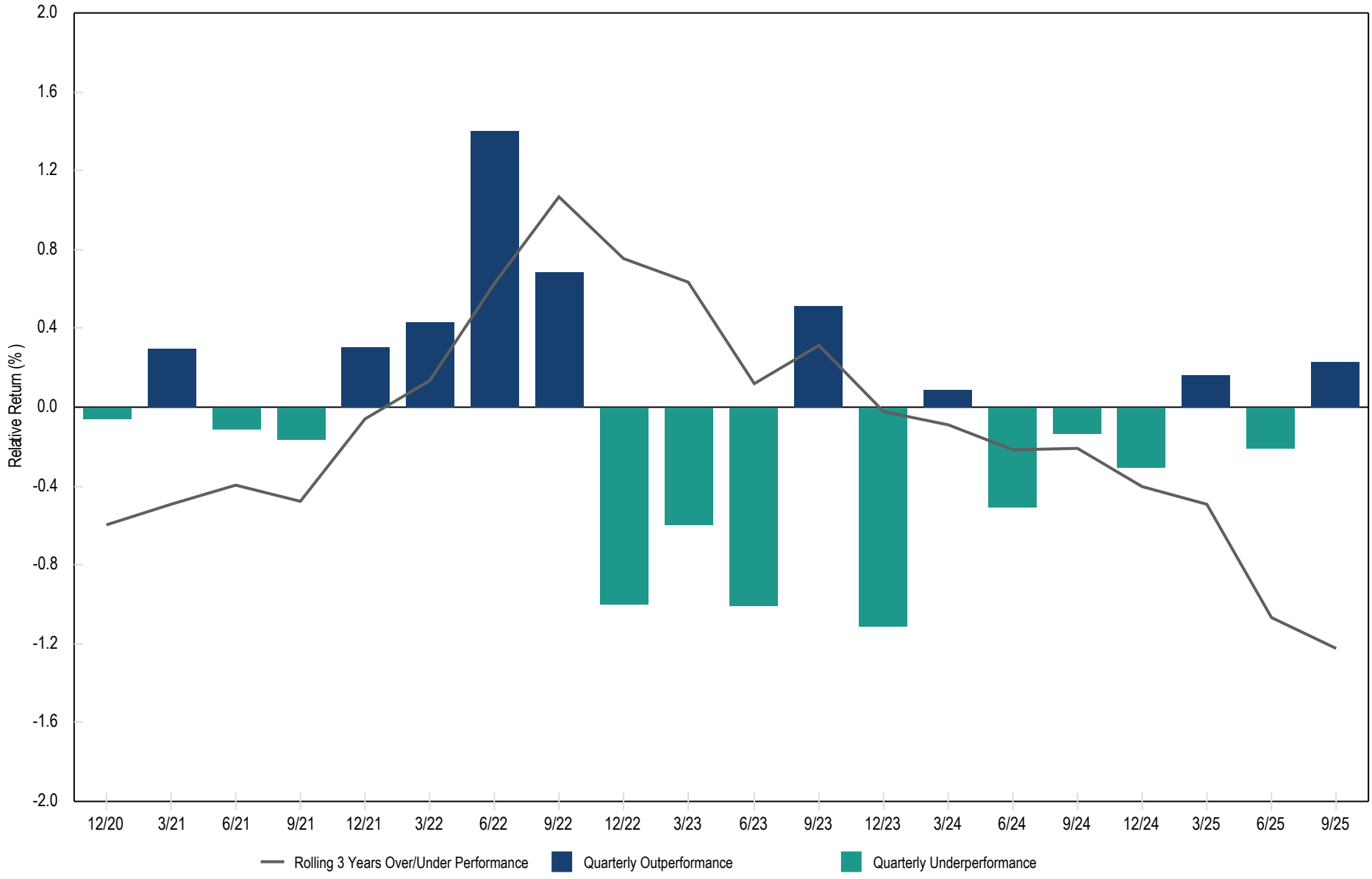
| | Fiscal YTD |
|---|---|
| Wtd. Actual Return | 4.4 |
| Wtd. Index Return | 4.2 |
| **Excess Return** | **0.2** |
| Selection Effect | 0.0 |
| Allocation Effect | 0.1 |
| Interaction Effect | 0.1 |

## Attribution Summary FYTD

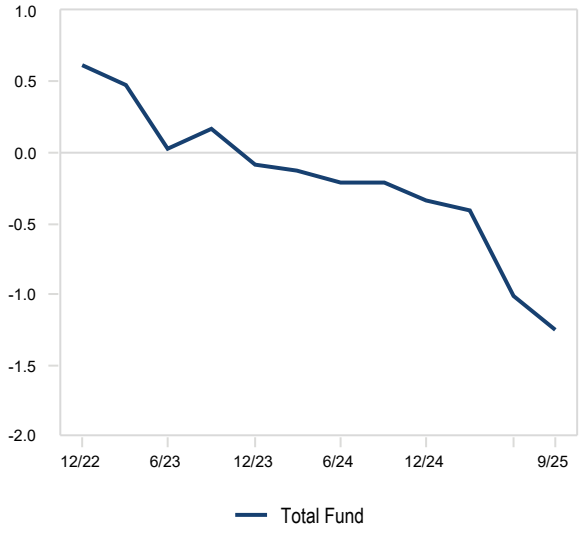
| | Actual Weight (%) | Policy Weight (%) | Wtd. Actual Return | Wtd. Index Return | Excess Return | Selection Effect | Allocation Effect | Interaction Effects | Total Effects |
|---|---|---|---|---|---|---|---|---|---|
| Equity | 33.8 | 33.0 | 7.6 | 7.7 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Core Plus Fixed Income | 10.5 | 17.0 | 1.9 | 1.8 | 0.1 | 0.0 | 0.2 | 0.0 | 0.2 |
| Credit Fixed Income | 10.5 | 10.0 | 2.6 | 2.3 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Commodities | 3.9 | 4.0 | 5.4 | 3.6 | 1.8 | 0.1 | 0.0 | 0.0 | 0.1 |
| Hedge Funds | 9.7 | 10.0 | 2.3 | 3.3 | -1.0 | -0.1 | 0.0 | 0.0 | -0.1 |
| Alpha Pool | 2.5 | 2.5 | 2.2 | 1.8 | 0.4 | 0.0 | 0.0 | 0.0 | 0.0 |
| Midstream Energy | 4.8 | 5.0 | 0.8 | 1.3 | -0.5 | 0.0 | 0.0 | 0.0 | 0.0 |
| Core Real Estate | 5.5 | 6.0 | 2.4 | 0.5 | 1.8 | 0.1 | 0.0 | 0.0 | 0.1 |
| Private Real Assets | 4.0 | 4.0 | 2.8 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Private Equity | 5.4 | 5.0 | 4.9 | 5.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Private Credit | 6.4 | 6.0 | 3.3 | 3.4 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Opportunistic | 2.5 | 0.0 | 5.5 | 2.4 | 3.1 | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Cash | 0.7 | -2.5 | 4.8 | 1.1 | 3.7 | -0.1 | -0.1 | 0.1 | -0.1 |
| **Total Fund** | **100.0** | **100.0** | **4.4** | **4.2** | **0.2** | **0.0** | **0.1** | **0.1** | **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.*

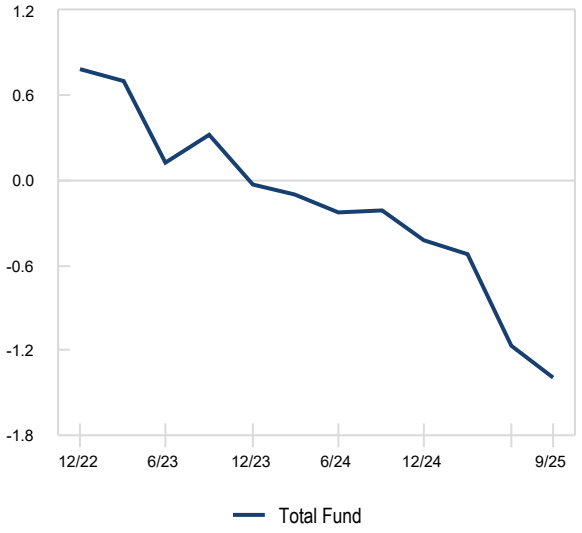
## Rolling 3 Year Annualized Excess Performance



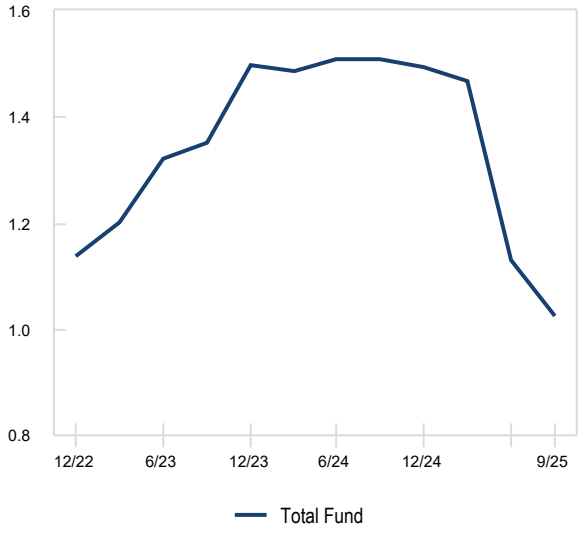
## Rolling Information Ratio



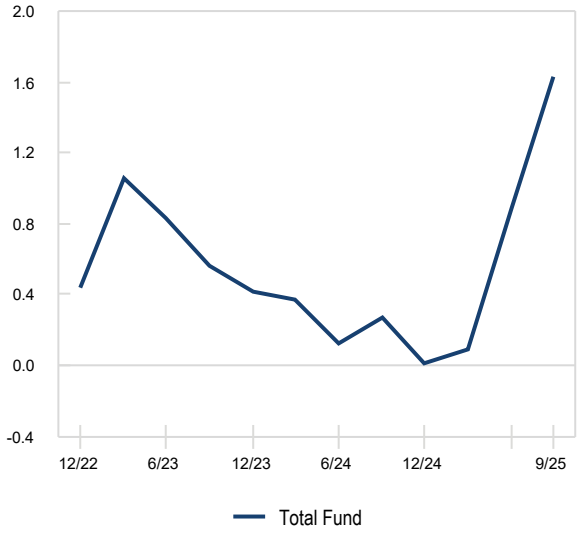

## Rolling Annual Excess Benchmark Return



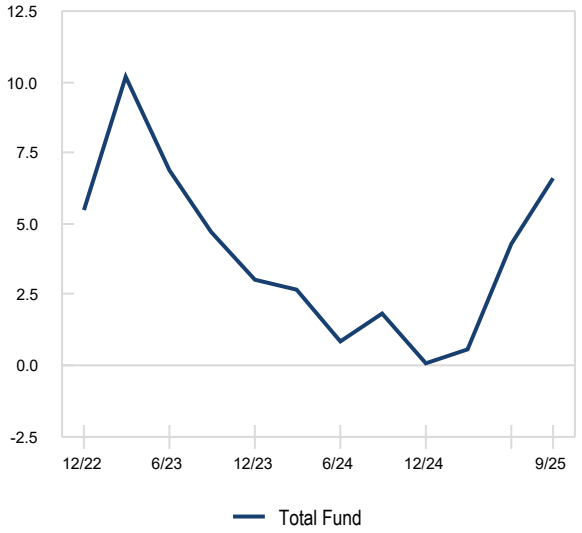

## Rolling Tracking Error



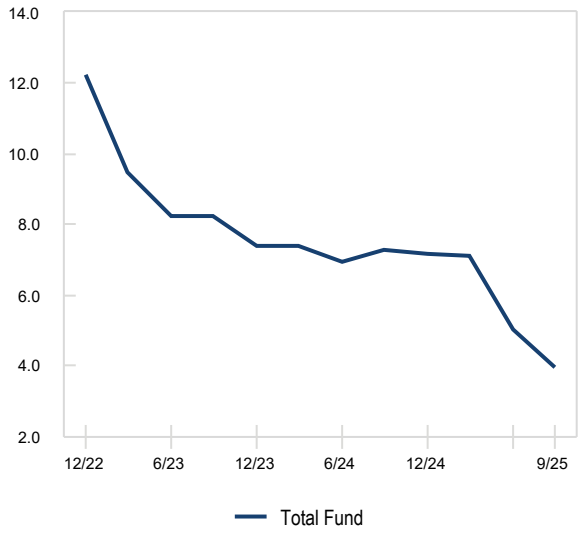

## Rolling Sharpe Ratio



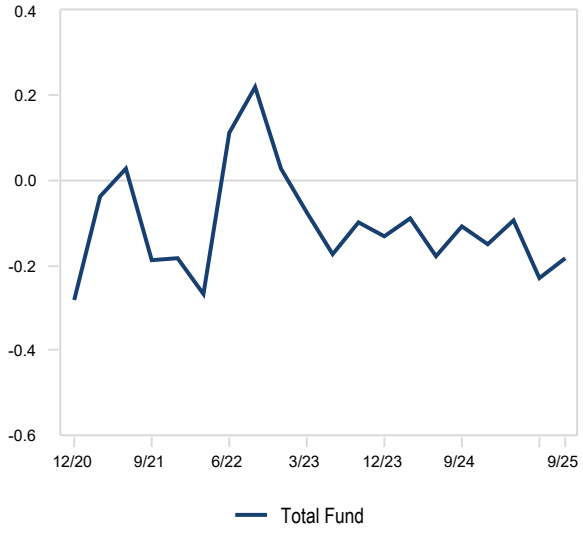

## Rolling Annual Excess Risk Free Return



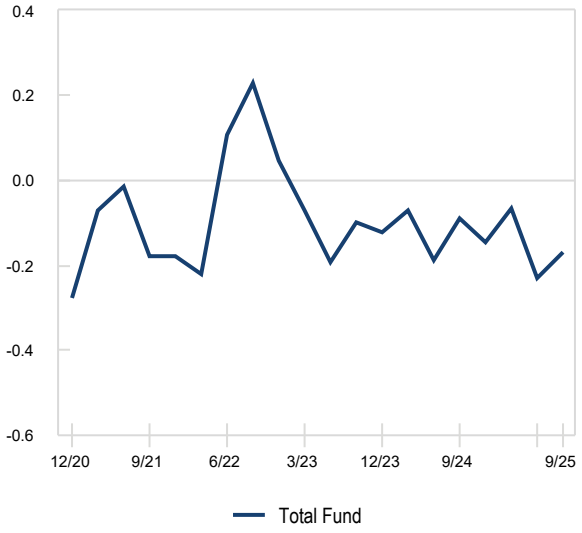

## Rolling Annualized Standard Deviation



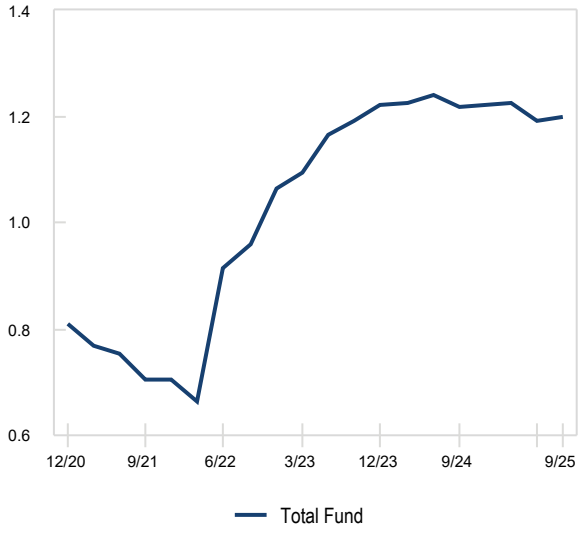
## Rolling Information Ratio



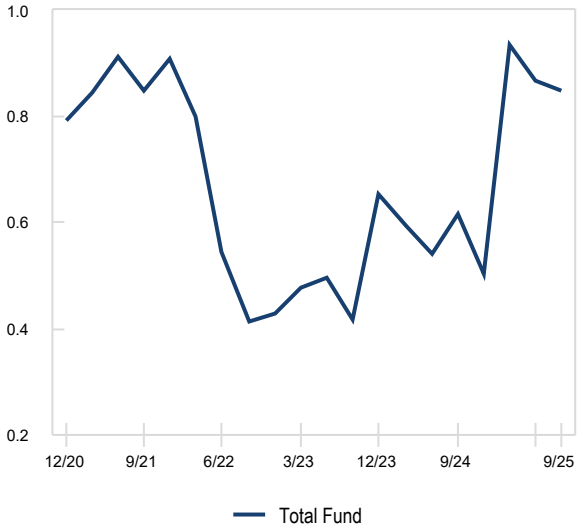

## Rolling Annual Excess Benchmark Return



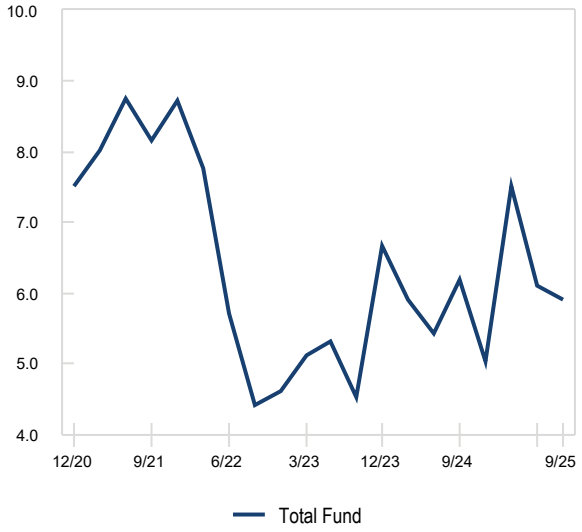

## Rolling Tracking Error



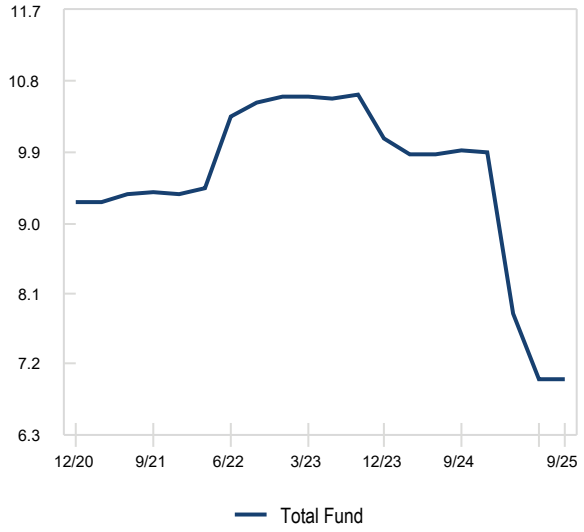

## Rolling Sharpe Ratio




## 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** | **2,163,118,845** | | **-40,471** | **25,898** | **-22,984,014** | **164,725,761** | **2,304,846,019** |
| Mellon DB SL Stock Index Fund | 655,409,933 | | | | | 53,276,897 | 708,686,830 |
| PIMCO StocksPLUS | 168,332,044 | | | | | 14,065,670 | 182,397,714 |
| Chilton High Conviction Equity | 160,783,574 | | | -75,754 | 30,000,000 | 12,532,284 | 203,240,105 |
| AB US Small Cap Value Equity | 67,984,676 | | -40,471 | | -72,864,014 | 4,920,124 | 315 |
| Geneva Capital Small Cap Growth | 102,581,759 | | | | | -2,213,538 | 100,368,221 |
| Russell 2000 Overlay | | | | | 39,880,000 | 1,495,160 | 41,375,160 |
| Mellon DB SL World ex-US Index Fund | 382,686,441 | | | | | 20,700,468 | 403,386,908 |
| Cevian Capital II | 53,594,602 | | | | | 4,196,545 | 57,791,147 |
| Lazard Japanese Equity | 160,482,986 | | | | | 16,266,019 | 176,749,005 |
| American Century Non-US Small Cap | 75,445,746 | | | | -20,000,000 | 3,612,853 | 59,058,599 |
| Dalton Japan Long Only | 86,433,639 | | | 101,652 | | 6,665,475 | 93,200,766 |
| DFA Emerging Markets Value I | 62,205,550 | | | | | 4,769,345 | 66,974,895 |
| Mellon Emerging Markets Stock Index Fund | 23,588,101 | | | | | 2,598,357 | 26,186,458 |
| Carrhae Capital Long Master Fund Ltd | 85,455,259 | | | | | 13,189,959 | 98,645,219 |
| ABS Emerging Market Direct | 78,132,749 | | | | | 8,649,920 | 86,782,669 |
| Transition Equity | 1,785 | | | | | 224 | 2,008 |
| | | | | | | | |
| **Fixed Income** | **1,385,395,986** | **766,087** | **-273,165** | | **-28,135,375** | **30,663,841** | **1,388,417,375** |
| Fixed Income Beta Exposure | 97,845,705 | 627,812 | -137,253 | | -370,000 | 1,566,941 | 99,533,205 |
| Mellon DB SL Aggregate Bond Index Fund | 139,786,570 | | | | | 2,847,891 | 142,634,460 |
| PIMCO Core Plus | 183,486,399 | | | | | 4,649,076 | 188,135,475 |
| Aristotle Short Duration Bond Strategy | 256,555,255 | | | | 10,000,000 | 4,100,467 | 270,655,722 |
| TCW Securitized Opportunities | 93,049,527 | | | | -93,050,069 | 542 | |
| KKR US Broadly Syndicated Loan Fund | 178,313,524 | | | | -3,782,697 | 2,755,000 | 177,285,827 |
| Guggenheim Structured Credit | 100,257,314 | | | | 65,000,000 | 3,320,713 | 168,578,027 |
| Schroders Credit | 155,000,000 | | | | 10,000,000 | 3,248,455 | 168,248,455 |
| Stone Harbor Emerging Markets Debt Blend Portfolio | 15,884,186 | 5,139 | | | -15,932,609 | 43,284 | |
| PIMCO EMD | 164,964,265 | | | | | 8,131,297 | 173,095,562 |
| Transition Fixed Income | 253,242 | 133,135 | -135,912 | | | 177 | 250,641 |
| | | | | | | | |
| **Commodities** | **249,749,478** | | **-122,437,984** | | **132,437,984** | **14,072,898** | **273,822,376** |
| Wellington Commodities | 249,749,478 | | -122,437,984 | | 132,437,984 | 14,072,898 | 273,822,376 |

| | Estimated Beginning Market Value | Contributions | Withdrawals | Fees | Net Transfers | Net Investment Change | Estimated Ending Market Value |
|---|---|---|---|---|---|---|---|
| **Hedge Funds** | **602,515,857** | | **-201,542** | | **61,516,686** | **14,420,707** | **678,251,707** |
| Aristeia International Limited | 79,678,154 | | | | | 1,660,673 | 81,338,827 |
| Brevan Howard Fund | 59,502,698 | | | | | 579,411 | 60,082,109 |
| D.E. Shaw Composite Fund | 70,455,222 | | | | | 2,915,793 | 73,371,015 |
| HBK Fund II | 54,684,514 | | | | | 1,362,442 | 56,046,956 |
| Hudson Bay Cap Structure Arbitrage Enhanced Fund | 86,620,566 | | | | | 1,613,938 | 88,234,504 |
| Indus Pacific Opportunities Fund | 55,510,741 | | | | | 745,505 | 56,256,246 |
| Pharo Macro Fund | 82,460,889 | | | | | 1,834,731 | 84,295,620 |
| PIMCO Commodity Alpha Fund | 75,840,255 | | | | | 3,469,668 | 79,309,923 |
| Elliott Associates | 37,762,817 | | -201,542 | | 11,516,686 | 682,675 | 49,760,635 |
| Hawk Ridge Partners II | | | | | 50,000,000 | -444,128 | 49,555,872 |
| | | | | | | | |
| **Alpha Pool** | **158,822,269** | | | | **490,000** | **3,481,984** | **162,794,253** |
| Hudson Bay - Alpha Pool | 39,439,929 | | | | 120,981 | 613,874 | 40,174,784 |
| Davidson Kempner Institutional Partners | 55,923,059 | | | | 173,341 | 1,555,825 | 57,652,225 |
| HBK Fund II | 20,287,798 | | | | 62,734 | 442,728 | 20,793,260 |
| Garda Fixed Income Relative Value Opportunity Fund | 43,171,484 | | | | 132,944 | 869,556 | 44,173,984 |
| | | | | | | | |
| **Midstream Energy** | **313,908,819** | | | **-116,423** | **15,703,778** | **3,077,073** | **332,573,246** |
| Harvest Midstream | 193,380,301 | | | -116,423 | 17,555,976 | 1,091,494 | 211,911,348 |
| PIMCO Midstream | 120,528,518 | | | | -1,852,199 | 1,985,579 | 120,661,898 |
| | | | | | | | |
| **Core Real Estate** | **359,902,014** | | **-218,106** | | **9,566,200** | **8,751,509** | **378,001,618** |
| ASB Allegiance Real Estate Fund | 116,581,713 | | | | -792,139 | 1,284,208 | 117,073,782 |
| JPMCB Strategic Property Fund | 96,612,701 | | -218,106 | | -4,657,304 | 1,012,014 | 92,749,305 |
| Blue Owl Real Estate Fund VI | 32,709,368 | | | | 7,845,318 | 2,757,489 | 43,312,175 |
| Sculptor Diversified REIT | 48,867,215 | | | | -860,001 | 2,613,416 | 50,620,629 |
| Hudson Bay Real Estate Opportunities | 28,877,922 | | | | 8,303,732 | 969,609 | 38,151,263 |
| TPG AG Essential Housing III | 20,859,829 | | | | | | 20,859,829 |
| BPC Real Estate Debt Fund LP | 15,393,266 | | | | -273,406 | 114,774 | 15,234,634 |

| | Estimated Beginning Market Value | Contributions | Withdrawals | Fees | Net Transfers | Net Investment Change | Estimated Ending Market Value |
|---|---|---|---|---|---|---|---|
| **Private Real Assets** | **252,660,175** | | **-381,185** | | **18,914,303** | **7,199,750** | **278,393,043** |
| Invesco Real Estate Value-Add Fund IV | 140,304 | | | | | -2,318 | 137,986 |
| Landmark Real Estate Partners VIII | 31,084,215 | | | | -559,170 | -123,991 | 30,401,054 |
| Long Wharf Real Estate | 33,719,376 | | | | -396,432 | 584,587 | 33,907,531 |
| Covenant Apartment Fund X | 25,660,024 | | | | -51,171 | 188,056 | 25,796,909 |
| Singerman Real Estate Opportunity Fund IV | 21,868,351 | | | | 2,931,250 | -1,132,504 | 23,667,097 |
| LBA Logistics Value Fund IX, L.P. | 24,641,187 | | | | | -196,105 | 24,445,081 |
| Covenant Apartment Fund XI, LP | 29,448,634 | | | | -683,755 | 1,546,512 | 30,311,391 |
| KSL Capital Partners VI | 8,133,486 | | | | 411,249 | -281,622 | 8,263,113 |
| Merit Hill Self-Storage V, LP. | 19,021,731 | | | | 5,699,601 | -136,500 | 24,584,832 |
| Juniper Capital IV, L.P | 5,707,996 | | | | 1,335,360 | -157,426 | 6,885,930 |
| Landmark Real Estate Partners IX | 9,936,719 | | | | 1,812,824 | 525,073 | 12,274,616 |
| Juniper High Noon Partners, L.P | 4,673,121 | | | | | -111,542 | 4,561,579 |
| LRAF Holdings 21 Yeti II LP | 13,693,257 | | | | 1,509,211 | 472,526 | 15,674,993 |
| Post Oak Energy Partners GP V, LP | 24,104,783 | | | | 3,030,985 | 6,063,671 | 33,199,439 |
| Covenant Apartment Fund XII | 826,991 | | | | 2,400,000 | -91,748 | 3,135,243 |
| **Private Equity** | **334,025,975** | | | **-150,000** | **11,747,447** | **16,868,335** | **362,491,756** |
| Abbott VI | 9,941,607 | | | | -3,976,382 | 2,439,496 | 8,404,721 |
| Pantheon Secondary III | 535,597 | | | | | | 535,597 |
| Pantheon V | 30,817 | | | | | | 30,817 |
| Pantheon VI | 311,635 | | | | | | 311,635 |
| Pantheon VII | 3,376,418 | | | | -250,000 | 42,859 | 3,169,277 |
| Vista Foundation Fund IV | 23,417,581 | | | | 889,290 | 249,056 | 24,555,927 |
| Crown Global Secondaries V Master S.C.Sp | 42,979,853 | | | | -1,600,000 | 932,198 | 42,312,051 |
| Crown Global Secondaries VI Master S.C.Sp | 5,845,574 | | | | 1,800,000 | 1,159,957 | 8,805,531 |
| Brighton Park Capital Fund I | 43,650,978 | | | | -426,459 | 1,292,265 | 44,516,784 |
| Warren Equity Partners Fund III | 39,342,340 | | | | -144,151 | 953,739 | 40,151,928 |
| Peak Rock Capital Fund III | 28,841,956 | | | | -1,080,324 | 1,328,295 | 29,089,927 |
| Level Equity Growth Partners V | 14,139,808 | | | | | 767,989 | 14,907,797 |
| Level Equity Opportunities Fund 2021 | 11,959,372 | | | | | 777,812 | 12,737,184 |
| Linden Capital Partners V LP | 20,425,051 | | | | 2,147,211 | 782,466 | 23,354,728 |
| Rubicon Technology Partners IV L.P. | 15,295,404 | | | -150,000 | 317,939 | 868,107 | 16,331,450 |
| OrbiMed Private Investments IX, LP | 4,622,243 | | | | 616,677 | -135,156 | 5,103,764 |
| Brighton Park Capital Fund II, L.P | 11,812,393 | | | | 5,519,949 | 358,179 | 17,690,521 |
| Linden Co-Investment V LP | 7,246,467 | | | | 2,157,986 | 847,120 | 10,251,573 |

| | Estimated Beginning Market Value | Contributions | Withdrawals | Fees | Net Transfers | Net Investment Change | Estimated Ending Market Value |
|---|---|---|---|---|---|---|---|
| Warren Equity Partners Fund IV | 24,482,939 | | | | | 2,153,850 | 26,636,789 |
| WEP IV TS Co-Investment, L.P. | 9,677,226 | | | | | 1,173,124 | 10,850,350 |
| Parthenon Investors VII | 3,316,568 | | | | 3,863,669 | -209,381 | 6,970,856 |
| Longreach Capital Partners | 3,392,495 | | | | | 363,035 | 3,755,530 |
| Blue Owl Strategic Equity Partners | 5,241,421 | | | | | 270,008 | 5,511,429 |
| WEP TreeCo Co-Investment, L.P. | 3,790,842 | | | | | 453,317 | 4,244,159 |
| Accel-KKR Capital Partners VII | 349,389 | | | | 1,598,140 | | 1,947,529 |
| **Private Credit** | **404,673,592** | **1,117,995** | **-7,462,475** | **-275,868** | **2,924,715** | **13,489,480** | **414,613,828** |
| DC Value Recovery Fund IV | 16,672,836 | | -5,870,392 | | | -196,098 | 10,606,346 |
| Sixth Street TAO Partners (B) | 52,941,110 | | | | -4,656,986 | 2,144,346 | 50,428,470 |
| Brookfield Real Estate Finance Fund V | 5,593,475 | | | | -97,941 | -4,978 | 5,490,556 |
| Magnetar Constellation Fund V | 10,759,679 | | | -23,774 | -1,289,738 | -17,473 | 9,570,861 |
| H.I.G. Bayside Loan Opportunity Fund V | 38,993,387 | | | | -1,836,281 | 941,842 | 38,098,948 |
| Blue Torch Credit Opportunities Fund II | 12,893,298 | | | | | 221,077 | 13,114,375 |
| Fortress Credit Opportunites Fund V Expansion | 33,136,198 | | | | -1,223,632 | 869,552 | 32,782,118 |
| Fortress Lending Fund II | 14,264,227 | | | | -499,088 | -118,475 | 13,646,664 |
| Blue Torch Credit Opportunities Fund III | 34,378,956 | | | | -536,353 | 1,228,688 | 35,071,291 |
| Fortress Lending Fund III | 28,814,785 | | | | -5,809,456 | -165,306 | 22,840,023 |
| OrbiMed Royalty & Credit Opportunities IV | 14,181,820 | 1,117,995 | -1,592,083 | | 4,950,000 | 317,725 | 18,979,678 |
| Cerberus Business Finance V | 21,847,785 | | | -252,094 | 2,151,834 | 1,082,130 | 24,829,655 |
| Silver Point Specialty Credit Fund III, L.P. | 11,835,778 | | | | 413,949 | 367,793 | 12,617,520 |
| Ares Pathfinder II | 11,462,964 | | | | 4,310,807 | 158,680 | 15,932,451 |
| Oak Hill Advisors Structured Products Fund III, L.P. | 18,163,625 | | | | | 83,939 | 18,247,564 |
| ITE Rail Fund, L.P | 34,870,595 | | | | -614,706 | 6,574,499 | 40,830,388 |
| Ares Senior Direct Lending Fund III LP | 7,949,978 | | | | 372,788 | 286,712 | 8,609,478 |
| HPS Special Situations Opportunity Fund II, L.P. | 9,052,334 | | | | 2,307,555 | -18,148 | 11,341,741 |
| Castlelake Aviation V Stable Yield, L.P. | 3,978,047 | | | | 1,323,470 | 209,752 | 5,511,269 |
| Fortress Credit Opportunites Fund VI Expansion | 10,871,340 | | | | -1,377,629 | 18,286 | 9,511,997 |
| Quantum Capital Solutions II | 7,545,293 | | | | 3,617,773 | -535,694 | 10,627,372 |
| Quantum Capital Solutions II Co-Investment Fund, LP | 1,419,205 | | | | 668,349 | 29,071 | 2,116,625 |
| Blue Torch Credit Opportunities Fund IV | 3,046,878 | | | | 750,000 | 11,558 | 3,808,436 |

| | Estimated Beginning Market Value | Contributions | Withdrawals | Fees | Net Transfers | Net Investment Change | Estimated Ending Market Value |
|---|---|---|---|---|---|---|---|
| **Opportunistic** | **166,383,003** | | | | **-14,114,800** | **8,333,987** | **161,199,707** |
| Sixth Street TAO Partners (D) | 86,520,286 | | | | -12,357,151 | 3,654,645 | 78,415,296 |
| Aristeia Select Opportunities II | 58,978,303 | | | | | 3,417,767 | 62,396,070 |
| River Birch International - Opportunistic Investment | 4,478,943 | | | | -4,391,767 | 279,123 | 366,299 |
| Hudson Bay Special Opportunities Fund LP | 4,553,071 | | | | 2,634,118 | -228,348 | 6,958,841 |
| Pharo Opportunities Fund SPC | 11,852,400 | | | | | 1,210,800 | 13,063,200 |
| | | | | | | | |
| **Cash** | **250,828,300** | **38,637,710** | **-10,166,407** | | **-188,066,924** | **2,380,855** | **93,592,834** |
| Short Term Investment Funds | 134,342,383 | 38,637,710 | -10,166,407 | | -143,066,924 | 712,136 | 20,438,198 |
| BlackRock Short Duration Fund | 116,485,917 | | | | -45,000,000 | 1,668,719 | 73,154,636 |

| | Estimated Beginning Market Value | Contributions | Withdrawals | Fees | Net Transfers | Net Investment Change | Estimated Ending Market Value |
|---|---|---|---|---|---|---|---|
| **Other** | **-197,343,601** | **173,169,817** | **-99,125,218** | | | | **-123,299,002** |
| Parametric Cash Overlay | 15,348,844 | 48,387,266 | -47,341,092 | | | | 16,395,018 |
| Goldman Sachs Cash Account | -2,405,723 | 9,529,316 | -8,108,247 | | | | -984,654 |
| Futures Offset | -212,485,722 | 115,253,236 | -43,675,879 | | | | -140,908,365 |
| Collateral Cash | 2,199,000 | | | | | | 2,199,000 |

## Portfolio Reconciliation

| | 3 Mo | Fiscal YTD | 1 Yr | 3 Yrs | 5 Yrs | 10 Yrs |
|---|---|---|---|---|---|---|
| Beginning Market Value | 6,444,640,714 | 6,444,640,714 | 6,109,339,176 | 4,901,023,930 | 4,580,444,416 | 3,514,574,861 |
| Contributions | 988,994,652 | 988,994,652 | 4,539,603,017 | 8,967,506,177 | 16,933,617,039 | 23,513,488,639 |
| Withdrawals | -1,015,609,595 | -1,015,609,595 | -4,593,408,343 | -9,098,837,595 | -17,231,563,532 | -24,260,075,452 |
| Fees | -516,393 | -516,393 | -1,917,785 | -3,929,550 | -33,052,733 | -112,238,632 |
| Net Cash Flows | -26,614,943 | -26,614,943 | -53,805,326 | -131,331,418 | -297,946,493 | -746,586,813 |
| Net Investment Change | 287,672,990 | 287,672,990 | 650,164,911 | 1,936,006,249 | 2,423,200,838 | 3,937,710,712 |
| Ending Market Value | 6,705,698,761 | 6,705,698,761 | 6,705,698,761 | 6,705,698,761 | 6,705,698,761 | 6,705,698,761 |
| Net Change $ | 261,058,047 | 261,058,047 | 596,359,585 | 1,804,674,831 | 2,125,254,345 | 3,191,123,899 |

*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 September 30, 2025**

| | A | B | C | D | E | F | G | H | I | J | K | L |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| A | 1.00 | | | | | | | | | | | |
| B | 0.97 | 1.00 | | | | | | | | | | |
| C | 0.91 | 0.95 | 1.00 | | | | | | | | | |
| D | 0.90 | 0.92 | 0.76 | 1.00 | | | | | | | | |
| E | 0.71 | 0.72 | 0.53 | 0.71 | 1.00 | | | | | | | |
| F | 0.80 | 0.76 | 0.62 | 0.80 | 0.69 | 1.00 | | | | | | |
| G | 0.72 | 0.67 | 0.54 | 0.72 | 0.61 | 0.98 | 1.00 | | | | | |
| H | 0.87 | 0.84 | 0.75 | 0.80 | 0.67 | 0.87 | 0.79 | 1.00 | | | | |
| I | 0.83 | 0.81 | 0.64 | 0.85 | 0.82 | 0.92 | 0.86 | 0.81 | 1.00 | | | |
| J | 0.36 | 0.27 | 0.18 | 0.27 | 0.43 | 0.12 | 0.05 | 0.18 | 0.28 | 1.00 | | |
| K | 0.38 | 0.38 | 0.41 | 0.33 | 0.05 | 0.17 | 0.11 | 0.41 | 0.17 | 0.10 | 1.00 | |
| L | 0.00 | -0.09 | -0.10 | -0.08 | -0.03 | -0.17 | -0.19 | -0.12 | -0.13 | 0.06 | -0.08 | 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 | 0.7 | 0.8 | 1.0 | 11.7 | -1.0 | -1.4 | 1.3 | 1.2 | 6.6 | 5.7 | 2.1 | 87.9 | 83.8 |
| Equity | -0.4 | 1.0 | 1.0 | 21.4 | -0.7 | -1.1 | 1.3 | 1.3 | 15.7 | 12.3 | 2.4 | 97.1 | 100.0 |
| Domestic Equity | -1.6 | 1.0 | 1.0 | 22.2 | -1.6 | -2.0 | 1.0 | 1.2 | 16.5 | 13.7 | 2.2 | 96.2 | 103.3 |
| International Developed Equity | 0.8 | 1.0 | 1.0 | 21.2 | -0.1 | -0.1 | 1.8 | 1.2 | 15.6 | 12.8 | 2.3 | 98.7 | 98.0 |
| Emerging Markets Equity | 2.4 | 1.0 | 1.0 | 20.3 | 0.8 | 2.1 | 2.2 | 1.0 | 15.0 | 14.5 | 2.1 | 102.8 | 92.5 |
| Fixed Income | -0.1 | 1.0 | 1.0 | 6.6 | -0.3 | -0.1 | 0.5 | 0.3 | 1.9 | 5.7 | 0.5 | 99.6 | 101.7 |
| Core Fixed Income | -0.3 | 1.0 | 1.0 | 4.5 | -0.9 | -0.4 | 0.5 | 0.0 | -0.1 | 6.2 | 0.0 | 96.0 | 99.6 |
| High Yield/ Specialty Credit | 0.6 | 0.7 | 0.8 | 8.4 | -1.1 | -2.5 | 2.1 | 0.9 | 3.5 | 3.9 | 1.8 | 75.1 | 65.8 |
| Emerging Market Debt | 0.9 | 1.0 | 1.0 | 12.8 | 1.0 | 1.0 | 0.9 | 1.0 | 7.8 | 8.0 | 1.8 | 103.3 | 94.4 |
| Commodities | 5.8 | 0.9 | 0.9 | 8.4 | 1.5 | 5.6 | 3.6 | 0.4 | 3.8 | 9.4 | 0.6 | 98.3 | 52.6 |
| Hedge Funds | 6.0 | 0.2 | 0.1 | 8.3 | -1.3 | -4.2 | 3.0 | 2.0 | 3.3 | 1.7 | 3.8 | 50.8 | -209.2 |
| Alpha Pool | 18.9 | -1.7 | 0.0 | 2.4 | -3.0 | -6.5 | 2.1 | -1.1 | -2.2 | 2.0 | -1.2 | 28.3 | - |
| Midstream Energy | 1.9 | 0.8 | 0.9 | 21.9 | -0.5 | -2.0 | 4.1 | 1.2 | 16.1 | 13.0 | 2.5 | 85.9 | 73.4 |
| Core Real Estate | -3.3 | 1.2 | 0.7 | -9.4 | -1.2 | -4.0 | 3.6 | -2.1 | -14.3 | 6.7 | -1.9 | 29.9 | 147.8 |
| Private Real Assets | 0.0 | 1.0 | 1.0 | 0.3 | - | 0.0 | 0.0 | -1.0 | -4.3 | 4.0 | -1.2 | 100.0 | 100.0 |
| Private Equity | 0.0 | 1.0 | 1.0 | 9.7 | -0.6 | 0.0 | 0.0 | 1.1 | 4.7 | 4.5 | 2.8 | 99.9 | 100.0 |
| Private Credit | -0.1 | 1.0 | 1.0 | 10.2 | -1.9 | -0.1 | 0.0 | 1.1 | 5.1 | 4.6 | 4.8 | 99.4 | 102.6 |
| Opportunistic | - | - | - | 10.1 | 0.1 | 0.1 | 8.8 | 0.6 | 5.4 | 8.8 | 1.1 | 104.9 | - |

# 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 | 25 | 25 | 20 | 20 | 27 | 27 | 25 | 25 | 19 | 19 | 27 | 27 | 29 | 29 |
| Down Market Periods | 11 | 11 | 16 | 16 | 9 | 9 | 11 | 11 | 17 | 17 | 9 | 9 | 7 | 7 |
| Maximum Return | 8.39 | 9.24 | 4.23 | 4.53 | 3.77 | 4.55 | 7.56 | 7.35 | 6.99 | 6.26 | 1.46 | 2.89 | 2.53 | 1.16 |
| Minimum Return | -3.95 | -4.21 | -2.60 | -2.59 | -1.49 | -1.29 | -2.91 | -3.17 | -5.48 | -5.64 | -0.74 | -0.49 | -6.33 | -4.97 |
| Return | 21.43 | 22.49 | 4.49 | 4.93 | 8.45 | 10.97 | 12.83 | 11.80 | 8.38 | 2.76 | 8.26 | 12.51 | -9.40 | -5.36 |
| Excess Return | 15.65 | 16.56 | -0.08 | 0.35 | 3.54 | 5.91 | 7.78 | 6.85 | 3.85 | -1.48 | 3.31 | 7.22 | -14.27 | -10.04 |
| Excess Performance | -1.06 | 0.00 | -0.44 | 0.00 | -2.53 | 0.00 | 1.03 | 0.00 | 5.63 | 0.00 | -4.25 | 0.00 | -4.04 | 0.00 |
| **RISK SUMMARY STATISTICS** | | | | | | | | | | | | | | |
| Beta | 0.98 | 1.00 | 0.97 | 1.00 | 0.72 | 1.00 | 1.01 | 1.00 | 0.90 | 1.00 | 0.18 | 1.00 | 1.15 | 1.00 |
| Upside Risk | 12.37 | 12.69 | 5.23 | 5.49 | 4.34 | 5.57 | 8.00 | 7.73 | 8.07 | 7.28 | 2.80 | 4.58 | 2.13 | 1.17 |
| Downside Risk | 5.71 | 5.80 | 3.51 | 3.52 | 1.37 | 1.70 | 3.61 | 3.72 | 5.36 | 6.38 | 0.47 | 0.52 | 6.90 | 4.99 |
| **RISK/RETURN SUMMARY STATISTICS** | | | | | | | | | | | | | | |
| Standard Deviation | 12.30 | 12.54 | 6.16 | 6.35 | 3.88 | 4.96 | 8.01 | 7.91 | 9.38 | 9.64 | 1.67 | 3.07 | 6.66 | 4.88 |
| Alpha | -0.39 | 0.00 | -0.27 | 0.00 | 0.61 | 0.00 | 0.86 | 0.00 | 5.79 | 0.00 | 5.97 | 0.00 | -3.34 | 0.00 |
| Sharpe Ratio | 1.27 | 1.32 | -0.01 | 0.06 | 0.91 | 1.19 | 0.97 | 0.87 | 0.41 | -0.15 | 1.97 | 2.33 | -2.11 | -2.03 |
| Excess Risk | 12.33 | 12.57 | 6.14 | 6.34 | 3.88 | 4.98 | 8.01 | 7.91 | 9.39 | 9.65 | 1.69 | 3.10 | 6.75 | 4.95 |
| Tracking Error | 1.31 | 0.00 | 0.48 | 0.00 | 2.09 | 0.00 | 0.92 | 0.00 | 3.62 | 0.00 | 2.96 | 0.00 | 3.63 | 0.00 |
| Information Ratio | -0.70 | - | -0.91 | - | -1.13 | - | 1.01 | - | 1.47 | - | -1.32 | - | -1.16 | - |
| **CORRELATION STATISTICS** | | | | | | | | | | | | | | |
| R-Squared | 0.99 | 1.00 | 1.00 | 1.00 | 0.84 | 1.00 | 0.99 | 1.00 | 0.86 | 1.00 | 0.11 | 1.00 | 0.72 | 1.00 |
| Actual Correlation | 0.99 | 1.00 | 1.00 | 1.00 | 0.92 | 1.00 | 0.99 | 1.00 | 0.93 | 1.00 | 0.34 | 1.00 | 0.85 | 1.00 |

# Risk Return Statistics: Last Two Years

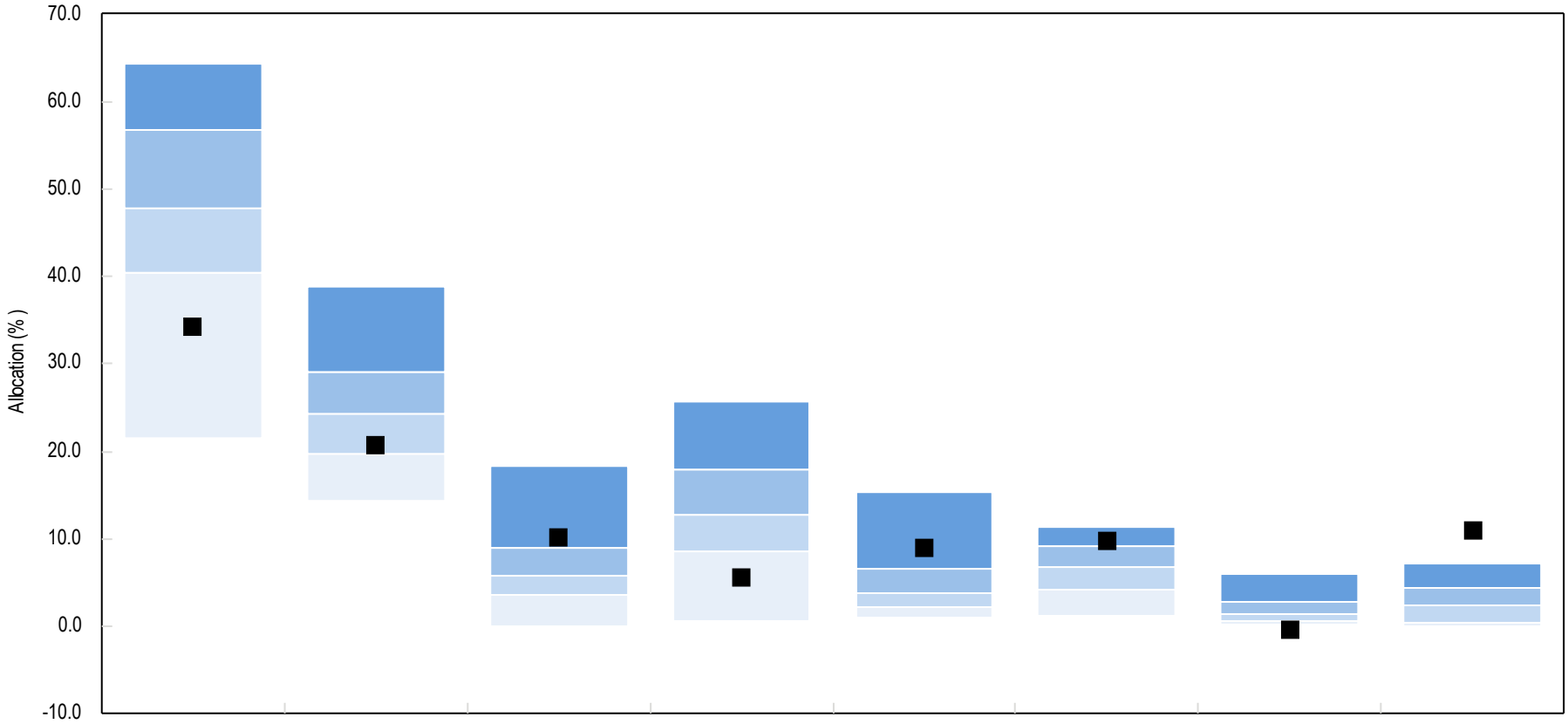


| | 2 Yrs | | | |
|---|---|---|---|---|
| | Midstream Energy | Alerian Midstream Energy Index | Opportunistic | Assumed Rate of Return +3% |
| **RETURN SUMMARY STATISTICS** | | | | |
| Up Market Periods | 18 | 18 | 24 | 24 |
| Down Market Periods | 6 | 6 | 0 | 0 |
| Maximum Return | 12.72 | 14.38 | 10.18 | 0.80 |
| Minimum Return | -5.47 | -6.10 | -6.31 | 0.80 |
| Return | 22.52 | 27.98 | 13.89 | 10.00 |
| Excess Return | 16.42 | 21.07 | 8.69 | 4.76 |
| Excess Performance | -5.46 | 0.00 | 3.89 | 0.00 |
| **RISK SUMMARY STATISTICS** | | | | |
| Beta | 0.85 | 1.00 | - | - |
| Upside Risk | 12.67 | 14.77 | 8.95 | 2.76 |
| Downside Risk | 5.51 | 6.02 | 4.58 | 0.00 |
| **RISK/RETURN SUMMARY STATISTICS** | | | | |
| Standard Deviation | 12.39 | 14.10 | 9.27 | 0.00 |
| Alpha | -0.77 | 0.00 | - | - |
| Sharpe Ratio | 1.33 | 1.50 | 0.94 | 27.76 |
| Excess Risk | 12.37 | 14.07 | 9.28 | 0.17 |
| Tracking Error | 3.78 | 0.00 | 9.27 | 0.00 |
| Information Ratio | -1.23 | - | 0.42 | - |
| **CORRELATION STATISTICS** | | | | |
| R-Squared | 0.94 | 1.00 | - | - |
| Actual Correlation | 0.97 | 1.00 | - | - |

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

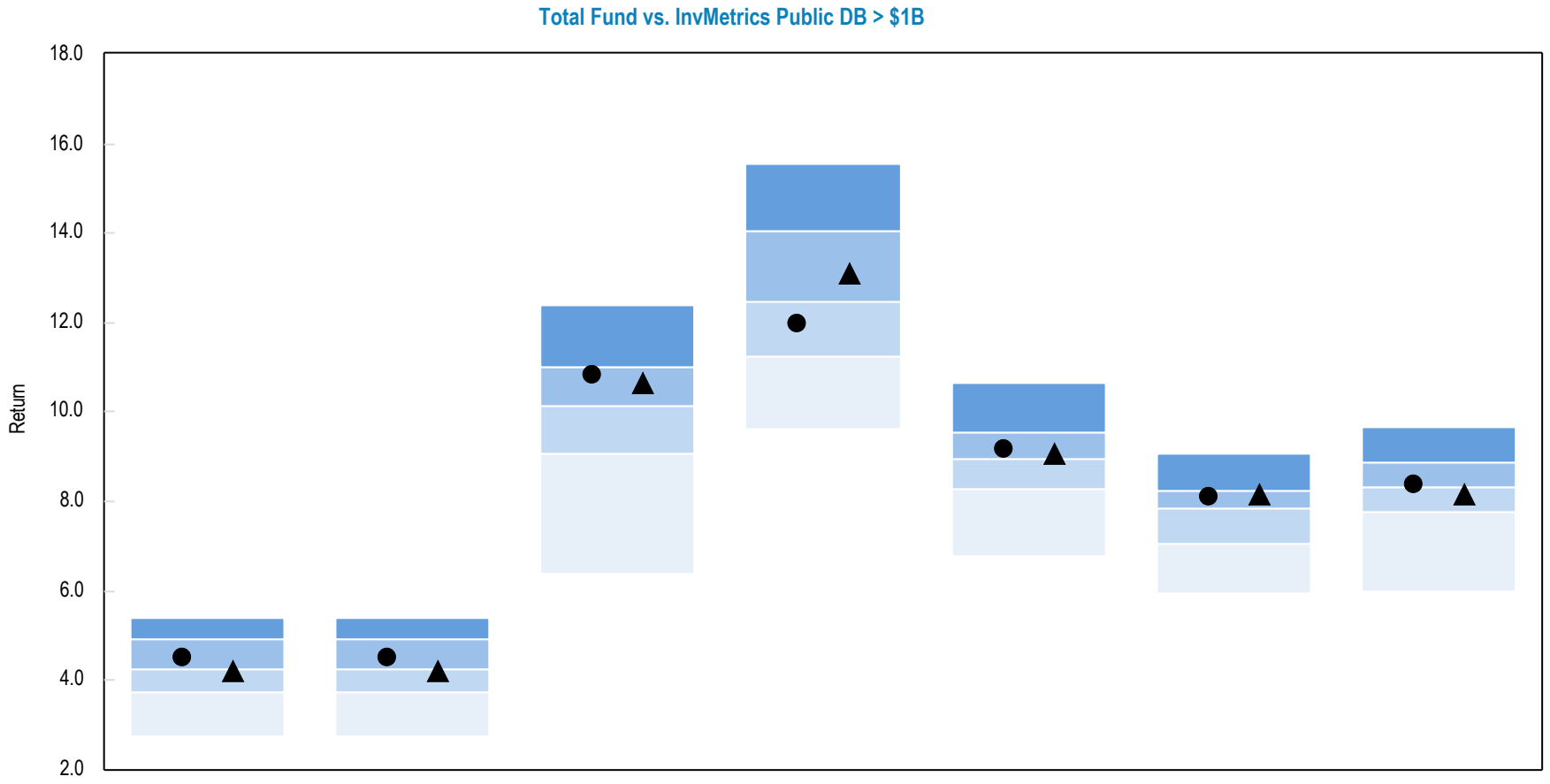
# Peer Comparison

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



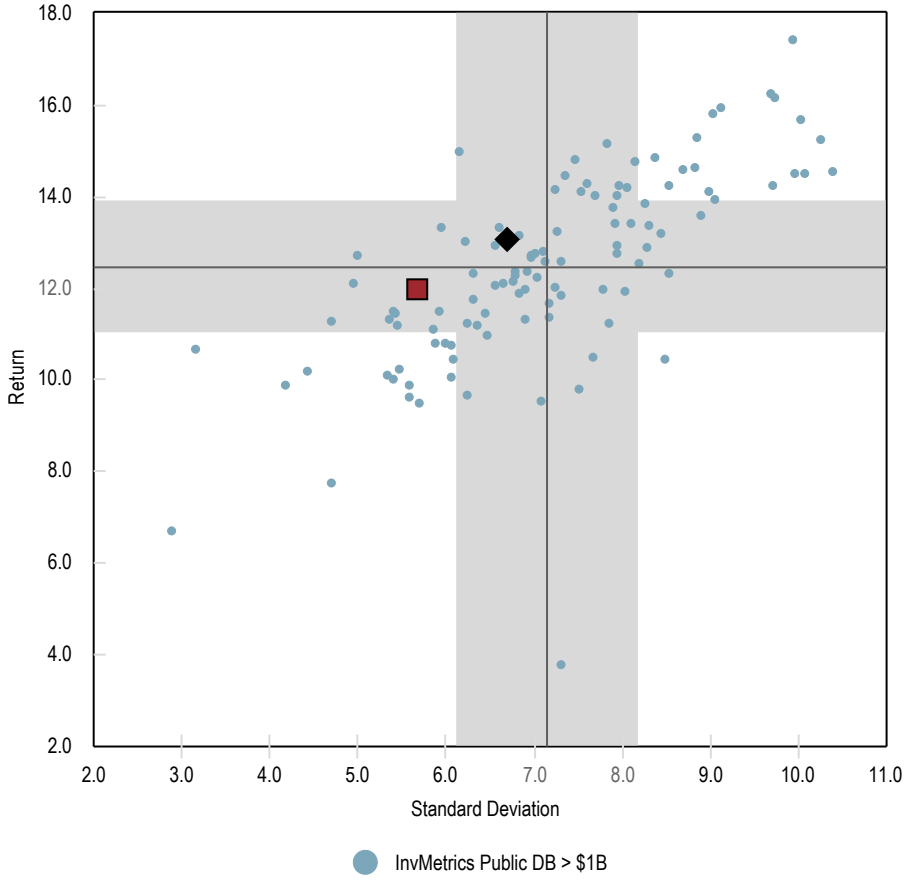

| | Total Equity | Total Fixed Income | Hedge Funds | Private Equity | Real Assets/Commod | Real Estate - Private | Cash & Equivalents | Other |
|---|---|---|---|---|---|---|---|---|
| Total Fund | 34.4 (87) | 20.7 (67) | 10.1 (20) | 5.5 (84) | 9.0 (18) | 9.8 (19) | -0.4 | 10.9 (1) |
| 5th Percentile | 64.5 | 38.8 | 18.3 | 25.7 | 15.3 | 11.3 | 6.0 | 7.2 |
| 1st Quartile | 56.8 | 29.0 | 9.0 | 17.9 | 6.6 | 9.2 | 2.8 | 4.3 |
| Median | 47.9 | 24.4 | 5.8 | 12.7 | 3.8 | 6.8 | 1.3 | 2.3 |
| 3rd Quartile | 40.4 | 19.7 | 3.5 | 8.6 | 2.1 | 4.1 | 0.6 | 0.3 |
| 95th Percentile | 21.5 | 14.3 | 0.0 | 0.7 | 0.9 | 1.2 | 0.2 | 0.1 |
| Population | 110 | 111 | 47 | 98 | 69 | 89 | 107 | 20 |

*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.*



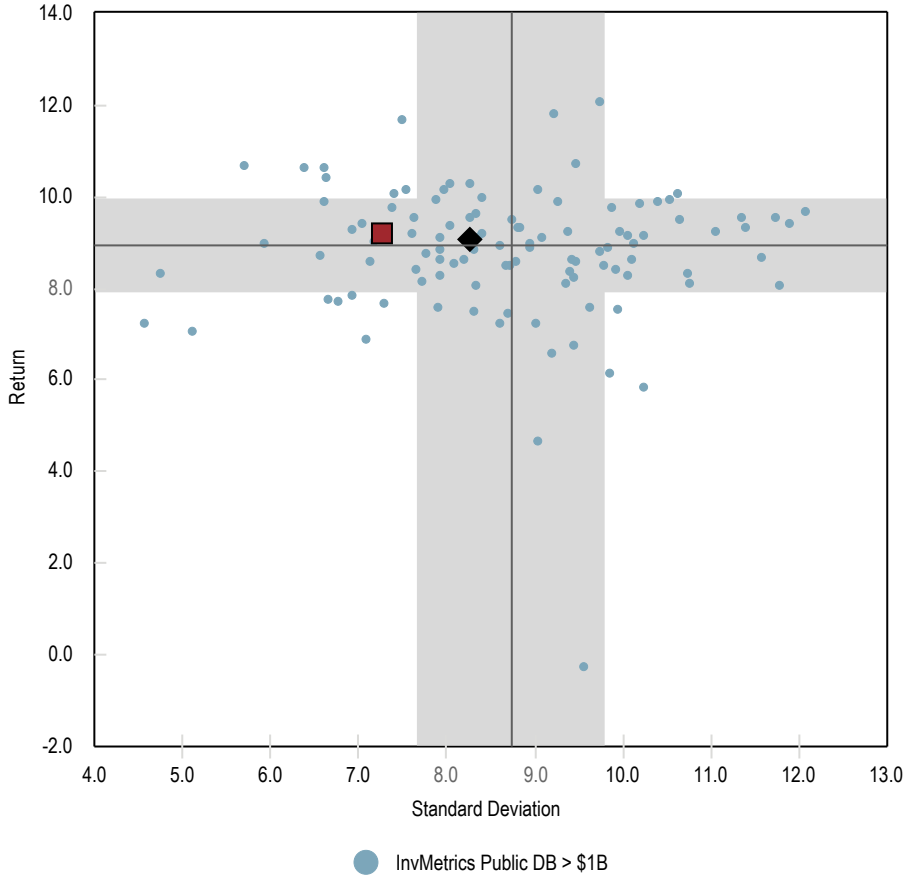

| | Quarter | Fiscal YTD | 1 Year | 3 Years | 5 Years | 7 Years | 10 Years |
|---|---|---|---|---|---|---|---|
| ● Total Fund | 4.5 (33) | 4.5 (33) | 10.9 (29) | 12.0 (61) | 9.2 (42) | 8.1 (34) | 8.4 (48) |
| ▲ Policy Index | 4.2 (51) | 4.2 (51) | 10.7 (34) | 13.1 (38) | 9.1 (47) | 8.2 (33) | 8.2 (59) |
| 5th Percentile | 5.4 | 5.4 | 12.4 | 15.6 | 10.6 | 9.1 | 9.7 |
| 1st Quartile | 4.9 | 4.9 | 11.0 | 14.1 | 9.6 | 8.3 | 8.9 |
| Median | 4.3 | 4.3 | 10.1 | 12.5 | 9.0 | 7.8 | 8.3 |
| 3rd Quartile | 3.7 | 3.7 | 9.1 | 11.2 | 8.3 | 7.1 | 7.8 |
| 95th Percentile | 2.8 | 2.8 | 6.4 | 9.6 | 6.8 | 6.0 | 6.0 |
| Population | 110 | 110 | 109 | 108 | 106 | 104 | 101 |

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




| | Return | Standard Deviation |
|---|---|---|
| Total Fund | 11.99 | 5.66 |
| Policy Index | 13.09 | 6.70 |
| Median | 12.48 | 7.15 |
| Population | 108 | 108 |

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




| | Return | Standard Deviation |
|---|---|---|
| Total Fund | 9.20 | 7.26 |
| Policy Index | 9.07 | 8.26 |
| Median | 8.96 | 8.73 |
| Population | 106 | 106 |

# Other

| | 2025 Q3 | 2025 Q2 | 2025 Q1 | 2024 Q4 | 2024 Q3 | 2024 Q2 | 2024 Q1 | 2023 Q4 | 2023 Q3 | 2023 Q2 | 2023 Q1 | 2022 Q4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Fund** | **4.4** | **4.6** | **1.6** | **-0.4** | **4.8** | **1.2** | **3.8** | **5.1** | **-0.9** | **1.9** | **3.2** | **4.5** |
| *Policy Index* | *4.2* | *4.8* | *1.4* | *-0.1* | *4.9* | *1.8* | *3.7* | *6.2* | *-1.4* | *2.9* | *3.8* | *5.5* |

| | 2022 Q3 | 2022 Q2 | 2022 Q1 | 2021 Q4 | 2021 Q3 | 2021 Q2 | 2021 Q1 | 2020 Q4 | 2020 Q3 | 2020 Q2 | 2020 Q1 | 2019 Q4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Fund** | **-3.1** | **-7.5** | **-0.8** | **3.6** | **0.5** | **5.5** | **3.5** | **8.8** | **4.4** | **10.7** | **-11.3** | **4.6** |
| *Policy Index* | *-3.8* | *-8.9* | *-1.3* | *3.3* | *0.7* | *5.6* | *3.2* | *8.8* | *4.5* | *10.1* | *-11.1* | *4.6* |

| | 2019 Q3 | 2019 Q2 | 2019 Q1 | 2018 Q4 | 2018 Q3 | 2018 Q2 | 2018 Q1 | 2017 Q4 | 2017 Q3 | 2017 Q2 | 2017 Q1 | 2016 Q4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total Fund** | **0.2** | **3.1** | **6.8** | **-6.4** | **2.3** | **0.3** | **-0.1** | **3.0** | **3.2** | **2.7** | **4.2** | **0.8** |
| *Policy Index* | *0.8* | *3.0* | *7.0* | *-5.5* | *2.2* | *0.7* | *-0.1* | *3.1* | *3.0* | *2.7* | *3.5* | *0.5* |

## 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 |
| Hawk Ridge Partners II | 8/31/2025 | Hawk Ridge |
| 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 |
| Russell 2000 Overlay | 8/31/2025 | Parametric |
| 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: 7/1/2025 - Present | 33% MSCI ACWI IMI (Net), 27% Fixed Income Blend - 16% Core (9% Bloomberg US Aggregate Index, 3% ICE BofAML 7-10 Year US Treasury Index, 4% Bloomberg US Corporate Credit 1-3 Year Index). 10% Credit (5% Securitized (2.5% Bloomberg Non-Agency CMBS Index; 1.67% Bloomberg ABS Index; 0.83% J.P. Morgan CLOIE AAA Index) 2.5% Morningstar LSTA Leverage Loan Index. 2.5% Emerging Market Debt ( 2.5% JPM EMBI Global Div - Hard currency only, 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 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%, -2.5% 3-Month T-bill. |
| Policy Index: 5/1/2025 - 7/1/25 | 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. |

# 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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