

### Key Takeaways

- Initial optimism surrounding supportive economy policies from the new administration quickly faded when rhetoric around tariffs, reduced government spending, and immigration were enacted into policy.
- An elusive recession in the U.S. over the past two years was fought off by a surprisingly resilient consumer and expansive fiscal spending. The wealthiest consumers accounted for a disproportion of this spending, making a potential erosion in their confidence from a declining wealth effect especially relevant.
- Perhaps even more impactful than policy changes, the level of uncertainty has the potential to meaningfully hold back business and consumer spending. Outside of some pulled forward demand in anticipation of price increases, future spending could decline to meaningfully lower levels.
- Inflationary pressures could once again be building despite a slower growth trajectory, led by passthrough price increases and other inflationary policies including curtailed immigration which helped maintain subdued wage growth.
- Elevated equity valuations entering the year made markets particularly susceptible to disappointments in growth, profits, or some combination of the two – particularly in U.S. large-caps. While nearly all markets have declined, the S&P 500 has finally fallen behind other major international indices after an extended period of relative outperformance.
- Despite remerging concerns surrounding inflation, yields initially declined as the flight to safety playbook was dusted off. The U.S. Treasury 10-year yield dipped below 4% for the first time since October of last year before rallying back to 4.5% based on potential deleveraging and renewed inflationary pressures from tariffs.
- In-line with equities, credit spreads widened creating a headwind for high yield and leveraged loans. Relative to equity drawdowns, the fall in high yield has so far been relatively benign (at least through early April).
- Private market assets will realize some sensitivity into the dramatic repricing currently occurring in public markets. Sponsors with captive asset bases and an expansive toolkit should be able to take advantage of dislocations that, while painful in the short-term, could set the stage for compelling future performance.
- Following widespread acceptance of a soft-landing scenario and accommodative risk asset performance, markets are now faced with significant policy and growth headwinds that have the potential to trigger a recession in the coming months.
- Periods of extensive volatility and uncertainty, like we experiencing currently, are painful and scary. Rather than panic, its best to focus on productive action as dislocations tend to breed opportunity.
- There are several actions to consider into the coming months: 1) opportunistically rebalancing to take advantage of areas of market weakness 2) for taxable accounts, contemplate tax-loss-harvesting assets to either offset future gains or to tax-efficiently reposition portfolios and 3) consider opportunistically leaning into market weakness after ensuring ample medium-term liquidity is secured.
- It's likely volatility continues into the coming months or even throughout the year, but ensuring a proper asset allocation and financial plan for the future offers the opportunity to be well situated for many years ahead.



## Economy

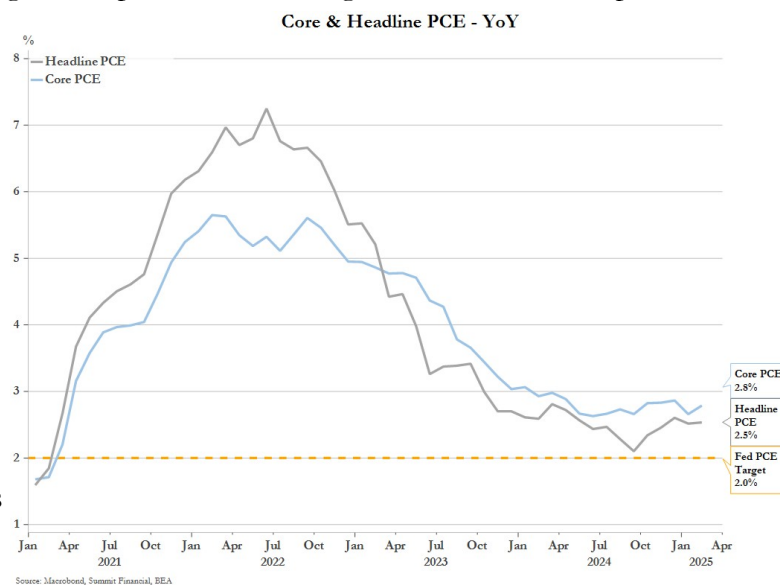
After the initial GDPNow estimate for real U.S. GDP growth in Q1 2025 came in at 2.9% on January 31st, it was quickly revised higher to 3.9% just a few days later. Since then, however, projections have fallen sharply, bottoming at -3.7% on April 1st before rebounding slightly to -2.4% as of this writing. The projected decline in growth, driven by ongoing uncertainty around tariffs and global trade, comes after two years when the U.S. economy remained resilient in the face of rates staying higher-for-longer and periods of weakness in the labor market. Given the current environment, many businesses and consumers are curtailing spending in preparation for a perceived forthcoming recession.

Similar to businesses, consumers, and other investment market participants, the Fed is also currently navigating a complex economic landscape with several factors influencing its decision-making process regarding interest rates. The Fed has maintained its benchmark interest rate within a range of 4.25% to 4.50% after pausing rate cuts in January and March 2025 while continuing to stress that it will remain cautious and data-dependent. High national debt means that higher interest rates significantly increase borrowing costs, potentially exacerbating the debt burden. Lowering rates could help mitigate the problem, but doing so is contingent on inflation remaining under control. President Trump's recently announced tariffs, which many view as inflationary, could result in the Fed being unable to cut rates and ultimately lead to stagflation—slow growth coupled with rising inflation—a scenario all participants would like to avoid.

After ending a 26-month streak in contraction territory, ISM manufacturing posted consecutive months of expansion in January and February. The March reading fell slightly back into contraction territory due to a decline in new orders driven by tariff uncertainty. Supporters of President Trump's policies believe the negative impact of tariffs on economic activity will be transitory, and the resulting reshoring of manufacturing will help drive the next leg of U.S. economic expansion.

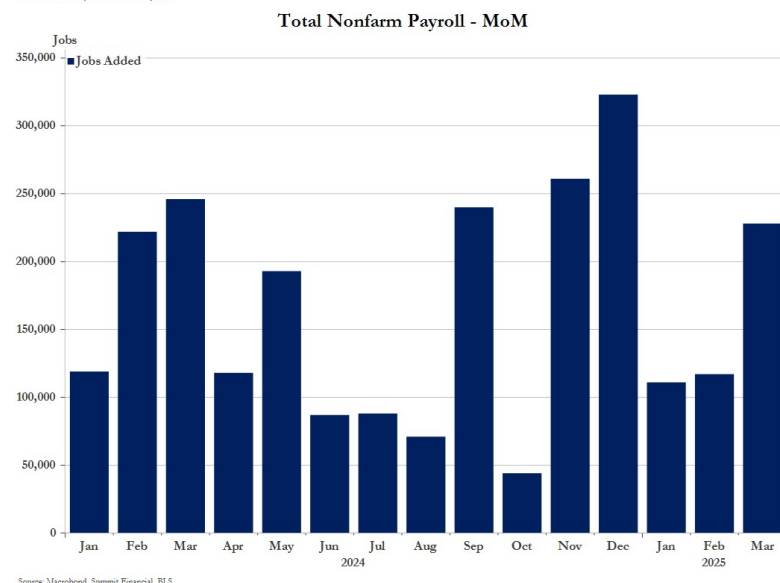
### Core PCE Ticks Up, Probability of Rate Cut Falls

- Core PCE, the Fed's preferred inflation gauge, increased 0.4% in February, above an expected 0.3% and it's biggest monthly gain since January 2024.
- Shelter costs, which have been one of the stickier elements of inflation, rose 0.3% while good prices increased 0.2% and services were up 0.4%.
- Consumers got some relief from gasoline, which fell 0.8% from January, but aggregate annual inflation of 2.8% is still well about the Fed's stated target of 2.0% and has muted expectations of rate cuts in the near term.
- Currently, the Fed's official projection is for two rate cuts in 2025, while the market is anticipating three.



### Labor Market Solid, Jobs Move to Private Sector

- As the Department of Government Efficiency continues to identify areas of wasteful spending and cut jobs, some strategists feared the resulting increase in unemployment would help push the U.S. into recession.
- The job market, however, has remained resilient and surprised to the upside by adding 228,000 jobs in March as the U.S. shifts away from dependence on the government and towards the private sector.
- The contribution of government jobs to total nonfarm payrolls, which eclipsed 100% back in October, fell to just 65% in March.
- Unemployment has remained at or slightly below 4.2% and permanent job losers, a good measure of joblessness, has also remained stagnant for several months.

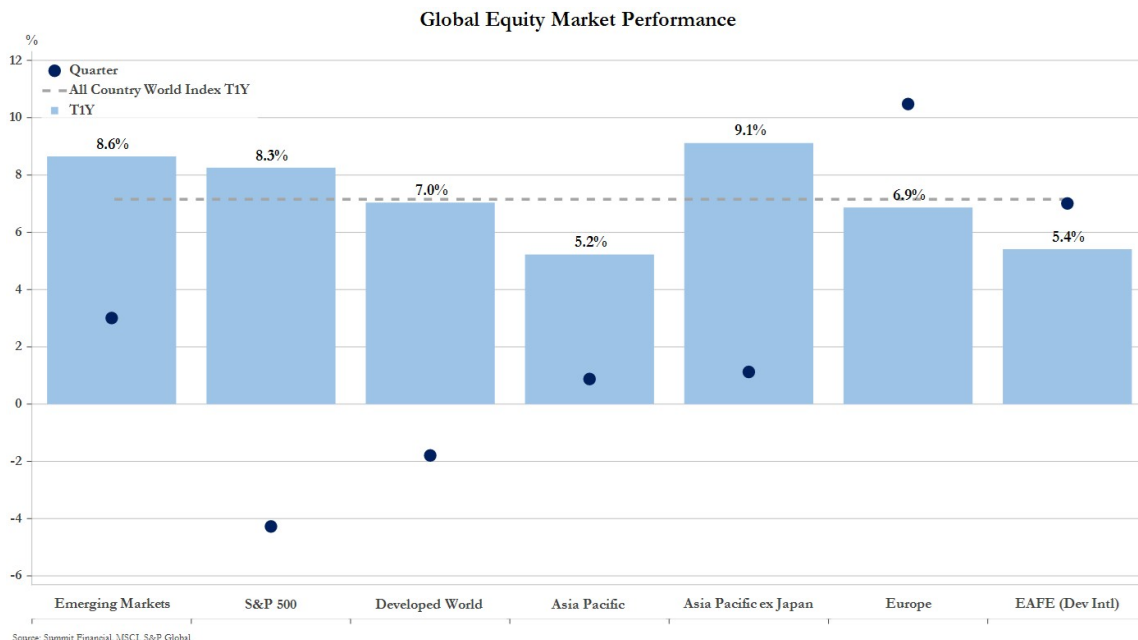


## Equity Markets

Despite gaining ~4.6% through mid-February, the S&P 500 ended Q1 down -4.27% as markets were gripped by tariff announcements and uncertainty. Unfortunately for investors, the pain did not end there as the index dropped an additional ~10% to end the first week of April. As tariff negotiations continue and new announcements are made seemingly every day, volatility has spiked and markets have made large moves to both the positive and negative over recent weeks. On a positive note, earnings growth continues to accelerate and broaden out beyond the Magnificent 7 which drove market gains throughout 2023 and 2024. Alternatively, uncertainty has many investors fleeing risk assets in search of safe havens. Many strategists feel any positive momentum will be short-lived and volatility will remain heightened until a new normal in global trade is reached and policy changes subside.

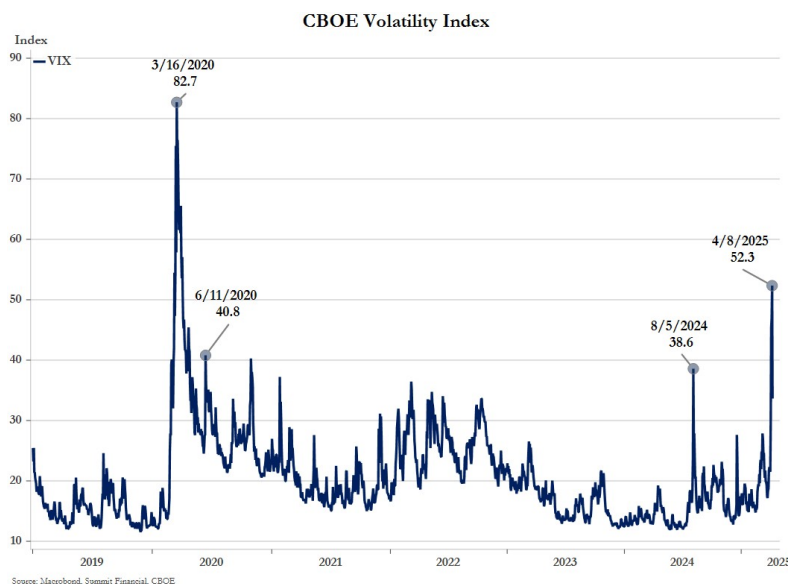
As some headlines paint a doomsday scenario, investors with well-diversified portfolios have been sheltered from some of the volatility as international equities were a bright spot and meaningfully outpaced U.S. stocks in Q1. Europe had a strong quarter, returning 10.5%, with gains early in the quarter driven by central bank interest rate cuts, but the rally was not immune to global trade uncertainty and tapered off by mid-March. The MSCI China Index returned an impressive 15.3% in Q1 but also lost steam and gave back all of its YTD gains over the following weeks as additional levies were placed on the U.S.'s largest economic rival.

It remains to be seen whether President Trump is using these tariffs more as a negotiating tool or as concrete economic policy, but until investors receive more clarity, they will likely remain on edge and large intraday market swings may persist.



### Volatility Spikes in Q1

- The VIX, often referred to as Wall Street's "fear gauge", recently spiked above 50, hitting its highest level since the onset of the COVID-19 pandemic in March 2020.
- Simultaneously, the MOVE Index, which measures volatility in the bond market, also spiked, reflecting a broader sense of market uncertainty.
- President Trump's announcement of reciprocal tariffs and a growing likelihood of a full-blown trade war were the key catalyst of the surge as expectations of higher prices and slower growth rattled investor confidence.
- In response, investors have shied away from risk assets, notably the tech sector which had been characterized by stretched valuations, in favor of safe haven assets like gold and U.S. Treasuries.

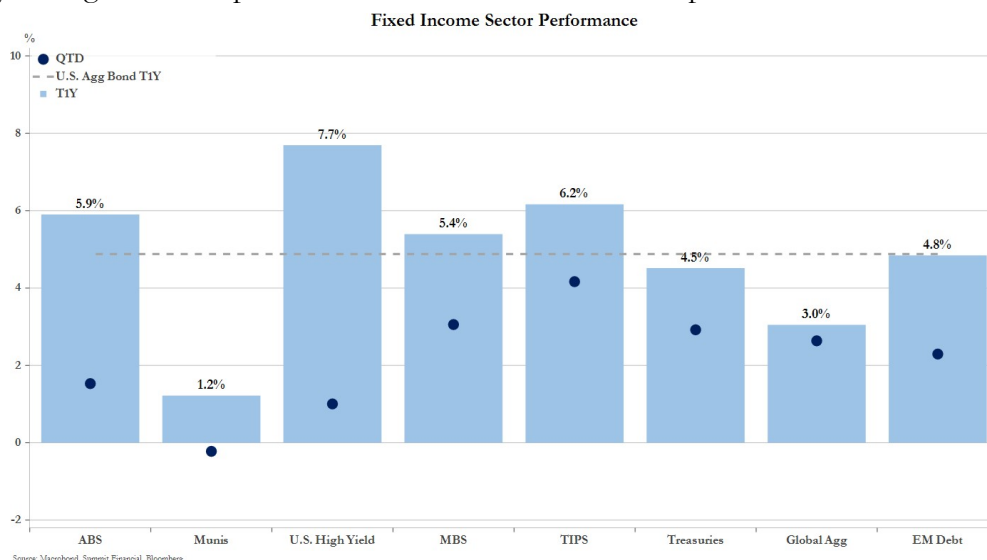


## Fixed Income Markets

After a tough fourth quarter, fixed income broadly performed well in Q1, with all sectors finishing positive outside of municipals. Treasury yields fell across the curve, particularly in the two to 10-year range, as concerns over economic growth and a potential recession mounted, driving up demand for high-quality assets like Treasuries and MBS. The yield on 10-year Treasuries dropped below 4% for the first time since October 2024, before rebounding to 4.5%, driven by potential deleveraging and renewed inflationary pressures from tariffs.

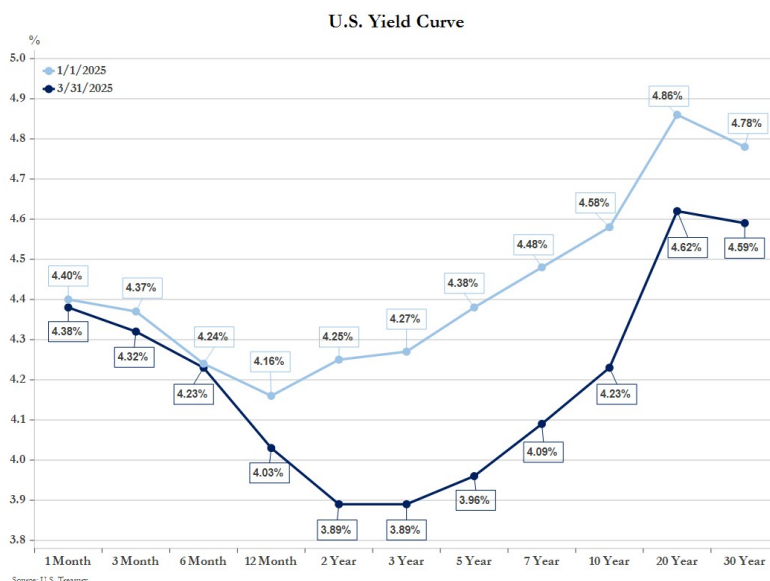
Credit spreads widened slightly from historically tight levels, reflecting renewed caution about the economic outlook amid tariff concerns and slowing growth. However, credit-sensitive sectors like high-yield bonds managed to stay in positive territory due to strong fundamentals and higher starting yields. Riskier debt, such as emerging market bonds, outperformed corporate debt early in the year but lost steam as growing uncertainty took hold in February and many investors embarked on a flight to safety. Ultimately, investment grade bonds outperformed lower quality issues as they were less affected by widening spreads. Inflation-protected securities led all sectors, returning 4.2% for the quarter, driven by rising inflation expectations and falling rates having a relatively larger impact on prices due to longer maturities.

Municipal bonds meaningfully lagged taxable fixed income as municipal yields rose and Treasury yields fell, pushing Q1 returns into negative territory. Heavy issuance was one factor that drove underperformance, along with uncertainty surrounding tax policies and the impact this may have on the municipal market. Short-term dislocations are not uncommon for municipals, and investors can typically expect strong performance in low or negative growth macro environments as fixed income and duration tend to rally. High income levels are typically the dominant driver of long-term performance for municipals, and many strategists have a positive view on the current backdrop and outlook.



### Yields End Q1 Lower Across The Treasury Curve

- The yield on 10-year U.S. Treasuries was unchanged in March but declined 35 bps in Q1, providing some relief to homebuyers and consumers as the rate typically informs mortgage and other borrowing costs throughout the U.S.
- As widely expected, the Fed held policy rates steady in the 4.25% - 4.50% range after the March FOMC meeting, taking a wait-and-see approach given significant policy uncertainty.
- Based on the FOMC's updated Summary of Economic Projections, they expect unemployment to tick up to 4.4%, growth to slow to 1.7%, and inflation to rise to 2.7% compared to estimates of 4.3%, 2.1%, and 2.5% in their December forecast, which provides little clarity on when the next rate cut may come.

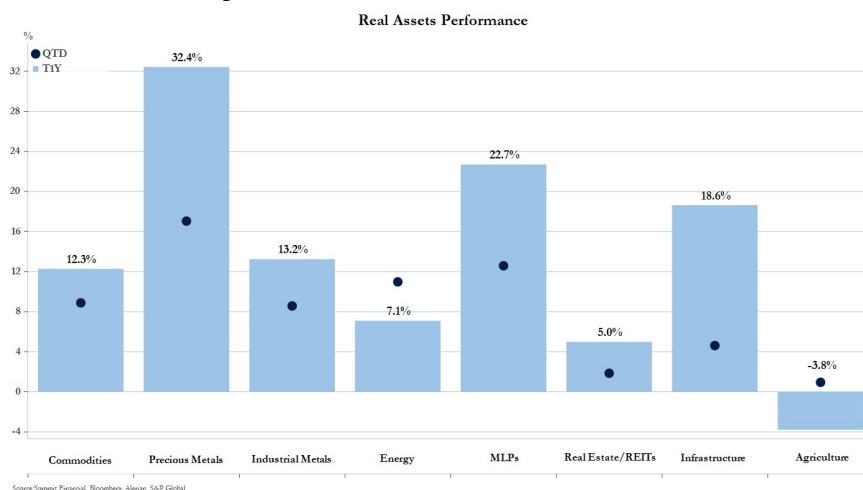




## Real Assets

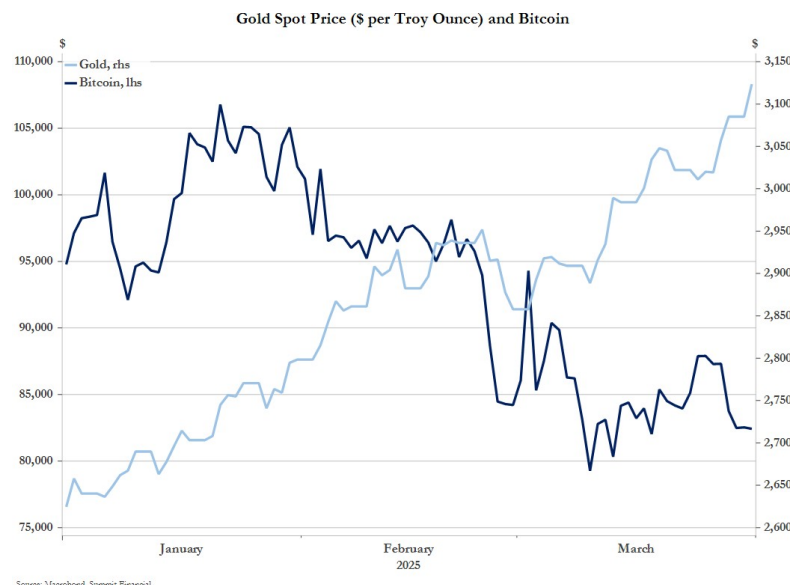
With equity markets experiencing heightened volatility to start the year, real assets were one of the few bright spots in Q1 2025. All sectors posted positive performance as investors flocked to defensive positions with tariffs looming and trade uncertainty persisting. Precious metals have led the charge so far in 2025, gaining 17.0% in Q1 and 32.4% from one year ago. The outperformance has been driven by strong demand from investors looking to tangible assets for protection against recent market swings fueled by geopolitical and economic uncertainty, as well as central banks looking to hedge against inflation and currency volatility. Copper futures climbed higher throughout the quarter and hit a recent high in late March as manufacturers raced to import large volumes of the metal into the U.S. before copper-specific levies were imposed, a trend that risked draining supply and increasing prices for other buyers. Since then, however, prices have fallen precipitously and copper has given up all of its gains and turned negative for the year as the latest wave of tariff announcements has reignited fears of slowing global economic growth. MLP's yet again posted a strong quarter returning 12.6% and are up 22.7% from a year ago. MLP's look to continue a strong run that has seen the sector produce gains over 20% in the last four consecutive years.

Energy advanced 11% in Q1 driven by natural gas' ~25% gain to start the year. Despite a planned OPEC+ production increase next month, crude and fuel products have been challenged by concerns that slowing economic growth will mute demand and a growing risk of sanctions that could limit supply from Iran and Venezuela. In the face of significant global economic challenges, REITs have proven resilient by returning 1.9% in Q1, with many adjusting their strategies to navigate turbulent market conditions. Amid a backdrop of market volatility and rising costs, REITs have been lowering leverage and laddering debt maturities to strengthen their balance sheets. The agriculture sector delivered the worst performance among real assets for the quarter and trailing year, returning 0.9% and -3.8%, respectively. With growth slowing due to looming tariffs, infrastructure's defensive nature led to positive first quarter returns of 4.6%. Core infrastructure assets with contractual cash flows and built-in inflation protection remain attractive for investors in the current market environment.



### Gold Continues Strong Run, Bitcoin Struggles

- Gold prices hit a new record high in Q1 after surging more than 27% and topping \$3,100 per ounce to end the quarter.
- Gold is benefiting from a confluence of macro drivers: heightened geopolitical tension, sticky inflation, and surging investor flows into exchange-traded funds.
- Bitcoin registered its weakest Q1 performance in seven years falling -12.6% after a 52% gain in Q4 2024.
- Cryptocurrencies and related securities got a boost immediately following Trump's reelection but have since lost significant ground as investors rotated away from risk assets amid an outlook of slowing global growth and trade policy uncertainty.

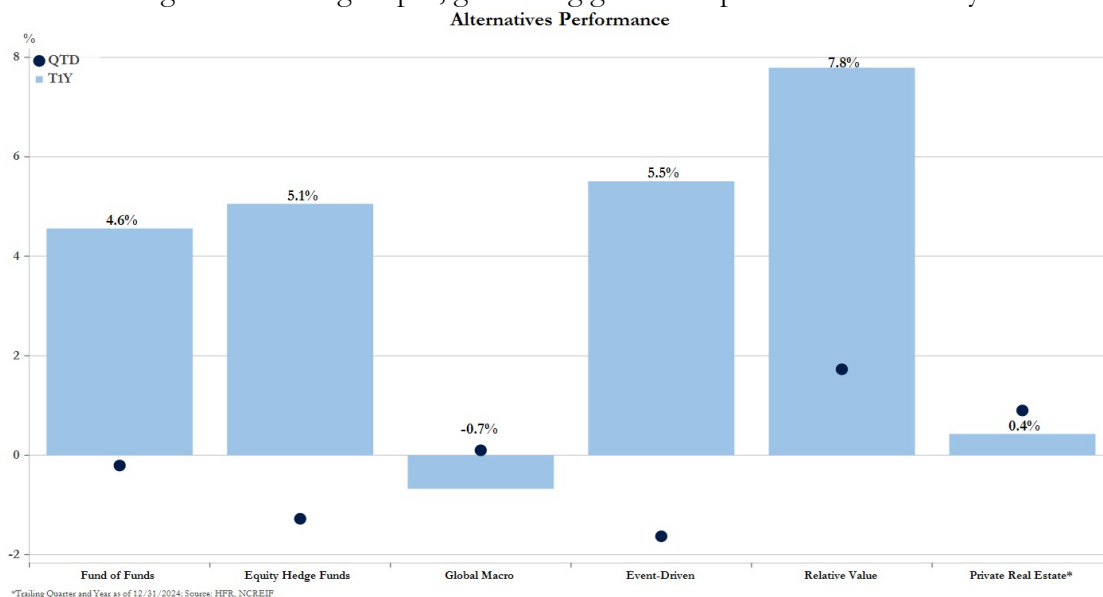


## Alternatives

The resurgence in private equity floundered during the quarter in the face of economic uncertainty and deteriorating business confidence. Deal activity and exits slowed markedly while falling public equity markets put downward pressure on valuations. While slower economic growth and rising costs may hamper both public and private companies, private equity has historically weathered difficult environments. Strong company fundamentals and the expansion of credit availability from private lenders should help mitigate tighter financial conditions. Exit activity, once dominated by IPOs, has become more diverse with corporate acquisitions and secondaries providing additional liquidity. Many fund sponsors have exposure to domestically-oriented companies based outside the U.S. which will help diversify business and currency risks.

Private credit once again provided stable returns and income during a period when public equity and interest rates were volatile. Yields continued to moderate with new senior secured corporate debt issuance rates falling below 10%. More recently, heightened economic risk and a pull back by bank lenders has resulted in wider credit spreads as private lenders filled the gap. Although signs of distress remain muted for private loans, defaults on leveraged bank loans are at the highest level in several years. Private credit distress is likely to increase if there is a recession and high interest rates remain a threat. The ability to negotiate and customize new deal terms as well as the focus on service sectors such as health care and business software with less exposure to manufacturing and cyclical sectors should offer downside protection.

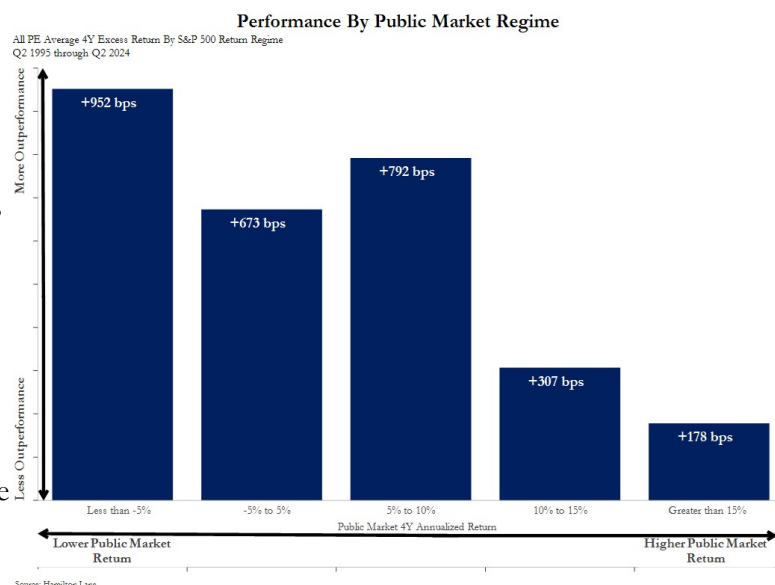
Hedge funds had a mixed quarter but provided downside protection as stock markets fell. Many hedge funds had been pulling back on market exposure in anticipation of market volatility triggered by Trump administration policies. Arbitrage and other relative value strategies were a bright spot, generating gains as capital market volatility and dislocation accelerated.



Over the long term, private equity has earned roughly a 5% premium over public equity. This return premium has been most pronounced during periods of poor public equity returns.

Although the recent market decline has improved valuations, the sharp run up in large public U.S. companies in 2023 and 2024 has left private equity valuations historically more attractive which could support future relative performance.

Many private companies have characteristics that should be favorable today. Private companies tend to be smaller with business models tied to domestic economies that are less exposed to trade-related issues and tariffs. PE secondaries are a growing market segment and may see widening spreads if GP and investor liquidity needs are not met by fund cash flows.



Growth	3/31/2025	12/31/2024
<b>GDP Growth</b>	-2.4%*	2.4%
<b>U.S. Leading Economic Indicator (YoY%)</b>	-3.1%**	-3.0%
<b>Unemployment Rate (%)</b>	4.2%	4.1%
<b>Initial Claims (Weekly as of 3/28/25, thousands)</b>	219.0	209.0
<b>Industrial Production (YoY%)</b>	1.4%**	0.5%
<b>Consumer Sentiment</b>	57.0	74.0
<b>ISM Manufacturing Index</b>	49.0	49.2
<b>ISM Non-Manufacturing Index</b>	50.8	54.0
<b>Retail Sales (YoY%)</b>	3.1%**	4.4%
<b>Building Permits (mil)</b>	1.46**	1.48

Inflation	3/31/2025	12/31/2024
<b>Headline CPI (YoY)</b>	2.4%	2.9%
<b>Core CPI (YoY)</b>	2.8%	3.2%
<b>Core PCE (YoY)</b>	2.8%	2.9%
<b>Forward Breakeven Inflation Expectation (5-year)</b>	2.3%	2.4%

\*GDP Now estimate as of 4/9/2025

Market Sentiment	3/31/2025	12/31/2024
<b>MOVE Index</b>	101.4	98.8
<b>VIX Index</b>	22.3	17.4
<b>National Financial Conditions Index (NFCI)</b>	-0.54	-0.60

Rates & Credit Conditions	3/31/2025	12/31/2024	10-Year Average
<b>3-M U.S. Treasury</b>	4.3%	4.6%	1.9%
<b>10-YR U.S. Treasury</b>	4.2%	3.8%	2.5%
<b>Spreads over 10-YR U.S. Treasuries (bps)</b>			
<b>U.S. Corporate Investment Grade</b>	92	94	116
<b>U.S. Corporate High Yield</b>	350	321	408
<b>U.S. Municipal</b>	-38	-46	-10

Federal Reserve Economic Projections	2025	2026	2027
<b>Real GDP (YoY%)</b>	1.7%	1.8%	1.8%
<b>PCE Price Index (YoY%)</b>	2.7%	2.2%	2.0%
<b>Core PCE (YoY%)</b>	2.8%	2.2%	2.0%
<b>Unemployment %</b>	4.4%	4.3%	4.3%

## Definitions

Term	Definition
CBOE Volatility Index (VIX)	The CBOE Volatility Index (VIX) reflects the market's real-time expectation of 30-day forward-looking volatility. It is created by the Chicago Board of Options Exchange (CBOE).
National Financial Conditions Index (NFCI)	The Chicago Fed's National Financial Conditions Index (NFCI) provides a comprehensive weekly update on U.S. financial conditions in money markets, debt and equity markets, and the traditional and "shadow" banking systems
Consumer Confidence Index	The Consumer Confidence Index is a measure based on a survey administered by The Conference Board that reflects prevailing business conditions and likely developments for the months ahead. This monthly report details consumer attitude, buying intentions, vacation plans, and consumer expectations for inflation, stock prices, and interest rates.
Consumer Price Index	The Consumer Price Index (CPI) is a measure of the average change over time in the prices paid by urban consumers for a market basket of consumer goods and services.
Core Inflation	Core Inflation is a measure of economic inflation that excludes food and energy
Headline Inflation	Headline Inflation is a measure of the total economic inflation that includes food and energy prices
ISM Manufacturing Index	The ISM Manufacturing Index, also known as the purchasing managers' index (PMI), is a monthly indicator of U.S. economic activity based on a survey of executives covering all North American Industry Classification System's businesses in the manufacturing sector.
ISM Non-Manufacturing Index	The ISM Non-Manufacturing Index is a monthly indicator of U.S. economic activity based on a survey of executives covering all North American Industry Classification System's businesses in the services (or non-manufacturing) sector.
Leading economic indicators (LEI)	Leading economic indicators (LEI) are statistics that precede economic events. They predict the next phase of the business cycle.
Merrill Lynch Option Volatility Estimate Index (MOVE Index)	The MOVE index, or Merrill Lynch Option Volatility Estimate Index, is a gauge of interest rate volatility in the U.S. Treasury market. It is calculated from options prices, which reflect the collective expectations of market participants about future volatility. The index measures the implied volatility of U.S. Treasury options across various maturities
OECD Composite leading indicators (CLIs)	The OECD Composite leading indicators (CLIs), designed to anticipate turning points in economic activity relative to trend
Personal Consumption Expenditures Price Index (PCE)	Personal Consumption Expenditures Price Index (PCE) is a measure of the prices that people living in the United States, or those buying on their behalf, pay for goods and services. The PCE price index is known for capturing inflation (or deflation) across a wide range of consumer expenses and reflecting changes in consumer behavior
The Federal Funds Rate	The Federal Funds Rate is the target interest rate range at which commercial banks borrow and lend their excess reserves to each other overnight, which is set by the Federal Open Market Committee (FOMC)
Treasury Bill (T-Bill)	A Treasury Bill (T-Bill) is a short-term U.S. government debt obligation backed by the Treasury Department with a maturity of one year or less;
U-3 unemployment rate	The U-3 unemployment rate is the most commonly reported rate in the United States, representing the number of unemployed people actively seeking a job
United States Industrial Production	United States Industrial production refers to the output of industrial establishments and covers sectors such as mining, manufacturing, electricity, gas and steam and air-conditioning. This indicator is measured in an index based on a reference period that expresses change in the volume of production output;
Consumer Sentiment	Consumer Sentiment is represented by The University of Michigan Consumer Sentiment Index which rates the relative level of current and future economic conditions.
Building Permits	Building Permits measures the change in the number of new building permits issued by the government. Building permits are a key indicator of demand in the housing market.
Retail Sales	Retail sales are an economic metric that tracks consumer demand for finished goods. This figure is a very important data set as it is a key monthly market-moving event. Retail sales are reported each month by the U.S. Census Bureau and indicate the direction of the economy.
Industrial Production	Industrial production refers to the output of industrial establishments and covers sectors such as mining, manufacturing, electricity, gas and steam and air-conditioning. This indicator is measured in an index based on a reference period that expresses change in the volume of production output.
Initial Claims	Initial claims refers to the government report on the number of workers applying for unemployment benefits for the first time following job loss.

## Disclaimer

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Label	Index	Index Description
U.S. Agg	Bloomberg U.S. Aggregate Bond Index	The Bloomberg U.S. Aggregate Bond Index is a broad-based flagship benchmark that measures the investment grade, U.S. dollar-denominated, fixed-rate taxable bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate pass-throughs), ABS, and CMBS (agency and non-agency).
Global Agg ex USD	Bloomberg Global Aggregate Index	The Bloomberg Global Aggregate Index is a flagship measure of global investment grade debt from twenty-four local currency markets. This multi-currency benchmark includes Treasury, government-related, corporate, and securitized fixed-rate bonds from both developed and emerging markets issuers.
Municipal	Bloomberg Municipal Bond Index	The Bloomberg Municipal Bond Index covers the U.S. dollar-denominated long-term tax-exempt bond market. The index has four main sectors: state and local general obligation bonds, revenue bonds, insured bonds, and pre-refunded bonds.
Russell 3000	Russell 3000 Index	The Russell 3000 Index measures the performance of the largest 3,000 U.S. companies representing approximately 98% of the investable U.S. equity market. It is constructed to provide a comprehensive, unbiased, and stable barometer of the broad market and is completely reconstituted annually to ensure new and growing equities are included.
S&P 500	S&P 500 Index	The S&P 500 Index is a market capitalization-weighted index of 500 widely held stocks often used as a proxy for the stock market. It measures the movement of the largest issues. Standard and Poor's chooses the member companies for the 500 based on market size, liquidity, and industry group representation. Included are the stocks of eleven different sectors.
MSCI EAFE (Dev)	MSCI EAFE Index	The MSCI EAFE Index (Europe, Australasia, Far East) captures large- and mid-cap representation across developed markets countries around the world, excluding the U.S. and Canada. The index covers approximately 85% of the free float-adjusted market capitalization in each country.
MSCI Emerging Markets	MSCI Emerging Markets Index	The MSCI Emerging Markets Index captures large- and mid-cap representation across emerging markets countries across the world. The index covers approximately 85% of the free float-adjusted market capitalization in each country.
HFRI FoF Comp.	HFRI Fund of Funds Composite Index	The HFRI Fund of Funds Composite Index is an equally weighted hedge fund of funds benchmark composed of global constituent funds. The underlying constituents are typically diversified among multiple managers and styles to provide a comprehensive representation of the hedge fund of funds investment space.
Nareit Developed Real Estate	FTSE EPRA/NAREIT Developed Index	The FTSE EPRA/NAREIT Developed Index is designed to track the performance of listed real estate companies and REITs worldwide. Index constituents are free float-adjusted, subject to liquidity, size, and revenue screening for inclusion.
BBG Commodity	Bloomberg Commodity Index	The Bloomberg Commodity Index reflects commodity futures price movements and is calculated on an excess return basis. The index rebalances annually weighted 2/3 by trading volume and 1/3 by world production, and weight-caps are applied at the commodity, sector, and group level for diversification. The roll period typically occurs from the 6th-10th business day based on the roll schedule.
Developed World	MSCI World Index	The MSCI World Index captures large- and mid-cap representation across developed markets countries. The index covers approximately 85% of the free float-adjusted market capitalization in each country.
Asia Pacific	MSCI AC Asia Pacific Index	The MSCI AC Asia Pacific Index captures large and mid cap representation across 5 Developed Markets countries and 8 Emerging Markets countries in the Asia Pacific region. With 1,537 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
Asia Pacific ex Japan	MSCI AC Asia Pac ex Japan	The MSCI AC Asia Pacific ex Japan Index captures large and mid cap representation across 4 of 5 Developed Markets countries (excluding Japan) and 9 Emerging Markets countries in the Asia Pacific region. With 1,312 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in each country.
Europe	MSCI Europe Index	The MSCI Europe Index captures large- and mid-cap representation across developed markets countries in Europe. The index covers approximately 85% of the free float-adjusted market capitalization across the European developed markets equity universe.
Comm. Services	S&P 500 Communication Services	The S&P 500® Communication Services comprises those companies included in the S&P 500 that are classified as members of the GICS® communication services sector.
Info Tech	S&P 500 Information Technology	The S&P 500® Information Technology comprises those companies included in the S&P 500 that are classified as members of the GICS® information technology sector.
Consumer Disc.	S&P 500 Consumer Discretionary	The S&P 500® Consumer Discretionary comprises those companies included in the S&P 500 that are classified as members of the GICS® Consumer Discretionary sector.
Industrials	S&P 500 Industrials	The S&P 500® Industrials comprises those companies included in the S&P 500 that are classified as members of the GICS® industrials sector.
Materials	S&P 500 Materials	The S&P 500® Materials comprises those companies included in the S&P 500 that are classified as members of the GICS® materials sector.
Energy	S&P 500 Energy	The S&P 500® Energy comprises those companies included in the S&P 500 that are classified as members of the GICS® energy sector.
Real Estate	S&P 500 Real Estate	The S&P 500® Real Estate comprises those companies included in the S&P 500 that are classified as members of the GICS® Real Estate sector.
Financials	S&P 500 Financials	The S&P 500® Financials comprises those companies included in the S&P 500 that are classified as members of the GICS® financials sector.
Consumer Staples	S&P 500 Consumer Staples	The S&P 500® Consumer Staples comprises those companies included in the S&P 500 that are classified as members of the GICS® consumer staples sector.
Health Care	S&P 500 Health Care	The S&P 500® Health Care comprises those companies included in the S&P 500 that are classified as members of the GICS® health care sector.
Utilities	S&P 500 Utilities	The S&P 500® Utilities comprises those companies included in the S&P 500 that are classified as members of the GICS® utilities sector.
ABS	Bloomberg US Asset-Backed Securities Index	The Bloomberg US ABS Index is a broad-based flagship benchmark that measures the investment grade, US dollar-denominated, fixed-rate taxable bond market. The index only includes ABS securities.
U.S. High Yield	Bloomberg U.S. Corporate High-Yield Index	The Bloomberg U.S. Corporate High-Yield Index measures the U.S. dollar-denominated, high yield, fixed-rate corporate bond market. Securities are classified as high yield if the middle rating of Moody's, Fitch, and S&P is Ba1/BB+/BB+ or below. Bonds from issuers with an emerging markets country of risk, based on Barclays EM country definition, are excluded.
MBS	Bloomberg U.S. Mortgage-Backed Securities Index	The Bloomberg Mortgage-Backed Securities Index tracks fixed-rate agency mortgage-backed pass-through securities guaranteed by Ginnie Mae (GNMA), Fannie Mae (FNMA), and Freddie Mac (FHLMC). The index is constructed by grouping individual TBA-deliverable MBS pools into aggregates or generics based on program, coupon, and vintage.
TIPS	Bloomberg U.S. Treasury Inflation Notes 1-10 Year Index	The Bloomberg U.S. Treasury Inflation Notes 1-10 Year Index measures the performance of the U.S. Treasury Inflation-Protected Securities (TIPS) market with less than 10 years to maturity. TIPS are inflation-protected bonds (IPBs) that are issued by the U.S. Treasury. Their face value is pegged to the CPI and adjusted in step with changes in the rate of inflation.
Treasuries	Bloomberg U.S. Treasury Index	The Bloomberg U.S. Treasury Index measures U.S. dollar-denominated, fixed-rate, nominal debt issued by the U.S. Treasury. Treasury bills are excluded by the maturity constraint but are part of a separate Short Treasury Index. STRIPS are excluded from the index because their inclusion would result in double-counting.
EM Debt	Bloomberg Emerging Markets Tradeable Debt Index: Total Return	This index measures the performance of emerging market debt on a total return basis



Label	Index	Index Description
Precious Metals	Bloomberg Precious Metals Subindex	Formerly known as Dow Jones-UBS Precious Metals Subindex (DJUBSPR), the index is a commodity group subindex of the Bloomberg CI. It is composed of futures contracts on gold and silver. It reflects the return of underlying commodity futures price movements only and is quoted in USD.
Industrial Metals	Bloomberg Industrial Metals Subindex	Formerly known as Dow Jones-UBS Industrial Metals Subindex (DJUBSIN), the index is composed of futures contracts on aluminum, copper, nickel and zinc. It reflects the return of underlying commodity futures price movements only. It is quoted in USD.
Energy	Bloomberg Energy Subindex	Formerly known as Dow Jones-UBS Energy Subindex (DJUBSEN), the index is a commodity group subindex of the Bloomberg CI. It is composed of futures contracts on crude oil, heating oil, unleaded gasoline and natural gas. It reflects the return of underlying commodity futures price movements only and is quoted in USD.
MLPs	Alerian MLP Index	The Alerian MLP Index is a float-adjusted, capitalization-weighted index whose constituents earn most of their cash flow from midstream activities involving energy commodities. It tracks energy infrastructure Master Limited Partnerships (MLPs).
Real Estate/REITs	FTSE EPRA/NAREIT Developed Index	The FTSE EPRA/NAREIT Developed Index is designed to track the performance of listed real estate companies and REITs worldwide. Index constituents are free float-adjusted, subject to liquidity, size, and revenue screening for inclusion.
Infrastructure	S&P Global Infrastructure Index	The S&P Global Infrastructure Index is designed to track 75 companies from around the world chosen to represent the listed infrastructure industry while maintaining liquidity and tradability. To create diversified exposure, the index includes three distinct infrastructure clusters: energy, transportation, and utilities.
Agriculture	Bloomberg Agriculture Subindex	Formerly known as Dow Jones-UBS Agriculture Subindex (DJUBSAG), the index is a commodity group subindex of the Bloomberg CI. It is composed of futures contracts on coffee, corn, cotton, soybeans, soybean oil, soybean meal, sugar and wheat. It reflects the return of underlying commodity futures price movements only and is quoted in USD.
Fund of Funds	HFRI Fund of Funds Composite Index	The HFRI Fund of Funds Composite Index is an equally weighted hedge fund of funds benchmark composed of global constituent funds. The underlying constituents are typically diversified among multiple managers and styles to provide a comprehensive representation of the hedge fund of funds investment space.
Equity Hedge Funds	HFRI Equity Hedge Index	The HFRI Equity Hedge Index is an equally weighted hedge fund benchmark composed of investment managers who maintain both long and short positions, primarily in equity and equity derivative securities. Equity hedge managers typically maintain at least 50% exposure to, and may in some cases be entirely invested in, equities, both long and short.
Global Macro	HFRI Macro Index	The HFRI Macro Index is an equally weighted hedge fund benchmark composed of investment managers which trade a broad range of strategies in which the investment process is predicated on movements in underlying economic variables and the impact these have on equity, fixed income, hard currency, and commodity markets. Managers employ a variety of techniques, both discretionary and systematic analysis, combinations of top-down and bottom-up theses, quantitative and fundamental approaches, and long- and short-term holding periods.
Event-Driven	HFRI Event-Driven Index	The HFRI Event-Driven Index is an equally weighted hedge fund benchmark composed of investment managers who maintain positions in companies currently or prospectively involved in corporate transactions of a wide variety including but not limited to mergers, restructurings, financial distress, tender offers, shareholder buybacks, debt exchanges, security issuance or other capital structure adjustments. Event-driven exposure includes a combination of sensitivities to equity markets, credit markets, and idiosyncratic, company-specific developments.
Relative Value	HFRI Relative Value Index	The HFRI Relative Value Index is an equally weighted hedge fund benchmark composed of investment managers who maintain positions in which the investment thesis is predicated on the realization of a valuation discrepancy in the relationship between multiple securities. Managers employ a variety of fundamental and quantitative techniques to establish investment theses, and security types can range broadly across equity, fixed income, derivative, or other security types.
Private Real Estate	NCREIF Property Index	The NCREIF Property Index is a quarterly, unleveraged composite total return for private commercial real estate properties held for investment purposes only. Constituents include operating apartment, hotel, industrial, office, and retail properties.
U.S. Large Cap	Russell 1000 Index	The Russell 1000 Index measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 Index representing approximately 90% of the total market capitalization of that index. It includes approximately 1,000 of the largest securities based on a combination of their market cap and current index membership.
U.S. Mid Cap	Russell Midcap Index	The Russell Midcap Index measures the performance of the mid-cap segment of the U.S. equity universe. The Russell Midcap Index is a subset of the Russell 1000 Index. It includes approximately 800 of the smallest securities based on a combination of their market cap and current index membership. The Russell Midcap Index represents approximately 31% of the total market capitalization of the Russell 1000 companies.
U.S. Small Cap	Russell 2000 Index	The Russell 2000 Index measures the performance of the small-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 Index representing approximately 10% of the total market capitalization of that index. It includes approximately 2,000 of the smallest securities based on a combination of their market cap and current index membership.
U.S. Core	Russell 1000 Index	The Russell 1000 Index measures the performance of the large-cap segment of the U.S. equity universe. It is a subset of the Russell 3000 Index representing approximately 90% of the total market capitalization of that index. It includes approximately 1,000 of the largest securities based on a combination of their market cap and current index membership.
U.S. Value	Russell 1000 Value Index	The Russell 1000 Value Index measures the performance of the large-cap value segment of the U.S. equity universe. It includes those Russell 1000 companies with lower price-to-book ratios and lower forecasted growth values.
U.S. Growth	Russell 1000 Growth Index	The Russell 1000 Growth Index measures the performance of the large-cap growth segment of the U.S. equity universe. It includes those Russell 1000 companies with higher price-to-book ratios and higher forecasted growth values.
International Large Cap	MSCI All Country World ex. U.S. Index	The MSCI All Country World ex U.S. Index captures large- and mid-cap representation across developed and emerging markets countries, excluding the U.S. The index covers approximately 85% of the global equity opportunity set outside the U.S.
International Mid Cap	MSCI All Country World ex. U.S. Mid Cap Index	The MSCI ACWI ex USA Mid Cap Index captures mid cap representation across 22 Developed Markets (DM) and 24 Emerging Markets (EM) countries*. With 1,208 constituents, the index covers approximately 15% of the free float-adjusted market capitalization in each country.
International Small Cap	MSCI All Country World ex. U.S. Small Cap Index	The MSCI ACWI ex USA Small Cap Index captures small cap representation across 22 of 23 Developed Markets (DM) countries (excluding the US) and 24 Emerging Markets (EM) countries*. With 4,263 constituents, the index covers approximately 14% of the global equity opportunity set outside the US.
International Core	MSCI All Country World ex. U.S. Index	The MSCI All Country World ex U.S. Index captures large- and mid-cap representation across developed and emerging markets countries, excluding the U.S. The index covers approximately 85% of the global equity opportunity set outside the U.S.
International Value	MSCI All Country World ex. U.S. Value Index	The MSCI ACWI ex USA Value Index captures large and mid cap securities exhibiting overall value style characteristics across 22 Developed and 24 Emerging Markets countries*. The value investment style characteristics for index construction are defined using three variables: book value to price, 12-month forward earnings to price and dividend yield.
International Growth	MSCI All Country World ex. U.S. Growth Index	The MSCI ACWI ex USA Growth Index captures large and mid cap securities exhibiting overall growth style characteristics across 22 Developed Markets (DM) countries and 24 Emerging Markets (EM) countries*. The growth investment style characteristics for index construction are defined using five variables: long-term forward EPS growth rate, short-term forward EPS growth rate, current internal growth rate and long-term historical EPS growth trend and long-term historical sales per share growth trend.