

Morgan Stanley

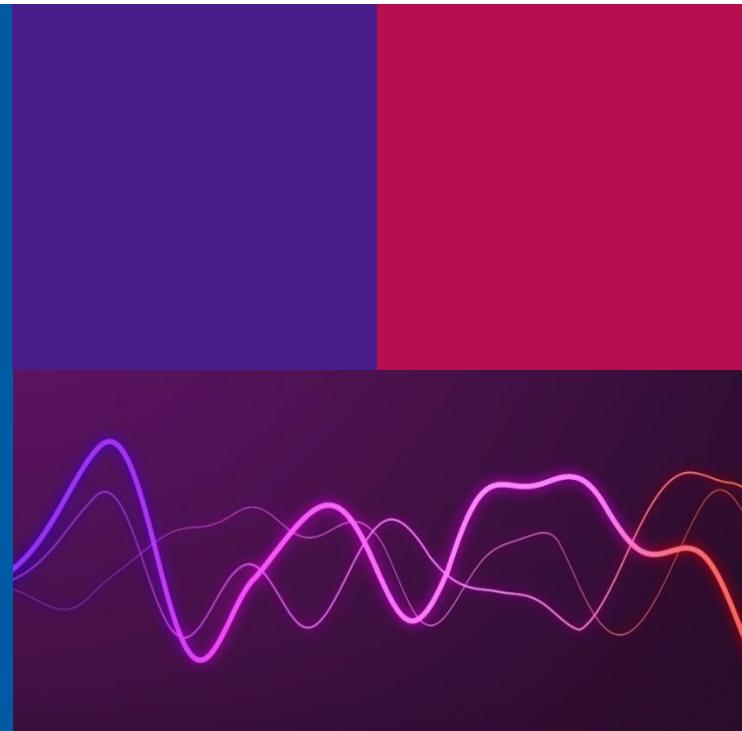
INVESTMENT MANAGEMENT

The BEAT

Bonds | Equities | Alternatives | Transition

Monthly Global Market and Asset Allocation Guide

June 2025



TOP IDEAS

3

BONDS

20

EQUITIES

32

ALTERNATIVES

43

TRANSITION

49

The **BEAT**, previously known as the Monthly Market Monitor, provides connectivity between changing market events and implications for investor portfolios.

Spanning **Bonds**, **Equities**, **Alternatives** and **Transition** *, this monthly review provides timely information across a broad array of markets and investment topics.

Each edition explores investment ideas, identifies areas of focus and provides a comprehensive outlook on asset allocation — all supported by a concise review of economic and asset class data through clear and impactful charts.

We believe The **BEAT** is a critical desk reference that enables more informed discussion and understanding of financial markets.



If you are viewing this book on your computer or tablet, **click or tap on the section box to jump to the beginning of each section.**

Data provided is for informational use only. See end of report for important additional information.

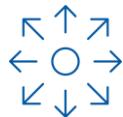
*Transition is an asset allocation view, which refers to cash, cash equivalents or liquid short-duration assets, such as short-dated Treasuries, that can be used to “transition” to other asset classes.

TOP IDEAS

Key Themes for June 2025

**A New Fed Policy Framework**

Shortfalls vs. Deviations. Chairman Powell remarked at a Fed conference in May that in the next policy framework review they would weight more heavily “shortfalls” rather than “deviations” to their inflation target and estimate of full employment - their so-called dual mandate. This marks a change from their last policy review in 2020. The implication is that Fed policy may become less reactive to deviations from objectives in their dual mandate, with the goal of adopting a more robust policy reaction function.

**The Implications of a New Fed Framework**

It's all about the average. Powell commented that he may revisit the concept of average inflation targeting. This means that the Fed may tolerate a period of above target inflation, as long as the preceding period was below target, such that “on average” they meet their target. Same for the unemployment rate. The immediate read from the market today is that the Fed could cut rates sooner, even though inflation is running above target - especially if they believe there is a risk of a sharp rise in the unemployment rate. Thus, a more robust and less rigid framework.

**Steeper Yield Curves**

Implications for long duration. The potential change in the Fed's framework increases the possibility of a steeper curve and underperformance of long duration assets. The Fed may be signaling that they are willing to risk higher inflation in order to stave off the potential recessionary impacts of a sharp rise in unemployment. This suggests term premia should increase, but doesn't mean long-term yields can't fall in absolute terms. It simply means they may fall not as far as prior to the change in framework.

**Broader Asset Market Policy Support**

A positive impulse for equities. The change in the Fed's framework is supportive of equity assets. This is because the near-term read is that the Fed is more apt to lower policy rates to create stimulus, despite risking higher inflation. This should support earnings and multiples alike, provided inflation does not spin out of control.

**Tariffs: Policy, Strategy and Process**

It's not just chaos. It is important to understand that in the eyes of the administration tariff policy needs to develop a rational thesis rather than just react to headlines. There are three components to U.S. tariff policy: 1) Reduce the trade deficit, 2) Reduce non-tariff barriers (NTBs), and 3) Coercive policy objectives with trading partners to counter China's policies. Much of the focus is on the measurable first point, but the hard-to-quantify points two and three may be the main drivers that put trade agreements well within reach. Markets may not be appreciative and risk being surprised to the upside.

The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Not to be construed as an investment or research recommendation.

TOP IDEAS

The Portfolio Solutions Group – Our Top 4 Ideas

Rebalancing Equity Exposure

The new deals. We see the trade deal struck between the U.S. and U.K. as the first domino to fall in other successive deals with allied trading partners. Additionally, the deal struck between the U.S. and China has brought down recession risks significantly. This is increasing both earnings and multiples from previous levels and we have rebalanced by increasing equity exposures not just in the U.S. but also Europe, our highest conviction overweight.

Adding European High Yield (HY)

Good for both U.S. and European investors. The reduction in global growth risks from the recent trade deals should also reduce default risks, making lower quality credit more attractive. U.S. dollar (USD) investors can buy European Union (EU) HY and pick up a significant amount of additional yield by adding FX carry. This increased demand for EU credit should also be supportive of the underlying asset itself and a boost for euro-based investors. Fiscal stimulus and ECB rate cuts should be supportive as well.

Considering U.S. Loans Exposure

Managing duration risk. With recession risks receding, we prefer bank loans over traditional U.S. HY, and the floating rate nature of loans over traditional fixed-duration HY. Having said that, loan spreads have tightened over recent weeks, creating less of a valuation tailwind and balancing the risk/reward towards default risks going forward. While HY is typically a less rate-sensitive asset, we like the additional reduction in rate sensitivity that comes from bank loans, especially given recent commentary about the Fed's potential change to their policy framework.

Overweight Indian Equities

Downcycle bottoming. India has suffered from two quarters of a self-inflicted economic slowdown and corporate earnings downgrade cycle, all driven by a combination of tight domestic fiscal and monetary policy. As growth risk has risen due to U.S. trade policy uncertainty, and inflation has moderated to a multi-year low, the Reserve Bank of India (RBI) has shifted to an accommodative policy stance by cutting interest rates. Based on recent data, encouraging signs of the domestic cycle bottoming have emerged. While U.S. tariffs remain a risk, India is relatively insulated given their low goods export exposure to the U.S. and a largely domestic-oriented economy.

The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Not to be construed as an investment or research recommendation.

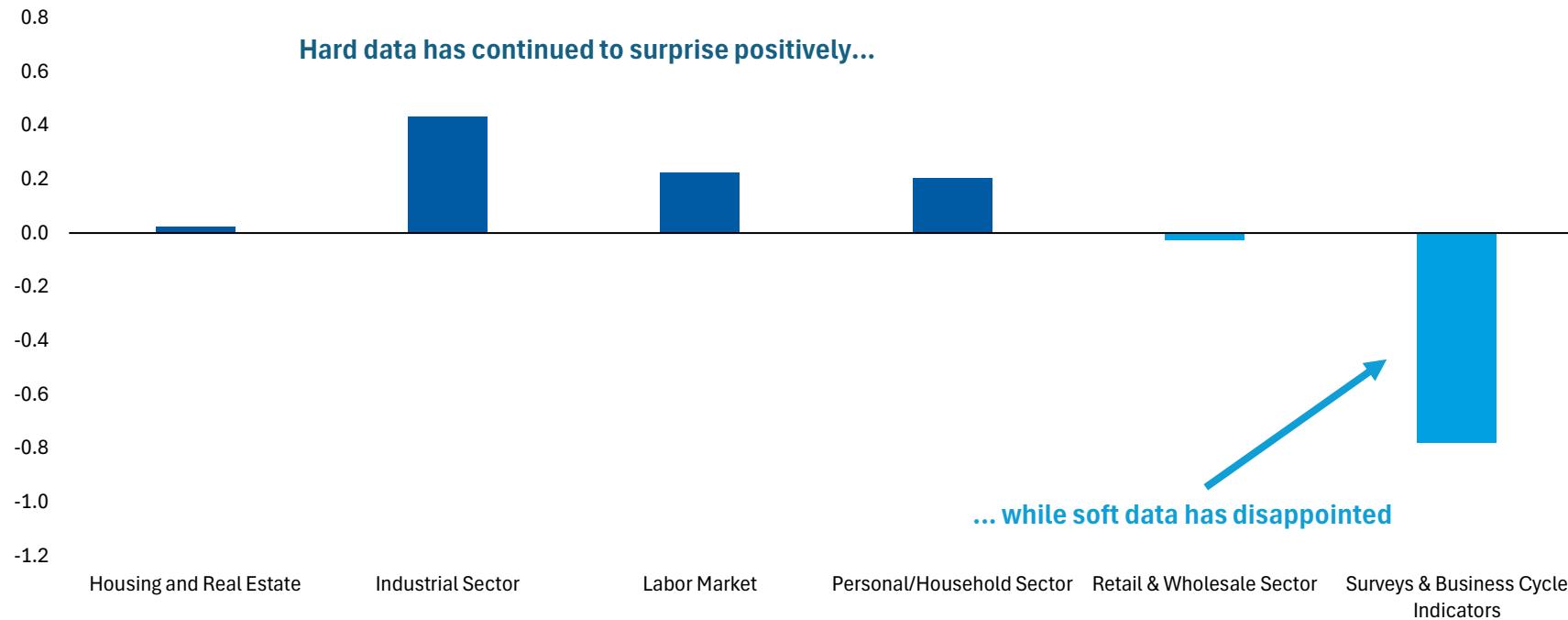
TOP THEMES

While Soft Data Continues to Disappoint, Hard Data Remains Resilient

Record levels of policy uncertainty have cast some doubt over the prospects for economic growth. Thus far, this uncertainty has resulted in negative trends for many of the so-called “soft” data measures (sentiment surveys, PMIs*), while “hard” data (measures of actual economic activity) have continued to surprise positively. We would expect these trends to eventually reconverge, with the timing, direction and magnitude determining the path forward for asset prices.

Economic Data Weakness Has Been Contained to Soft Measures Like Surveys and Business Cycle Indicators

Bloomberg U.S. economic surprise by economic sector



Source: Bloomberg, MSIM. As of May 20, 2025. * PMI stands for Purchasing Managers' Index. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results.**

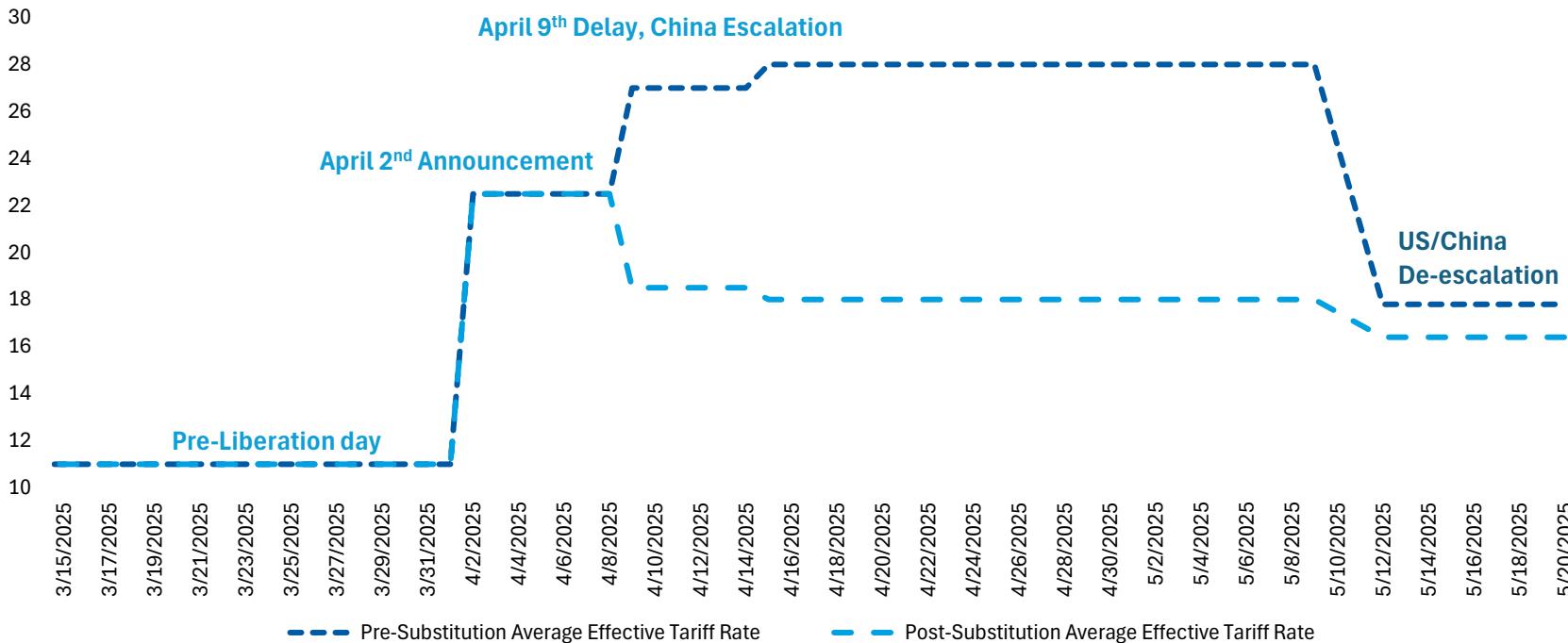
TOP THEMES

With Recent Developments, Have We Reached Peak Tariff De-escalation?

With the May 12th temporary pause/reduction of tariffs on China, the overall average effective tariff rate (as estimated by the Yale Budget Lab) fell by just over 10%, down to 17.8% on a pre-substitution basis. With the recent de-escalation with China proving to be much more significant than market expectations, further reductions seem less likely.

Following the Recent Trade Deal With China, Have We Reached Peak Tariff De-escalation?

Average pre/post-substitution effective tariff rate (%), as estimated by the Yale Budget Lab



Source: Bloomberg, Yale Budget Lab, MSIM. As of May 20, 2025. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results.**

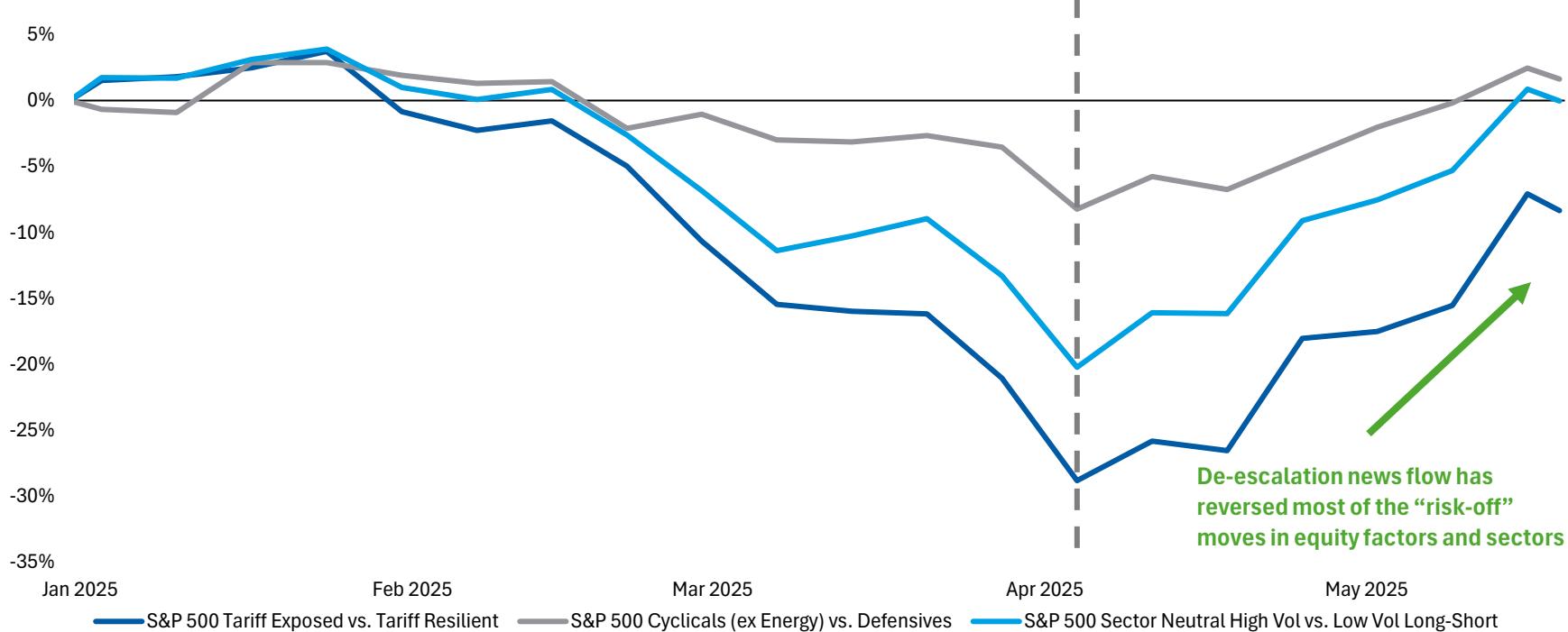
TOP THEMES

With De-escalation in Focus, Markets Have Exhibited “Risk-On” Trends

Since the reciprocal tariffs delay announced on April 9th, equity market internals have signaled risk-on trends across several perspectives: On average, Cyclical (ex energy) have outperformed Defensives, the high-volatility factor has outperformed low-volatility (sector neutral basis), and our tariff “exposed” basket of stocks has outperformed the tariff “resilient” basket.

The “Risk-On” Trade Has Returned Since Early April, with De-escalation in Trade Tensions a Key Catalyst

YTD cumulative performance for key pair trades



Source: Bloomberg, MSIM. As of May 20, 2025. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results.**

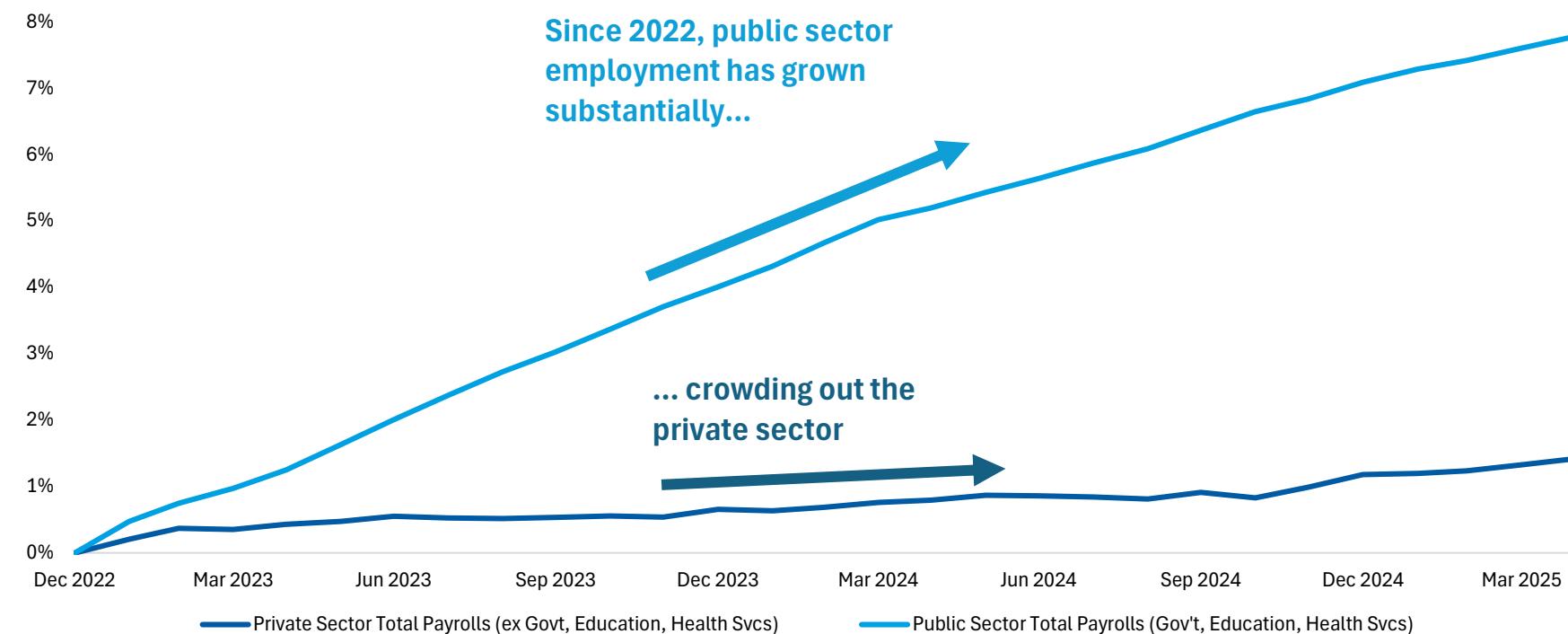
TOP THEMES

Over the Past Three Years, Payroll Gains Have Been Driven by the Public Sector

Over recent years, the majority of payroll job gains have been in the public sector (government, education, health services), resulting in a crowding out of private sector employment. It remains to be seen whether the new administration's policies can lead to a reconvergence in employment trends, which would be positive for labor productivity and inflation.

Public Sector Employment Has Exploded Since 2022, Resulting in a Crowding Out of the Private Sector

Cumulative growth in total payrolls since 12/31/2022



Source: Bloomberg, MSIM. As of April 30, 2025. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results.**

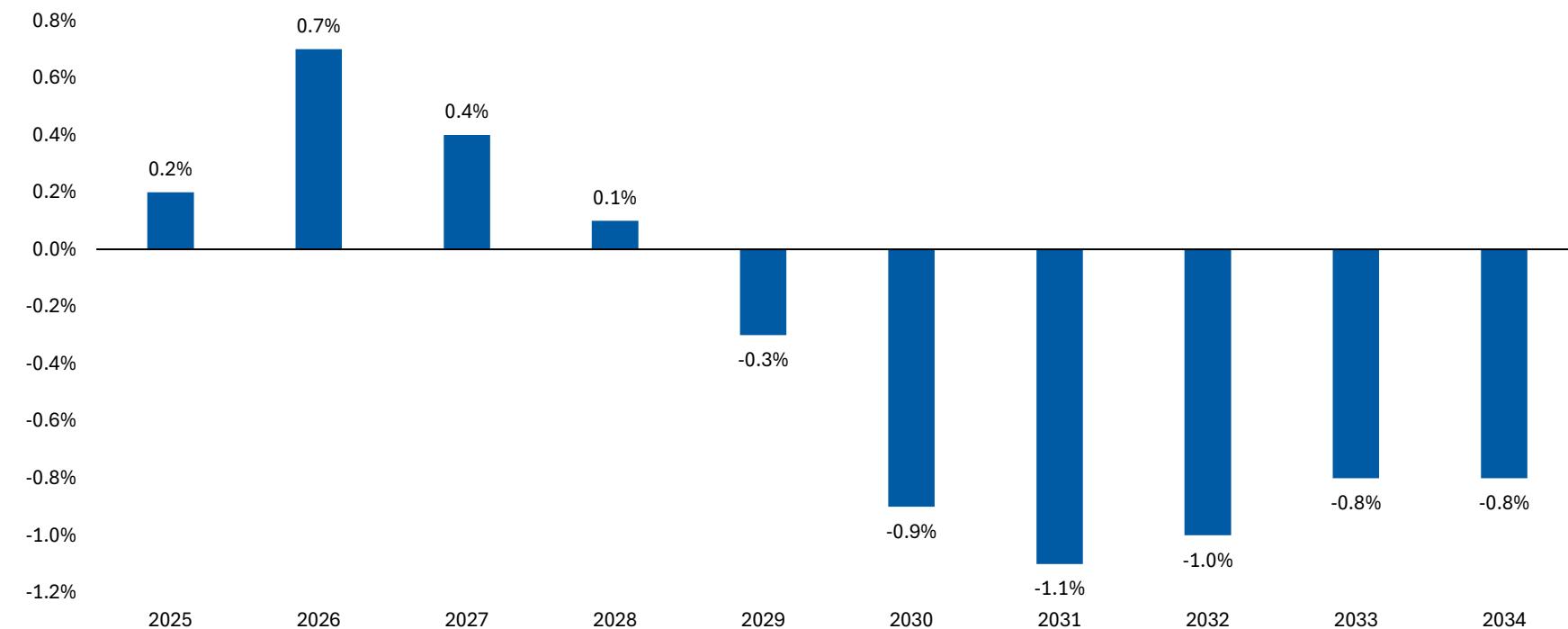
TOP THEMES

Mapping the Total Fiscal Impulse from Reconciliation

While the budget process still has a long way to go, the bill emerging from the House reconciliation process suggests more near-term fiscal tailwinds than had been expected. The core focus remains on extending the tax cuts set to expire at the end of this year, but the bill has been structured with front-loaded benefits and backend-weighted costs as well.

Estimated Fiscal Impulse from Reconciliation Shows a Front-Loading of Stimulus

Net fiscal impulse from reconciliation legislation



Source: Bloomberg, Don Schneider (Piper Sandler), MSIM. As of May 16, 2025. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results.**

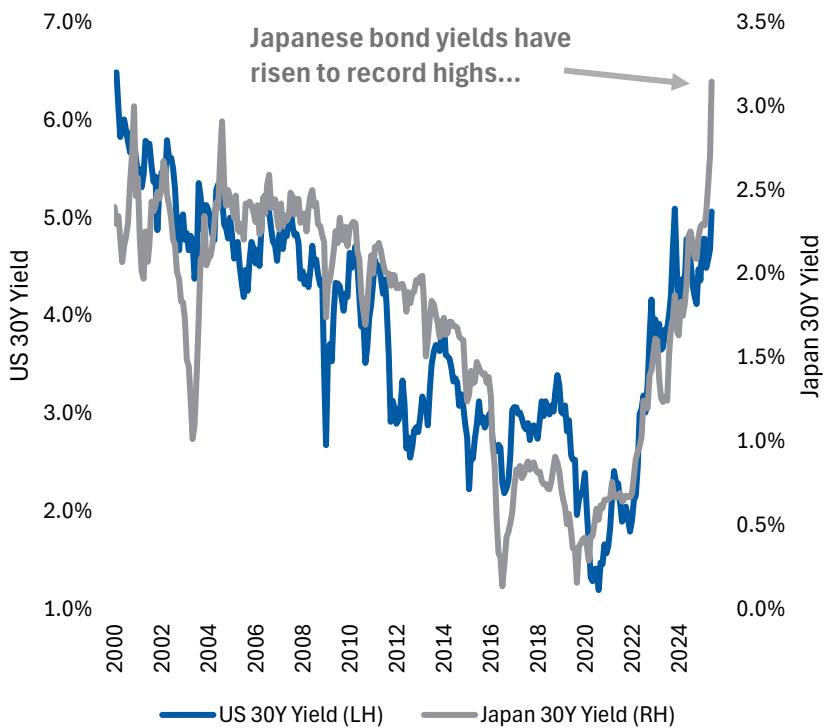
TOP THEMES

Global Bond Yields Are on the Rise – Not Unique to the U.S.

Long duration assets are being repriced globally, not just in the U.S. In fact, U.S. long-dated bond yields have risen less so than in other major regions thus far in 2025.

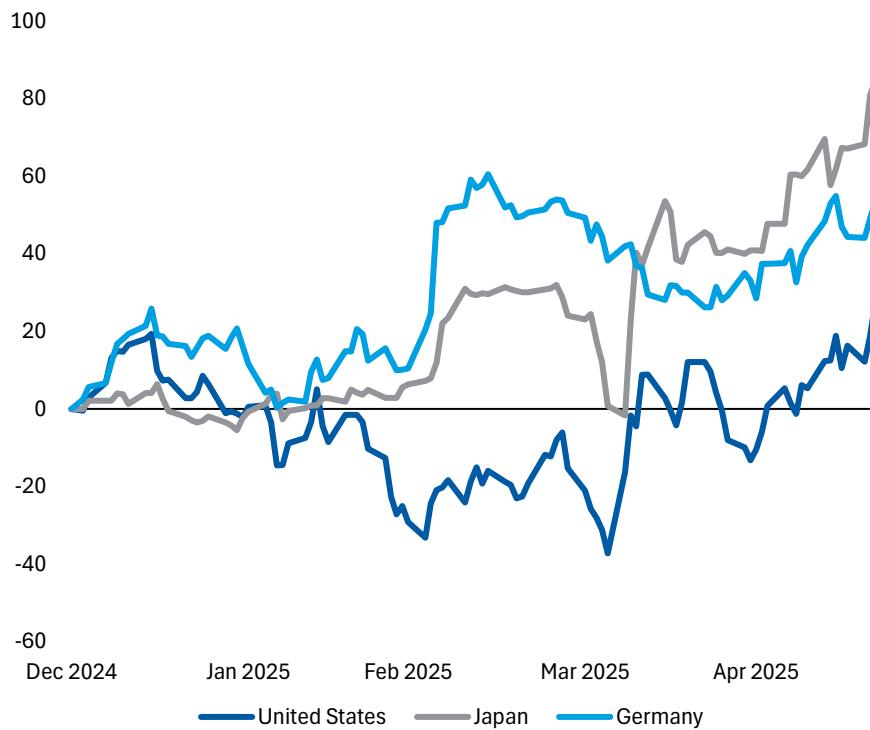
Japanese Bond Yields Have Risen to Historic Levels

U.S. 30-year yield (LH), Japan 30-year yield (RH)



U.S. Bond Yields Have Risen Least in 2025

YTD cumulative change (in bps)



Source: Bloomberg, MSIM. As of May 20, 2025. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results.**

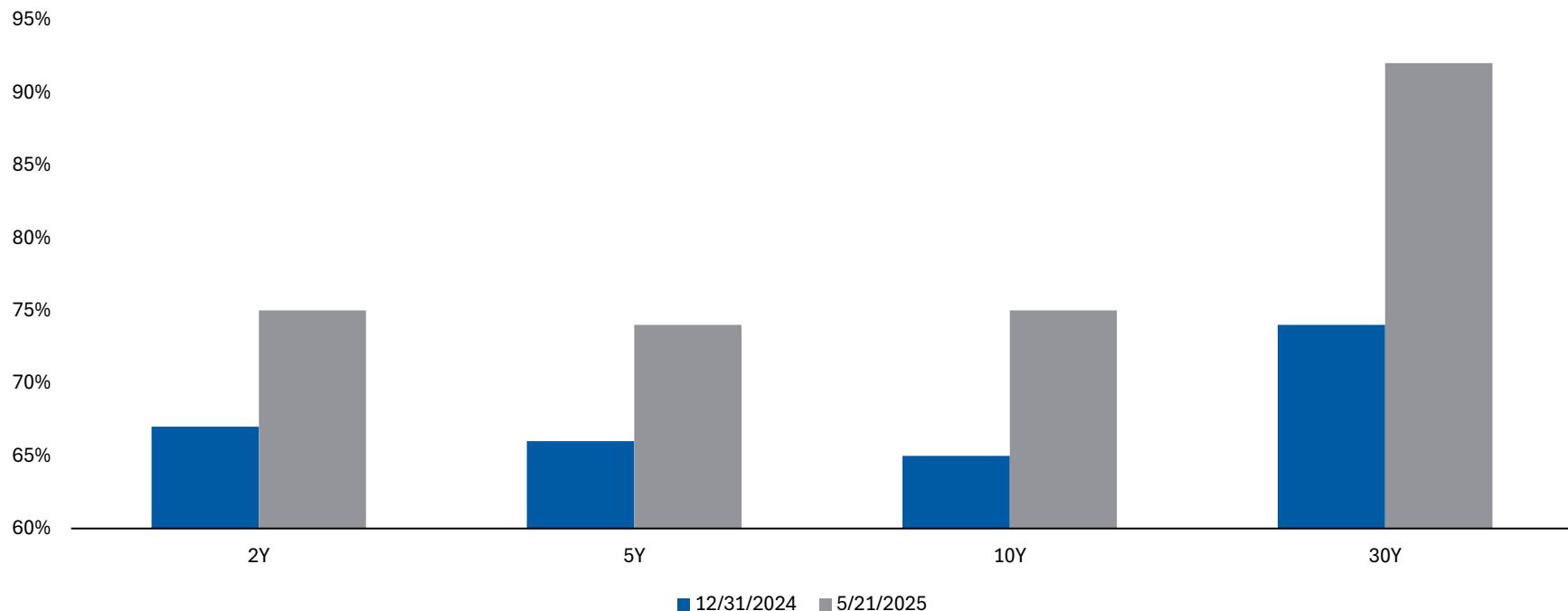
TOP THEMES

Municipals: Higher Yields and a Steeper Curve

Longer-dated yields in the municipal market moved higher in May, a continuation of the YTD trend. In the face of heavy supply in recent months, the muni curve has (bear) steepened, to a greater degree than U.S. Treasuries (USTs), resulting in attractive Muni/UST ratios out on the curve.

Muni/UST Ratios Look Attractive Farther Out on the Curve

Muni/UST ratios across selected curves, 12/31/24 and present



Source: Bloomberg, MSIM. As of May 21, 2025. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results.**

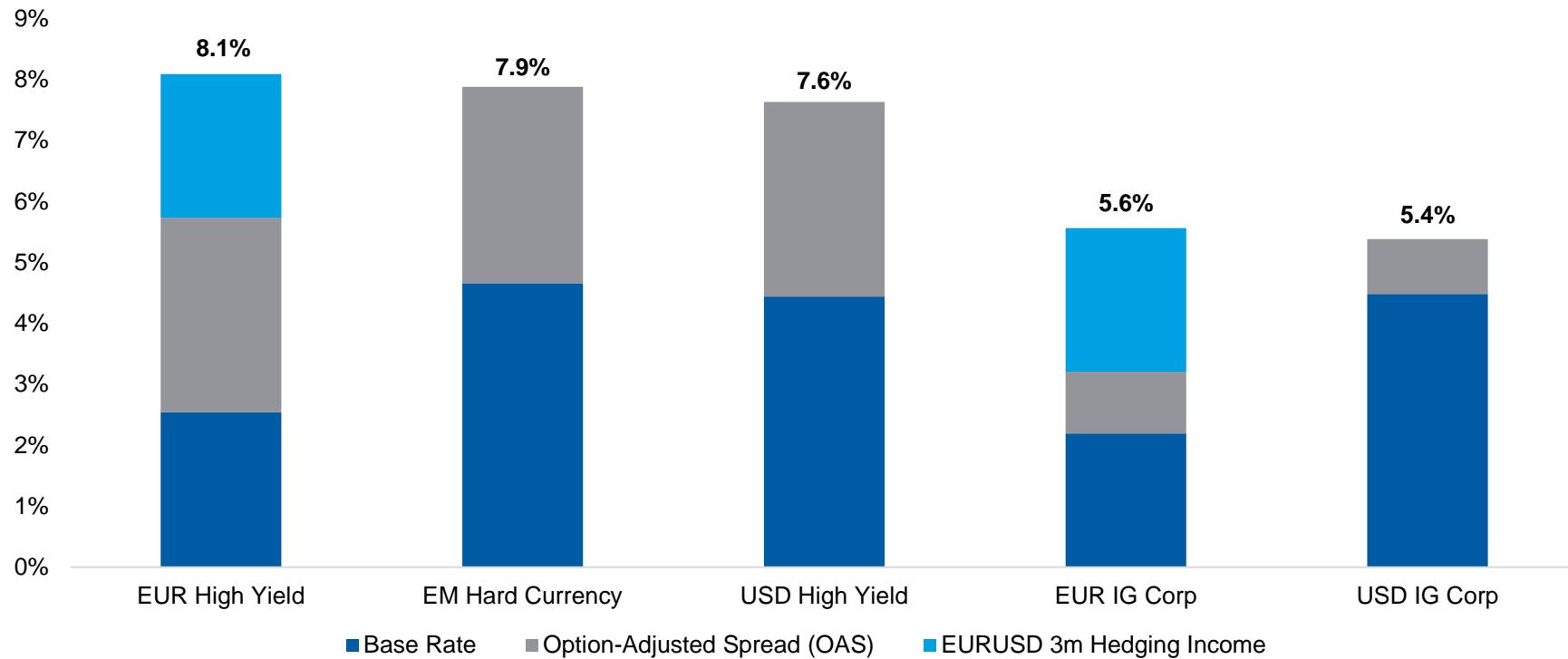
TOP IDEAS

Overweight European High Yield Credit

The reduction in global growth risks from the recent positive trade negotiation outcomes should reduce default risks, making lower-quality credit more attractive. European HY credit appears attractive especially for USD-based investors, given an additional 2.4% pick up from hedging euro exposure back to USD.

European HY Credit Offers the Highest Yield on USD-Hedged Basis

Yield decomposition across major credit asset classes



Source: Bloomberg, MSIM. As of May 22, 2025. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results.**

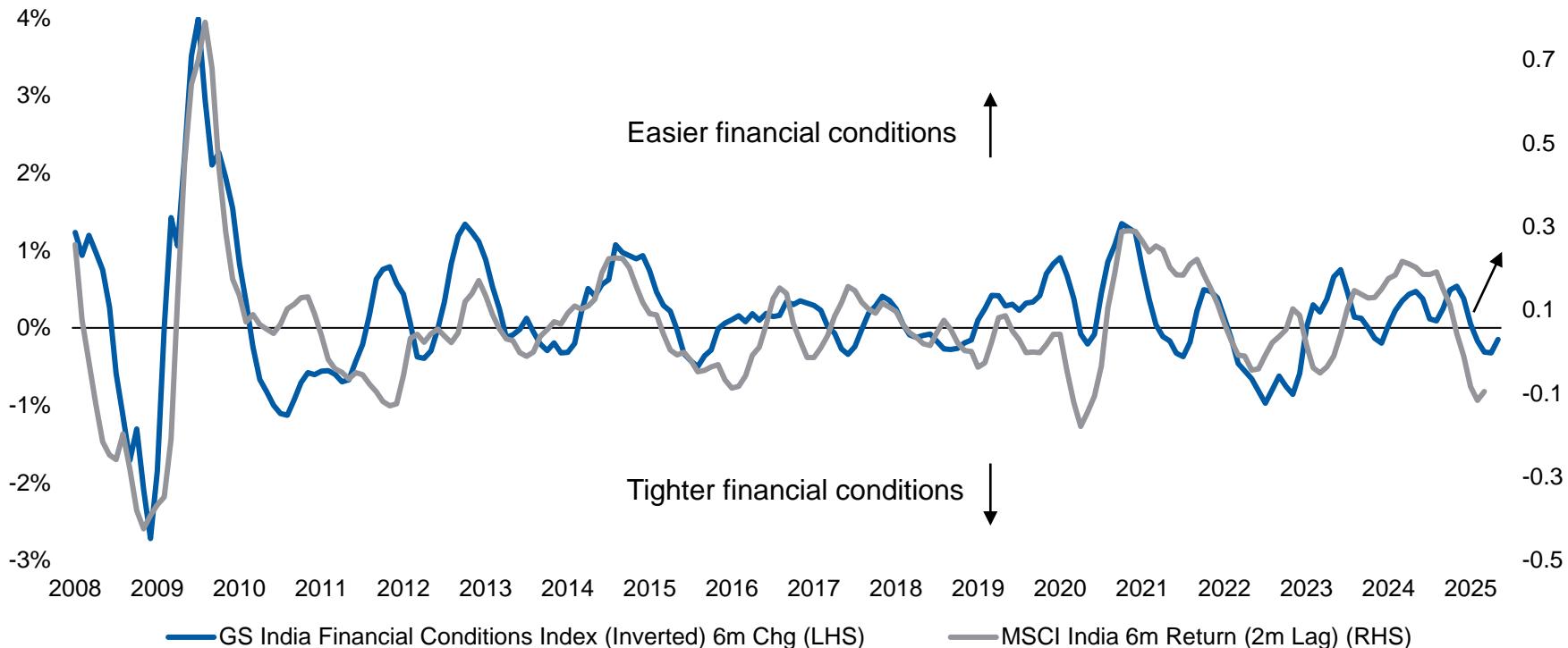
TOP IDEAS

Overweight Indian Equities

India muddled through two quarters of an economic and corporate earnings growth slowdown since 4Q24, driven by tight domestic fiscal and monetary policy. The first signs of bottoming have emerged after the Reserve Bank of India shifted to an accommodative policy stance. India is also less vulnerable to U.S. trade-policy volatility, given its low external exposure.

Indian Equity Returns Have Historically Been Positive When Financial Conditions Ease

India financial conditions (LH) and MSCI India rolling 6M return (2-month lag, RH)



Source: Bloomberg, Goldman Sachs, MSIM. As of May 21, 2025. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results.**

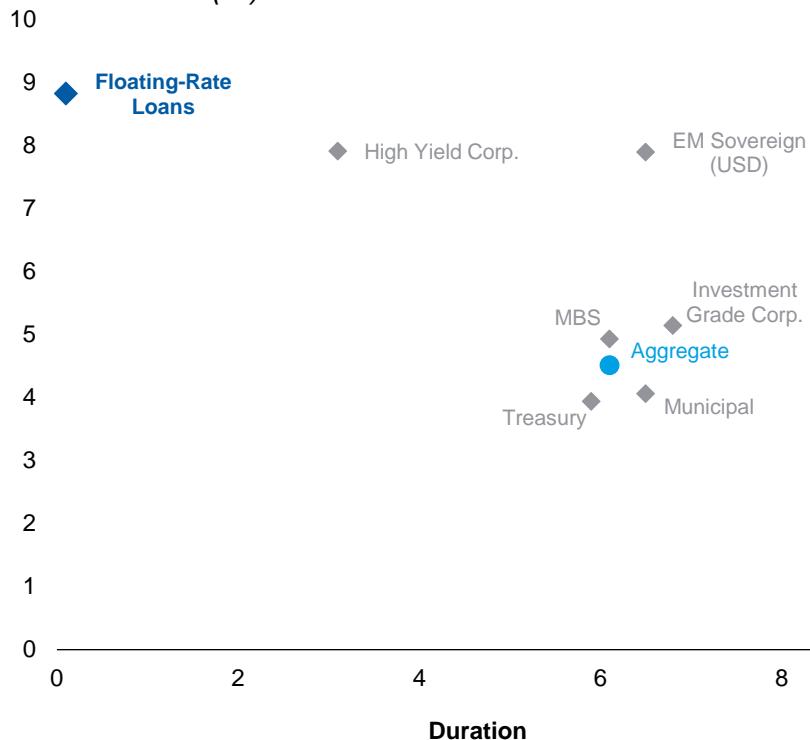
TOP IDEAS

Considering Loans Exposure: Managing Duration Risk

While loan spreads have tightened over recent weeks, we like the additional reduction in rate sensitivity that comes from bank loans, especially given the Fed's potential changes to their policy framework. Additionally, loans show low correlations to traditional fixed income asset classes.

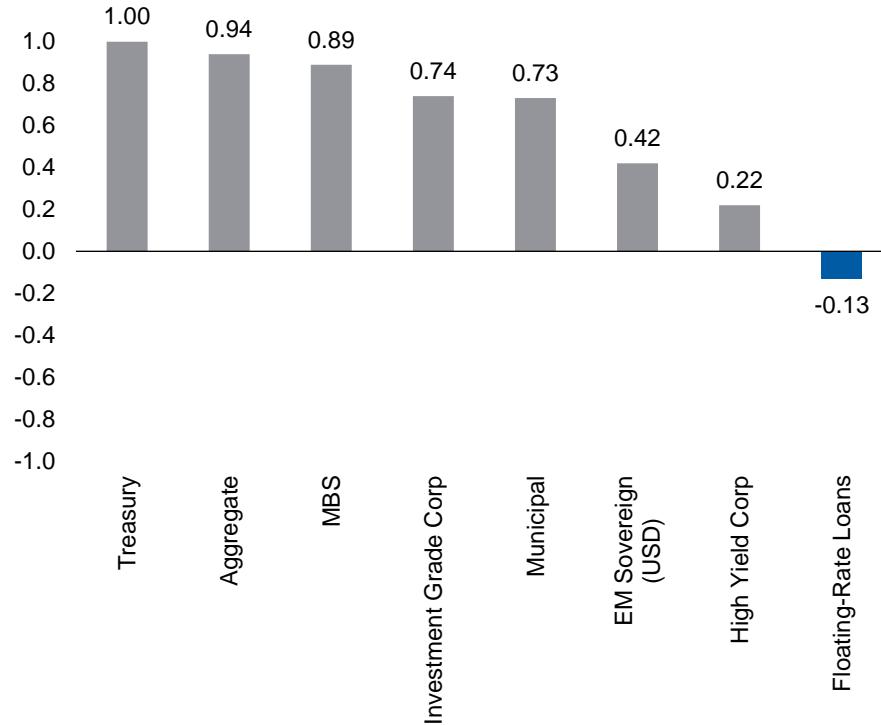
Loans Have High Yields and Near-Zero Duration

Yield-to-worst (%) vs. duration



Negative Correlation to Core Bond Allocations

10-year correlation to USTs



Source: Bloomberg, MSIM. As of May 22, 2025. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results.**

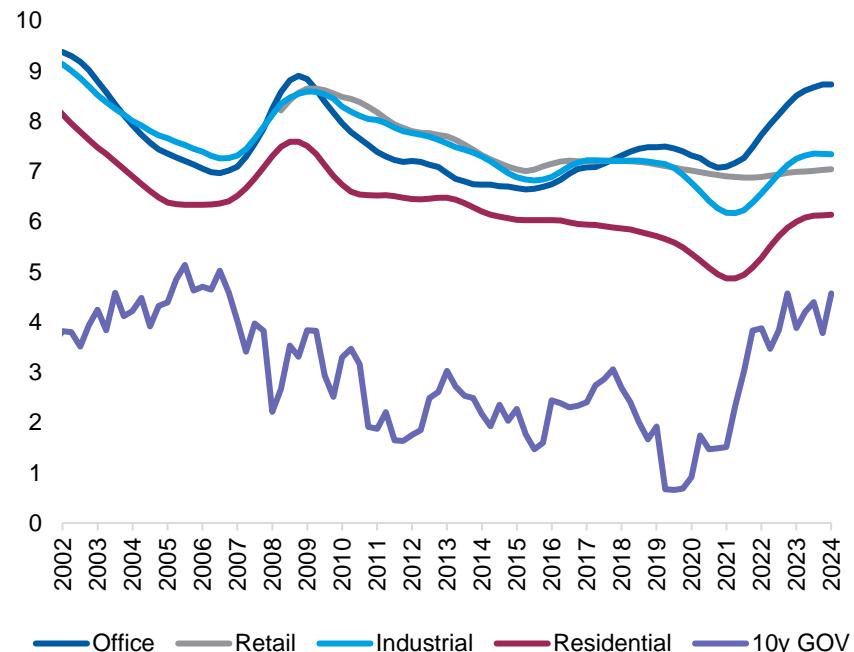
TOP IDEAS

Real Estate Fundamentals Continue to Improve

Real estate has been experiencing a repricing over the last few years in response to higher interest rates, cyclical oversupply and, in certain sectors, secular demand destruction. That said, the long-term operating outlook is markedly improving, with future supply materially decreasing and the demand destruction seen in certain sectors stabilizing. Entry pricing is meaningfully lower, providing a margin of safety and an interesting access point to improving fundamentals.

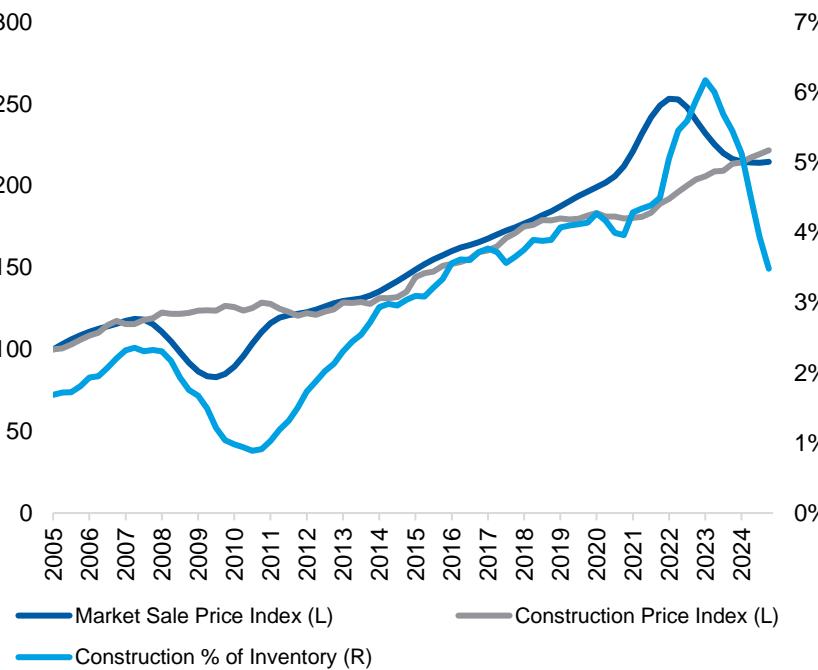
U.S. Cap Rates Have Stabilized...

Real estate sector cap rates (%)



...and Asset Valuations Are Below Replacement Cost

Residential price index (LH), construction as % of inventory (RH)



Source: CoStar, Bloomberg, Bureau of Labor Statistics. As of Dec 31, 2024. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is not indicative of future results..**

TOP IDEAS

Capital Markets Investment Framework

Representative Allocations from the Portfolio Solutions Group

Current allocation
Change from previous

- High conviction underweight
- Underweight
- = Neutral
- + Overweight
- ++ High conviction overweight

| Asset Allocation | Our View | Commentary |
|---------------------|---|---|
| Bonds | | |
| Duration |  | We continue to favor a neutral stance on duration. Following the recent increase to ~4.50%, 10-year yields currently sit in the middle of our conceptual range. The recent de-escalation in tariffs between China and the U.S. has removed headwinds to growth and reduced recession risks. |
| Credit |  | Credit spreads have continued to tighten and are now back below medium and long-term averages. We continue to view credit spreads as asymmetrically exposed to negative news, with limited upside from today's levels. |
| Equities | | |
| Risk Level |  | Risks remain balanced for equities. The announced de-escalation of the U.S./China tariff war further eases growth headwinds and reduces recession risk. Equities still need to navigate headline risks tied to trade negotiations, upside price pressure from tariffs and eventual deceleration in growth. |
| Alternatives | | |
| Private Markets |  | Private equity investors have experienced constrained distribution activity since 2022. In this environment, we expect to experience higher dispersion in underlying capital markets, portfolio company and asset performance, and the success of private asset managers. We think private equity valuations offer a fair entry, and see the importance of European exposure along with emerging markets allocations, such as India. |
| Hedge Funds |  | In private credit, we favor non-cyclical exposures in corporate lending, and acknowledge the increased supply for opportunistic and special situation lenders that have a greater degree of flexibility in their debt strategies. The macro driven environment has been disruptive for many hedge fund alpha themes. We maintain our high conviction in relative value strategies able to capitalize on high levels of intra-market dispersion. |
| Commodities |  | We remain neutral on energy commodity markets, as geopolitical upside risks are balanced by high spare capacity in markets such as crude, which limited upside absent physical disruptions. In the current environment we see precious metals as a segment that could enjoy structural tailwinds. |
| Transition | | |
| Cash/Short Duration |  | We remain underweight cash and short duration instruments. |

For informational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. The tactical views expressed above are a broad reflection of our team's views and implementations, expressed for client communication purposes. Individual team allocations may differ. The information herein does not contend to address the financial objectives, situation or specific needs of any individual investor. The signals represent the Portfolio Solutions Group view on each asset class.

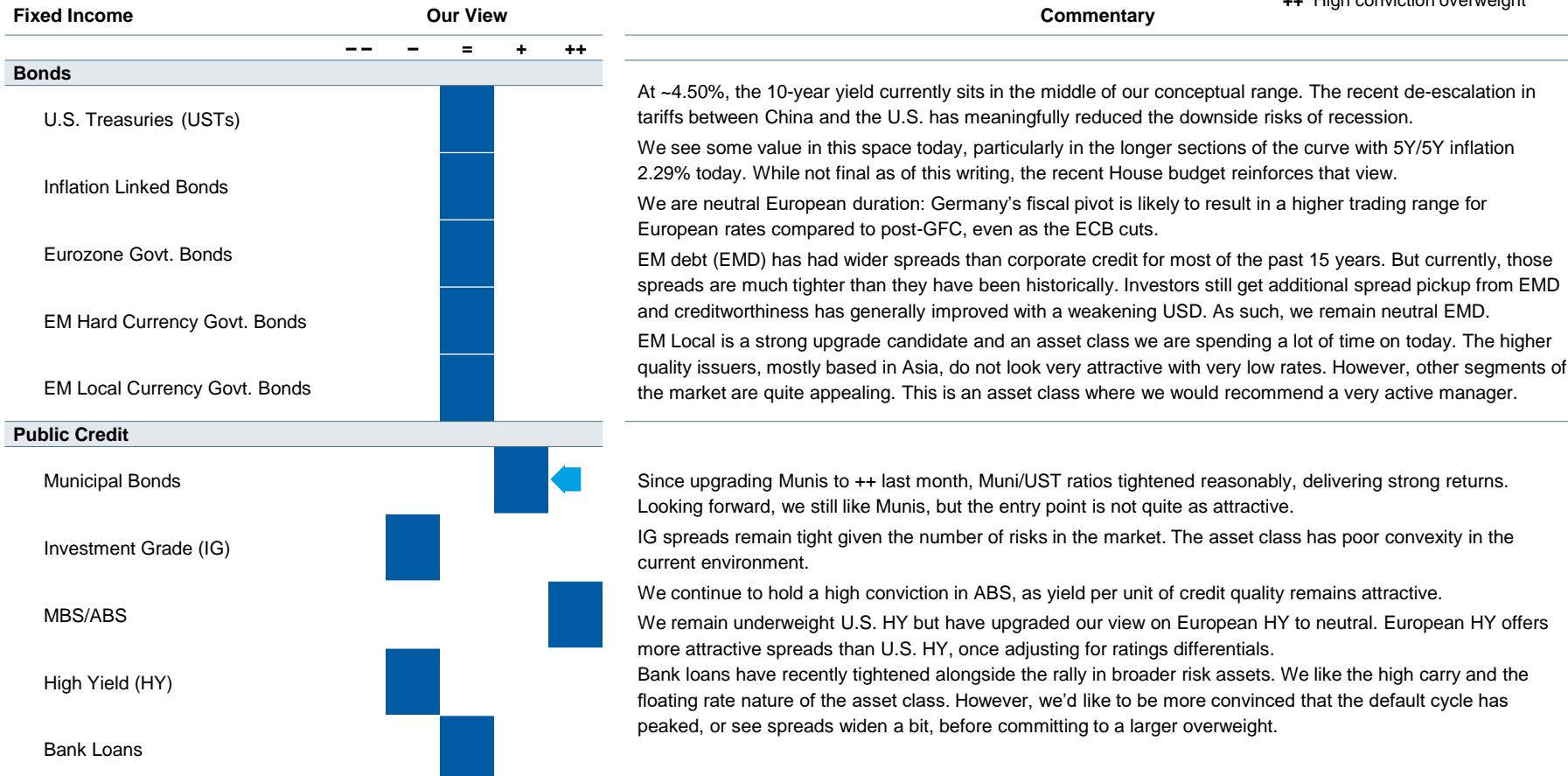
TOP IDEAS

Global Fixed Income

Representative Positioning from Portfolio Solutions Group

Current allocation
Change from previous

- High conviction underweight
- Underweight
- = Neutral
- + Overweight
- ++ High conviction overweight

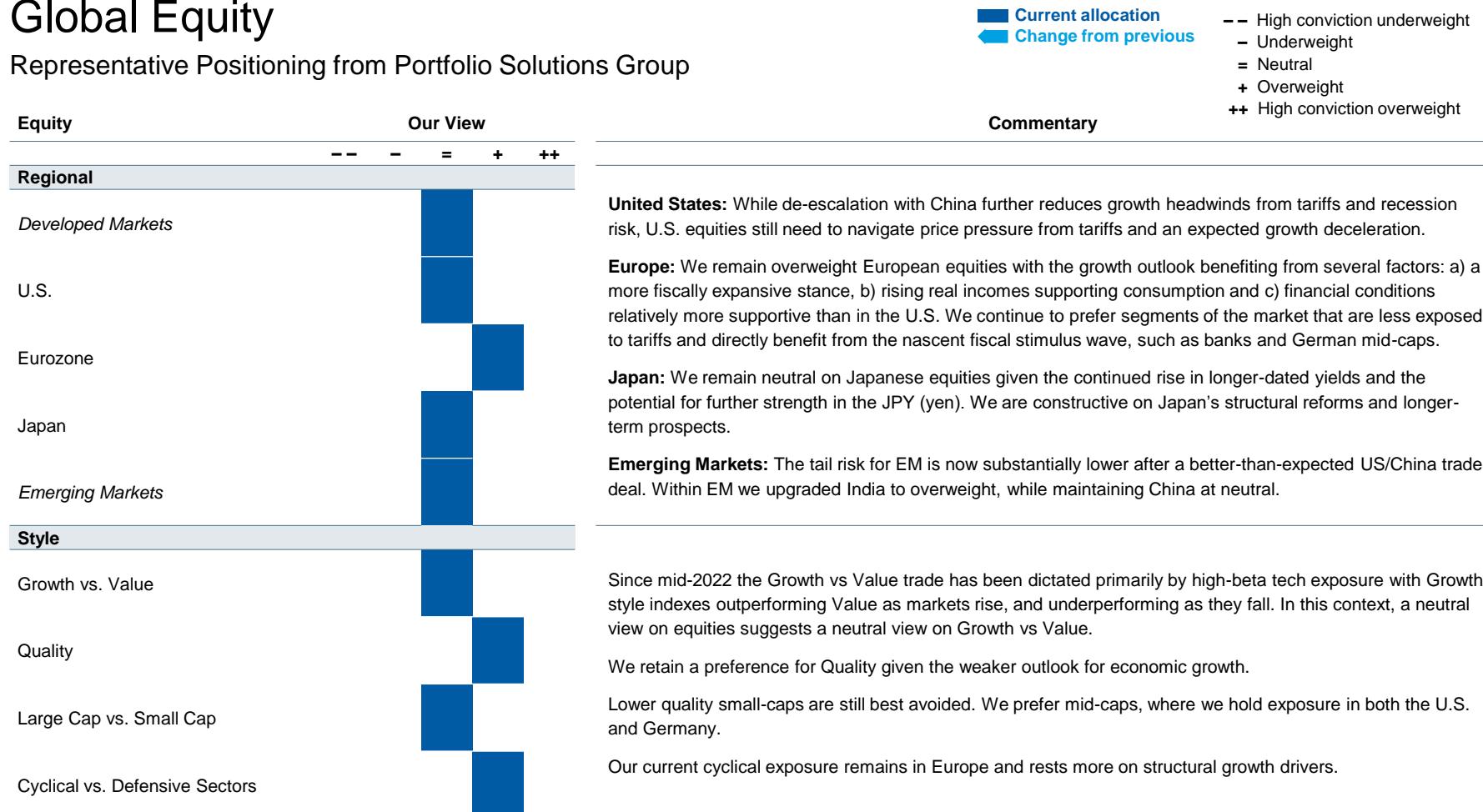


For informational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. The tactical views expressed above are a broad reflection of our team's views and implementations, expressed for client communication purposes. Individual team allocations may differ. The information herein does not contend to address the financial objectives, situation or specific needs of any individual investor. The signals represent the Portfolio Solutions Group view on each asset class.

TOP IDEAS

Global Equity

Representative Positioning from Portfolio Solutions Group



For informational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. The tactical views expressed above are a broad reflection of our team's views and implementations, expressed for client communication purposes. Individual team allocations may differ. The information herein does not contend to address the financial objectives, situation or specific needs of any individual investor. The signals represent the Portfolio Solutions Group view on each asset class.

TOP IDEAS

Alternatives

Representative Positioning from Portfolio Solutions Group

| Alternative Assets | Commentary |
|----------------------------|--|
| Private Markets | |
| Private Equity | Private equity investors have been experiencing constrained distribution activity since 2022 when the shift in the interest rate regime triggered adjustments across capital markets. There was optimism after last year's U.S. election that directional clarity and pro-market policy could support a recovery in distribution levels, but the recovery in investor cash flows has been more delicate than expected due to the shock factor and uncertainty associated with recent policy announcements. We think valuations offer a fair entry for new investments. Successful strategies will minimize downside exposure to the exogenous risks such as GDP growth, inflation and changes to global trade. We think they will be associated with organic growth initiatives using relatively modest leverage, and will likely participate, either as enablers or adopters, in the transformational technology changes that are taking place. While U.S. private equity is expected to benefit from its deep network of specialist private equity managers, European private opportunities potentially increases in its competitiveness as recently announced growth-related policies provide a tailwind and the country-specific nature of European private equity now potentially represents an advantage because of the resulting focus on local revenues. We are constructive on India private equity due to both domestically driven growth as well as the potential to invest in alternative global supply chains, although we note manager selection will be very important. |
| Private Real Assets | Commercial real estate currently offers compelling entry valuations at a time of stabilizing fundamentals. 2022 to 2024 was a challenging time for real estate, characterized by high interest rates, oversupply and difficult fundraising. In response to these dynamics, pricing has reset materially lower while the cost and availability of debt has stabilized, and future supply is significantly lower. However, private equity real estate fundraising has yet to recover, presenting a unique opportunity for those with capital willing to invest in the sector, particularly in growing, fundamentally strong sectors such as industrial, residential and net lease. |
| Private Credit | Infrastructure companies have demonstrated very strong cost-pass through and margin stability, often through fixed construction costs and contracted revenues linked to inflation. They've also demonstrated impressive demand growth in sectors such as power and data and are not directly impacted by tariffs from a revenue perspective as they are not expected to produce goods that are sold to the U.S., although transportation assets are linked to trade volumes. In relation to the cost impact from tariffs, the renewables supply chain is worth watching closely, with batteries and solar being more exposed to China, and wind power generation equipment less so due to more established supply chains through Europe and Mexico. |
| Liquid Alternatives | |
| Hedge Funds | The macro driven environment has been disruptive for many fundamental hedge fund alpha themes. However, we are cognizant that rich environments for stock picking alpha tend to follow these periods and expect an expanding opportunity set in the second half of 2025. We continue to prefer specialist hedge fund portfolio managers best positioned to analyze and adapt to the ongoing stimuli, including tariffs, a rapidly evolving AI landscape and concerns over the path of economic growth and resultant policy responses. Highly liquid macro strategies have been responsive to rapidly changing market dynamics, and we believe will continue to contribute to performance should broader volatility persist. We maintain our high conviction in relative value strategies able to capitalize on high levels of intra-market dispersion. |
| Commodities | We remain neutral on energy commodity markets as geopolitical upside risks are balanced by high spare capacity in markets such as crude, which limit upside absent physical disruptions. In the current environment we see precious metals as a segment that could enjoy structural tailwinds. |

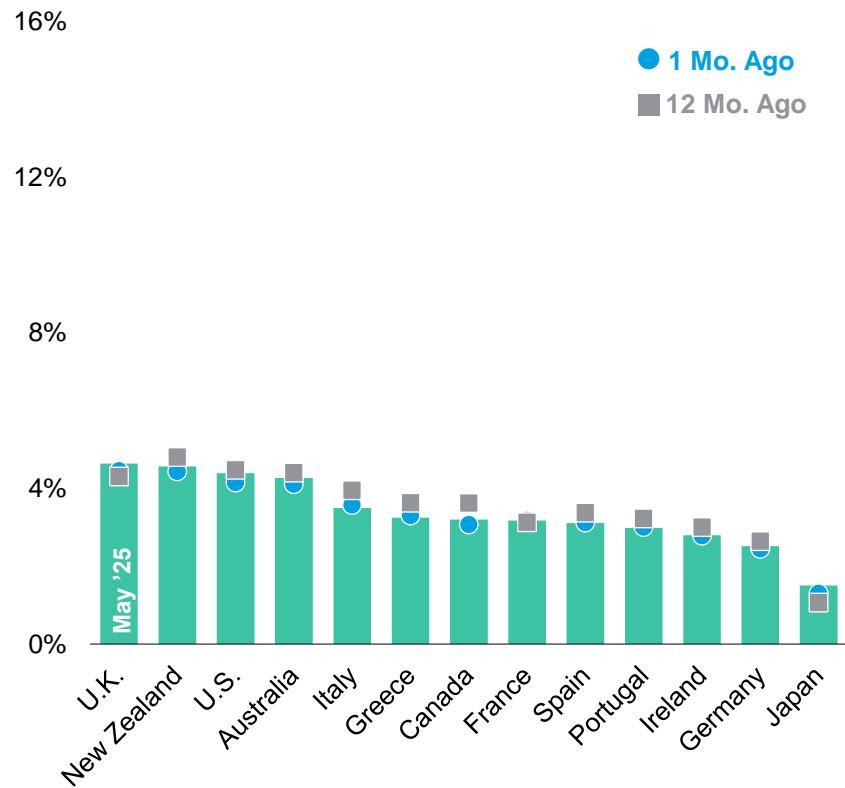
For informational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. The tactical views expressed above are a broad reflection of our team's views and implementations, expressed for client communication purposes. Individual team allocations may differ. The information herein does not contend to address the financial objectives, situation or specific needs of any individual investor. The signals represent the Portfolio Solutions Group view on each asset class. Note: Over/underweight in private markets refers to decisions regarding the flow of new investments, not the stock of existing investments.

BONDS

Sovereign Bond Yields

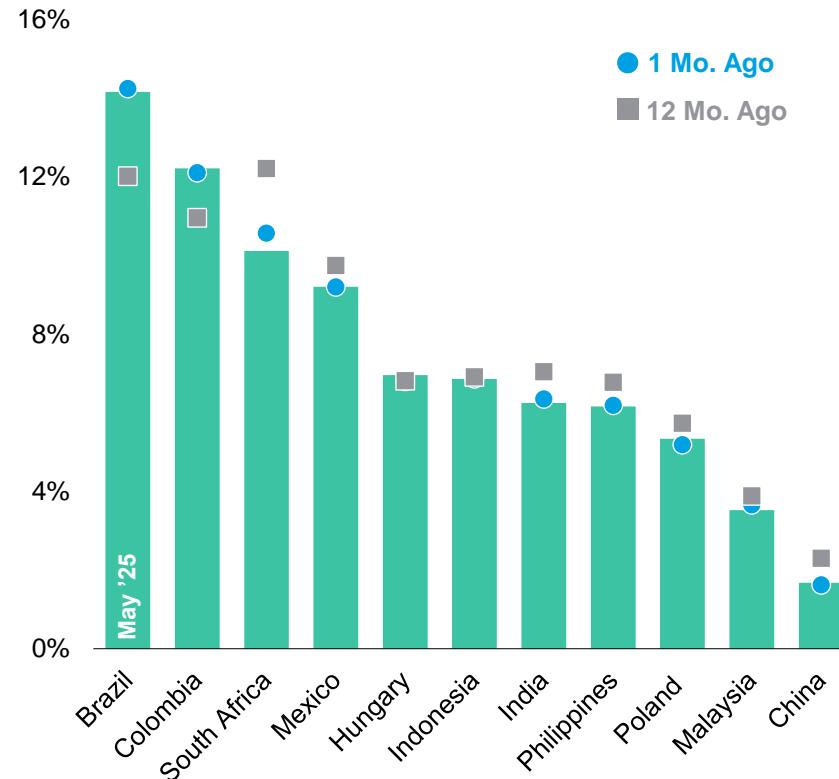
Developed Markets

(10 yr. Yield)



Emerging Markets

(10 yr. Yield)



Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Factset as of 5/31/25. Data provided is for informational use only. See end of report for important additional information.

BONDS

Key Rates (%)

| Security | Current | 12-Mo. Ago | Average | Minimum | Maximum |
|----------------------------------|---------|------------|---------|---------|---------|
| 1-Week SIFMA | 1.97 | 3.36 | 3.08 | 1.86 | 4.21 |
| Secured Overnight Financing Rate | 4.35 | 5.33 | 4.74 | 4.26 | 5.40 |
| 1-Mo SOFR | 4.32 | 5.33 | 4.70 | 4.29 | 5.35 |
| 3-Mo SOFR | 4.32 | 5.35 | 4.63 | 4.21 | 5.35 |
| 2-Yr Treasury | 3.90 | 4.92 | 4.12 | 3.54 | 4.88 |
| 5-Yr Treasury | 3.96 | 4.56 | 4.06 | 3.41 | 4.61 |
| 10-Yr Treasury | 4.39 | 4.55 | 4.25 | 3.62 | 4.79 |
| 30-Yr Treasury | 4.91 | 4.68 | 4.53 | 3.93 | 5.08 |
| 2-Yr Japan | 0.74 | 0.38 | 0.55 | 0.26 | 0.88 |
| 10-Yr Japan | 1.50 | 1.07 | 1.13 | 0.80 | 1.58 |
| 2-Yr German Bund | 1.79 | 3.09 | 2.22 | 1.66 | 3.11 |
| 10-Yr German Bund | 2.51 | 2.67 | 2.41 | 2.03 | 2.91 |
| 2-Yr UK Gilt | 4.00 | 4.49 | 4.11 | 3.53 | 4.60 |
| 10-Yr UK Gilt | 4.64 | 4.36 | 4.34 | 3.74 | 4.89 |
| Bloomberg US Agg | 4.71 | 5.16 | 4.69 | 4.10 | 5.11 |
| Bloomberg Global Agg | 3.57 | 4.01 | 3.62 | 3.26 | 3.98 |
| Bloomberg US Corporate | 5.21 | 5.58 | 5.17 | 4.64 | 5.55 |
| Bloomberg US Long Corporate | 5.94 | 5.76 | 5.62 | 5.07 | 6.15 |
| Bloomberg US Municipal | 4.04 | 3.93 | 3.67 | 3.28 | 4.47 |
| Bloomberg US Long Municipal | 4.88 | 4.41 | 4.32 | 3.94 | 5.16 |
| US High Yield | 7.53 | 8.05 | 7.46 | 6.98 | 8.65 |
| US Loans | 8.55 | 9.70 | 9.03 | 8.36 | 9.86 |

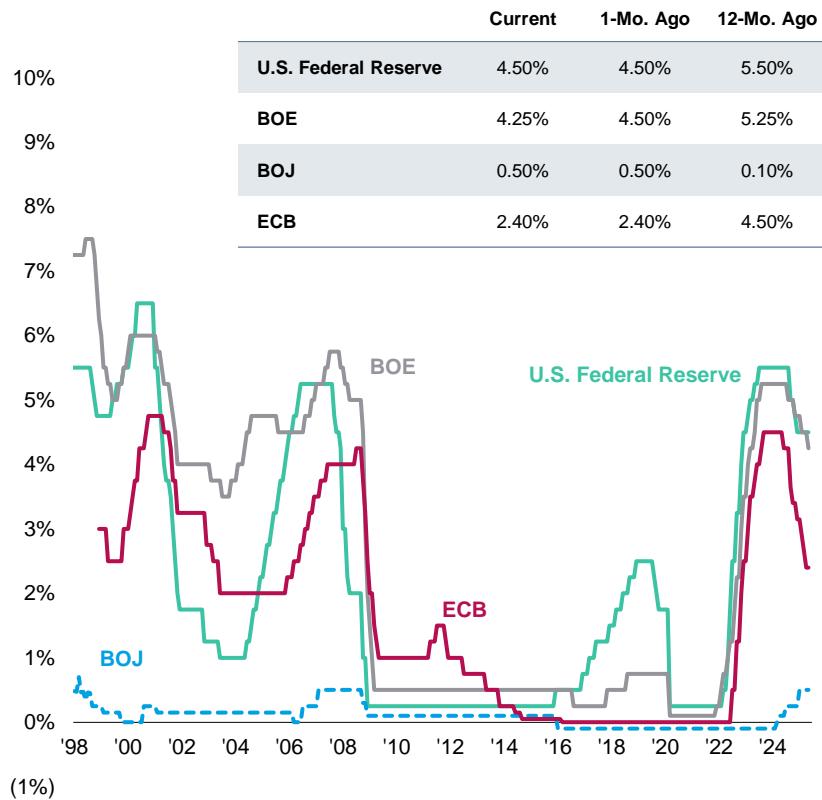
Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Bloomberg, Leveraged Commentary & Data (LCD), and Factset as of 5/31/25. Current represents most recent month. Average, minimum, and maximum measure a 12-month period ending most recent month. Data provided is for informational use only. US High Yield is represented by ICE BofA US High Yield Index. US Loans is represented by Morningstar LSTA U.S. Leveraged Loan Index. Bloomberg indices and ICE BofA US HY index using yield to worst. Morningstar LSTA U.S. Leveraged Loan Index using yield to maturity. SOFR is the Secured Overnight Financing Rate, a broad measure of secured overnight U.S. Treasury repo rates. See end of report for important additional information.

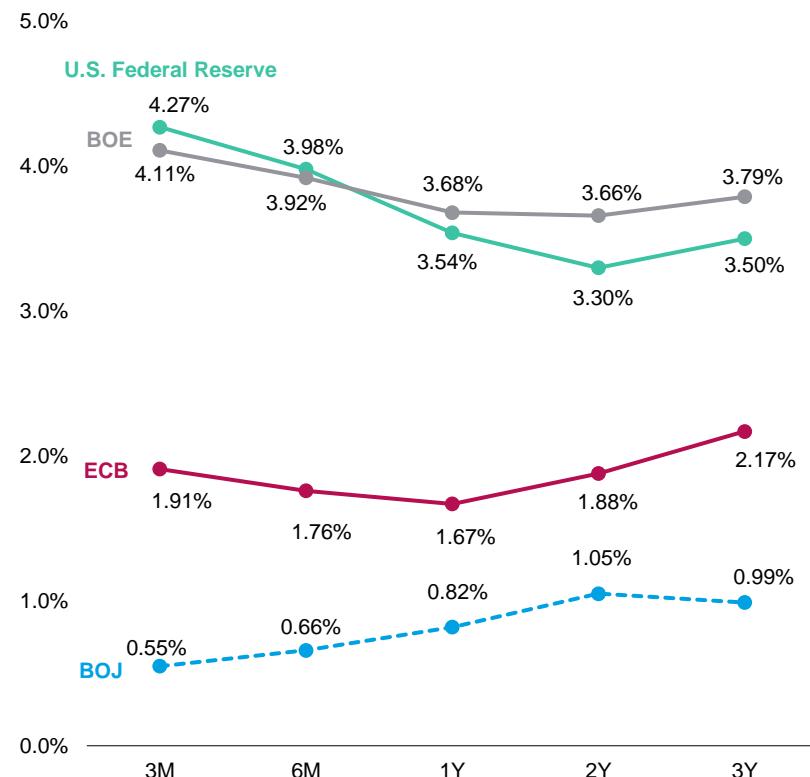
BONDS

Monetary Policy

Central Bank Policy Rates



Market Expectations for Future Central Bank Rates

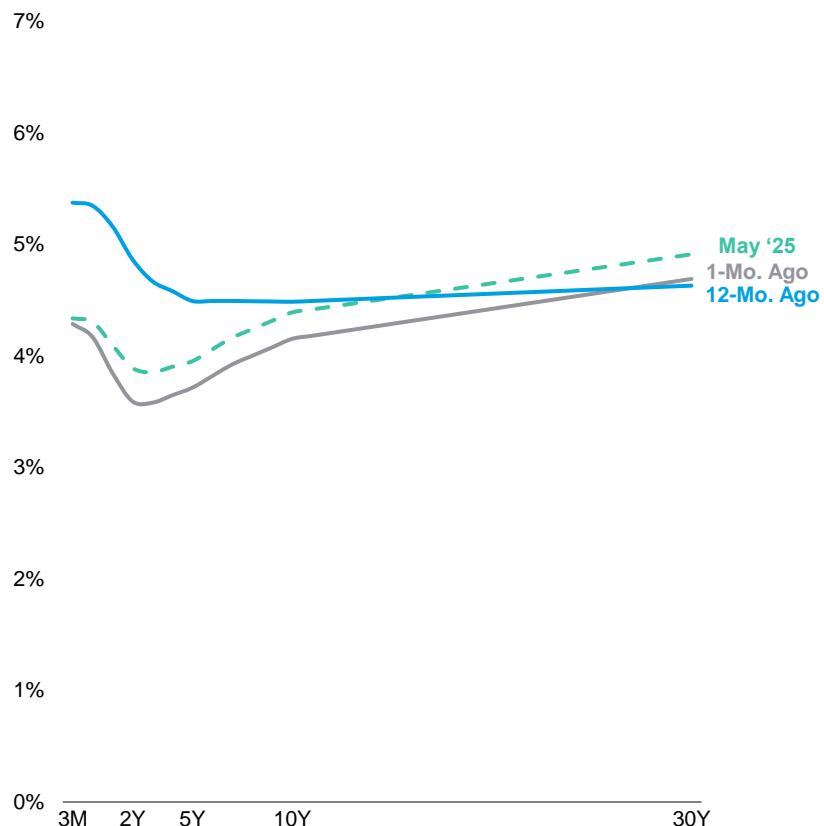


Source: Bloomberg, Factset as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

BONDS

U.S. Treasury Yields

U.S. Treasury Yield Curves



| Security | Yields & Performance | | | Total Return (%) | | | |
|-----------------|----------------------|-----------|------------|------------------|-------|--|--|
| | Yield (%) | | | | | | |
| | Current | 1-Mo. Ago | 12-Mo. Ago | | | | |
| 3-mo. Treasury | 4.34 | 4.29 | 5.38 | 0.36 | 4.76 | | |
| 6-mo. Treasury | 4.31 | 4.17 | 5.35 | 0.30 | 4.89 | | |
| 2-yr. Treasury | 3.90 | 3.59 | 4.87 | -0.29 | 5.40 | | |
| 3-yr. Treasury | 3.86 | 3.58 | 4.67 | -0.47 | 6.07 | | |
| 5-yr. Treasury | 3.96 | 3.72 | 4.49 | -0.79 | 6.20 | | |
| 10-yr. Treasury | 4.39 | 4.16 | 4.49 | -1.41 | 4.89 | | |
| 30-yr. Treasury | 4.91 | 4.69 | 4.63 | -3.18 | -0.70 | | |

Source: Factset, Morningstar as of 5/31/25. Data provided is for informational use only. Past Performance is not a reliable indicator of future results. See end of report for important additional information.

BONDS

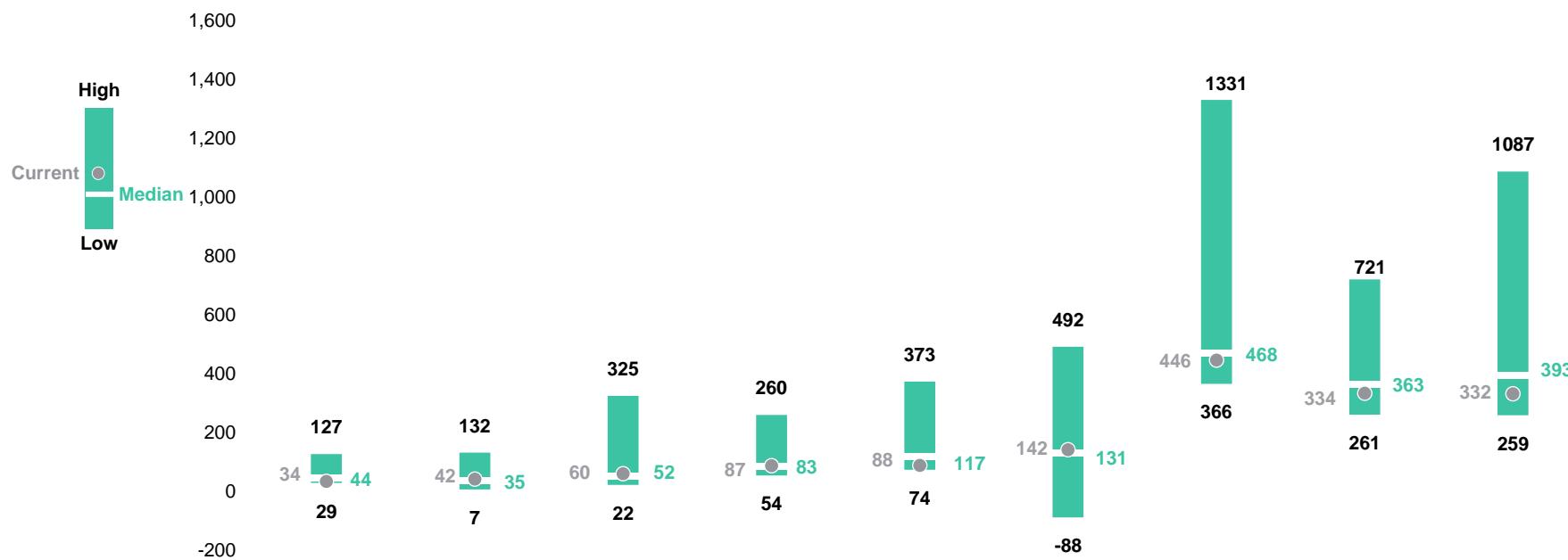
Characteristics and Performance Analysis

| Index | Averages | | | | | | Total Returns (%) | | | | | | |
|--|------------|------------|--------------------|--------------|-----------------|-----------------|-------------------|-------|-------|------|-------|-------|------|
| | Coupon (%) | Price (\$) | Yield to Worst (%) | Spread (bps) | Maturity (yrs.) | Duration (yrs.) | 1-Mo. | 3-Mo. | YTD | 1Y | 3Y | 5Y | 10Y |
| U.S. High Grade | | | | | | | | | | | | | |
| Bloomberg U.S. Aggregate Index | 3.54 | 91.5 | 4.71 | 34 | 8.4 | 6.1 | -0.72 | -0.29 | 2.45 | 5.46 | 1.49 | -0.90 | 1.49 |
| U.S. Treasury | 3.13 | 92.1 | 4.19 | — | 7.6 | 5.8 | -1.03 | -0.17 | 2.51 | 5.04 | 0.81 | -1.82 | 0.98 |
| U.S. Mortgage Backed Securities | 3.40 | 88.8 | 5.15 | 42 | 8.1 | 6.2 | -0.91 | -0.65 | 2.41 | 5.88 | 1.17 | -0.97 | 1.04 |
| U.S. Asset Backed Securities | 4.75 | 99.5 | 4.62 | 60 | 3.6 | 2.6 | 0.02 | 0.74 | 2.05 | 6.12 | 3.84 | 1.98 | 2.21 |
| U.S. Commercial Mortgage Backed Securities | 3.43 | 94.4 | 4.91 | 87 | 4.5 | 4.0 | -0.26 | 0.91 | 3.23 | 7.44 | 3.17 | 0.93 | 2.29 |
| U.S. Corp. Investment Grade | 4.38 | 92.5 | 5.21 | 88 | 10.4 | 6.8 | -0.01 | -0.33 | 2.26 | 5.61 | 2.72 | 0.16 | 2.56 |
| Bloomberg Municipal Bond Index | 4.62 | 99.2 | 4.04 | — | 13.3 | 6.7 | 0.06 | -2.42 | -0.96 | 2.03 | 1.73 | 0.55 | 2.13 |
| Bloomberg Taxable Municipal Bond Index | 4.40 | 91.0 | 5.20 | — | 14.0 | 7.6 | -1.23 | -1.64 | 1.64 | 4.40 | 2.19 | -0.27 | 2.73 |
| ICE BofA US Inflation-Linked Treasury Index | 1.11 | 93.3 | 1.67 | — | 7.5 | 6.0 | -0.63 | 0.03 | 3.58 | 5.50 | 0.69 | 1.46 | 2.46 |
| ICE BofA Preferred Index (Fixed Rate) | 5.43 | 88.8 | 6.30 | 142 | — | 6.2 | 0.69 | -2.32 | -0.63 | 2.72 | 3.73 | 2.26 | 3.80 |
| U.S. High Yield | | | | | | | | | | | | | |
| ICE BofA US High Yield Index | 6.54 | 95.7 | 7.53 | 332 | 4.7 | 3.0 | 1.68 | 0.59 | 2.64 | 9.28 | 6.64 | 5.82 | 4.94 |
| Morningstar LSTA U.S. Leveraged Loan Index | S+3.31 | 96.7 | 8.55 | 446 | 4.5 | — | 1.55 | 1.18 | 1.99 | 6.81 | 8.60 | 7.52 | 5.02 |
| Emerging Markets | | | | | | | | | | | | | |
| J.P. Morgan EM Bond Index (EMBI) Global Diversified | 5.44 | 86.6 | 7.81 | 334 | — | 6.4 | 1.12 | 0.12 | 3.15 | 8.04 | 5.71 | 2.01 | 3.12 |
| J.P. Morgan Corp. EM Bond Index (CEMBI) Broad Diversified | 5.36 | 94.9 | 6.56 | 230 | — | 4.3 | 0.61 | 0.24 | 2.61 | 7.33 | 5.99 | 3.29 | 3.83 |
| J.P. Morgan Govt. Bond Index-EM (GBI-EM) Global Diversified | 5.59 | — | 6.07 | — | — | 5.3 | 1.41 | 6.32 | 9.22 | 9.53 | 5.86 | 1.42 | 1.71 |
| Global Developed Markets | | | | | | | | | | | | | |
| Bloomberg Global Aggregate Ex-U.S. Index | 2.32 | 95.9 | 2.63 | 30 | 8.5 | 6.9 | -0.11 | 6.16 | 7.65 | 8.28 | 0.45 | -1.85 | 0.40 |
| FTSE World Government Bond Index | 2.58 | — | 3.12 | — | — | 7.0 | -0.65 | 3.37 | 5.30 | 6.47 | -0.02 | -2.73 | 0.34 |
| ICE BofA European Union Government Bond Index | 2.18 | 94.5 | 2.66 | 39 | 8.9 | 7.3 | -0.02 | 9.41 | 10.56 | 9.75 | 2.01 | -1.72 | 0.32 |
| ICE BofA Developed Mkts HY Ex-Sub Fincl Index (USD Hedged) | 6.25 | 96.1 | 7.11 | 352 | 3.6 | 3.0 | 1.63 | 0.70 | 2.73 | 9.41 | 7.11 | 5.97 | 5.08 |
| Bloomberg Euro-Aggregate Corporates (EUR) | 2.63 | 97.7 | 3.10 | 100 | 5.1 | 4.4 | 0.54 | 0.49 | 1.53 | 6.47 | 2.86 | 0.73 | 1.20 |
| Bloomberg Pan-European High Yield Euro (EUR) | 4.85 | 98.2 | 5.65 | 320 | 3.8 | 3.2 | 1.38 | 0.61 | 2.30 | 8.01 | 6.47 | 4.77 | 3.66 |

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Bloomberg, J.P. Morgan, ICE BofA Data Indices, LLC, Factset, and Leveraged Commentary & Data (LCD), as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. Yield to maturity is shown for the Morningstar LSTA U.S. Leveraged Loan Index and the FTSE World Government Bond Index. S+ refers to SOFR (Secured Overnight Financing Rate) as the base rate. Loan Index spread represents the three-year discounted spread over SOFR. Returns of the ICE BofA Developed Mkts HY Ex-Sub Financial Index are USD Hedged. The averages for the index are unhedged. Returns and averages for the Bloomberg Euro-Agg Corps and Bloomberg Pan-Euro HY indices are in EUR (unhedged).

BONDS

Spread Analysis (bps)



| | Aggregate | MBS | ABS | CMBS | Corporate | Preferred | Floating-Rate Loans | Emerging Markets (USD) | High Yield |
|---------------------------|-----------|-----------|-----------|-----------|------------|-----------|---------------------|------------------------|------------|
| Max Spread Date | 3/20/2020 | 3/19/2020 | 3/26/2020 | 3/25/2020 | 3/23/2020 | 3/23/2020 | 3/20/2020 | 3/23/2020 | 3/23/2020 |
| Min Spread Date | 4/14/2021 | 4/14/2021 | 6/21/2021 | 6/21/2021 | 11/08/2024 | 12/6/2017 | 4/20/2018 | 2/1/2018 | 1/22/2025 |
| Spread on 12/31/24 | 34 | 43 | 44 | 80 | 80 | 77 | 424 | 325 | 292 |
| Spread on 12/31/23 | 42 | 47 | 68 | 126 | 99 | 148 | 490 | 384 | 339 |
| Spread on 12/31/22 | 51 | 51 | 76 | 120 | 130 | 227 | 645 | 452 | 479 |

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Factset and Leveraged Commentary & Data (LCD) as of 5/31/25. Spread history measures past 10 years. Data provided is for informational use only. See end of report for important additional information. All fixed-income spreads are in basis points and measure option-adjusted yield spread relative to comparable maturity U.S. Treasuries using daily data. Aggregate represented by Bloomberg US Aggregate Index. MBS represented by Bloomberg U.S. Mortgage Backed Securities (MBS) Index. ABS represented by Bloomberg U.S. Asset Backed Securities (ABS) Index. CMBS represented by Bloomberg U.S. CMBS Investment Grade Index. Corporate represented by Bloomberg U.S. Corporate Investment Grade Index. Preferred represented by ICE BofA Fixed Rate Preferred Securities Index. Floating-Rate Loans represented by Morningstar LSTA U.S. Leveraged Loan Index. Loan Index spread represents the three-year discounted spread over SOFR (Secured Overnight Financing Rate). Emerging Markets(USD) represented by J.P. Morgan Emerging Markets Bond Index (EMBI) Global Diversified. High Yield represented by ICE BofA US High Yield Index.

BONDS

Corporate Bond Market Update

| | Averages | | | | | | Total Returns (%) | | | | | | |
|---|------------|------------|--------------------|--------------|-----------------|-----------------|-------------------|-------|--------|--------|--------|--------|--------|
| | Coupon (%) | Price (\$) | Yield to Worst (%) | Spread (bps) | Maturity (yrs.) | Duration (yrs.) | 1-Mo. | 3-Mo. | YTD | 1Y | 3Y | 5Y | 10Y |
| U.S. High Grade | | | | | | | | | | | | | |
| Bloomberg U.S. Corp. Investment Grade Index | 4.38 | 92.5 | 5.21 | 88 | 10.4 | 6.8 | -0.01 | -0.33 | 2.26 | 5.61 | 2.72 | 0.16 | 2.56 |
| AAA Index | 3.47 | 82.5 | 4.89 | 33 | 16.5 | 9.8 | -0.94 | -1.53 | 1.65 | 3.31 | -0.46 | -3.18 | 1.62 |
| AA Index | 3.74 | 88.6 | 4.87 | 47 | 12.4 | 7.7 | -0.48 | -0.70 | 2.00 | 4.62 | 1.09 | -1.61 | 1.48 |
| A Index | 4.27 | 92.8 | 5.06 | 74 | 10.2 | 6.7 | -0.20 | -0.24 | 2.33 | 5.40 | 2.30 | -0.42 | 2.27 |
| BBB Index | 4.62 | 93.1 | 5.42 | 110 | 10.1 | 6.6 | 0.27 | -0.32 | 2.26 | 6.01 | 3.44 | 1.02 | 3.00 |
| U.S. High Yield | | | | | | | | | | | | | |
| ICE BofA U.S. High Yield Index | 6.54 | 95.7 | 7.53 | 332 | 4.7 | 3.0 | 1.68 | 0.59 | 2.64 | 9.28 | 6.64 | 5.82 | 4.94 |
| BB Index | 5.90 | 98.1 | 6.23 | 197 | 4.9 | 3.3 | 1.52 | 1.13 | 3.17 | 8.20 | 5.71 | 4.91 | 4.93 |
| B Index | 7.26 | 97.2 | 7.67 | 351 | 4.5 | 2.8 | 1.44 | 0.05 | 2.09 | 8.10 | 6.46 | 5.37 | 4.50 |
| CCC Index | 7.14 | 81.8 | 13.19 | 913 | 3.9 | 2.7 | 3.17 | -0.26 | 1.84 | 17.06 | 10.66 | 10.77 | 5.96 |
| Morningstar LSTA U.S. Leveraged Loan Index | S+3.31 | 96.7 | 8.55 | 446 | 4.5 | - | 1.55 | 1.18 | 1.99 | 6.81 | 8.60 | 7.52 | 5.02 |
| BBB Index | S+1.89 | 100.0 | 6.20 | 188 | 5.1 | - | 1.00 | 1.61 | 2.53 | 6.74 | 7.65 | 5.70 | 4.39 |
| BB Index | S+2.54 | 99.5 | 6.98 | 272 | 4.9 | - | 1.39 | 1.49 | 2.34 | 6.97 | 8.39 | 6.46 | 4.53 |
| B Index | S+3.55 | 97.5 | 8.62 | 448 | 4.5 | - | 1.57 | 1.16 | 1.93 | 7.12 | 9.15 | 7.86 | 5.34 |
| CCC Index | S+4.72 | 80.4 | 18.61 | 1401 | 3.1 | - | 2.98 | -0.68 | 0.61 | 3.55 | 6.05 | 9.43 | 5.86 |
| D Index | - | 28.7 | - | - | - | - | -0.38 | -7.21 | -13.93 | -18.45 | -28.31 | -18.98 | -19.11 |

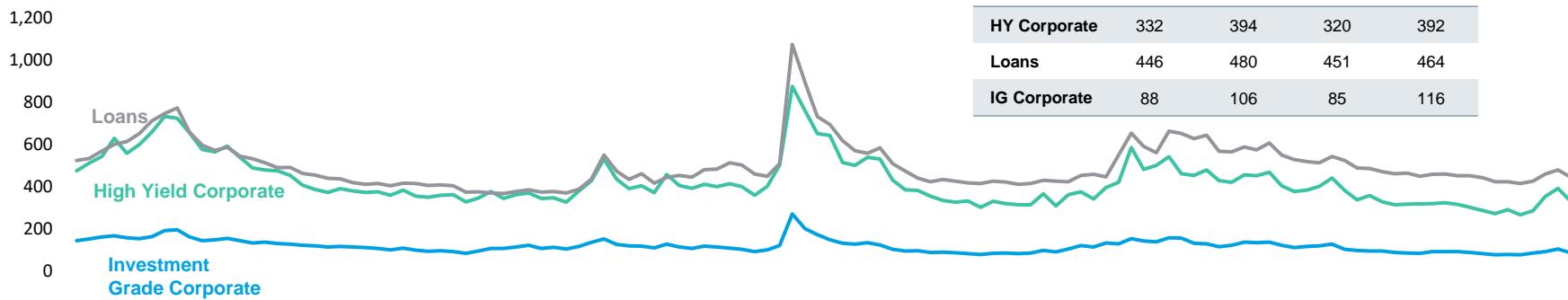
Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Bloomberg, J.P. Morgan, ICE BofA Data Indices, LLC, Factset, and Leveraged Commentary & Data (LCD), as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. Yield to maturity is shown for the Morningstar LSTA U.S. Leveraged Loan Index. S+ refers to SOFR (Secured Overnight Financing Rate) as the base rate. Loan Index spread represents the three-year discounted spread over SOFR.

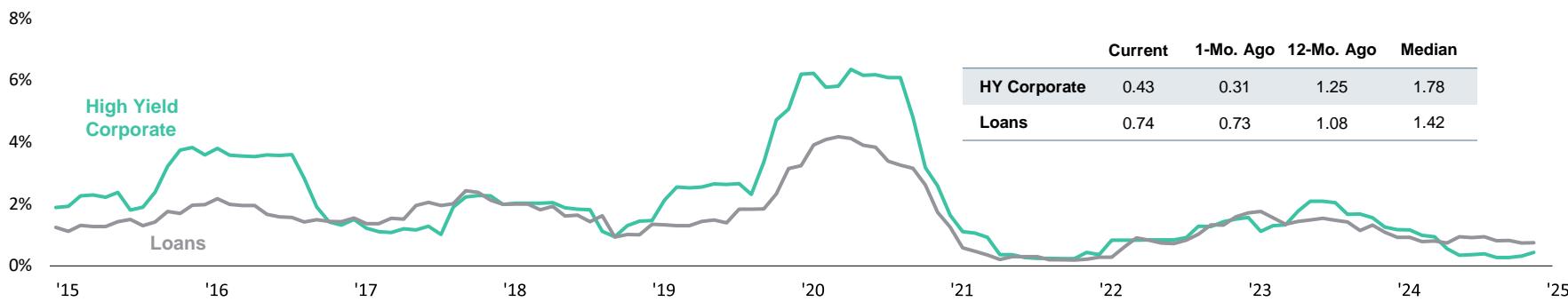
BONDS

Corporate Bond Market Update

Average Spread (bps)



Annual Default Rate



Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: J.P. Morgan and Leveraged Commentary & Data (LCD), as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. Corporate spreads are in basis points and measure option-adjusted yield spread relative to comparable maturity U.S. Treasuries. Loan Index spread represents the three-year discounted spread over SOFR (Secured Overnight Financing Rate).

BONDS

Municipal Bond Market Update

| | Averages | | | | | Total Returns (%) | | | | | | |
|--|-------------|-------------|--------------------|-----------------|-----------------|-------------------|--------------|--------------|-------------|-------------|-------------|-------------|
| | Coupon (%) | Price (\$) | Yield To Worst (%) | Maturity (yrs.) | Duration (yrs.) | 1-Mo. | 3-Mo. | YTD | 1Y | 3Y | 5Y | 10Y |
| Bloomberg Municipal Bond Index | 4.62 | 99.2 | 4.04 | 13.3 | 6.7 | 0.06 | -2.42 | -0.96 | 2.03 | 1.73 | 0.55 | 2.13 |
| AAA Index | 4.56 | 100.1 | 3.85 | 12.8 | 6.8 | -0.01 | -2.50 | -0.97 | 2.06 | 1.38 | -0.15 | 1.71 |
| AA Index | 4.64 | 100.2 | 3.92 | 13.0 | 6.6 | 0.10 | -2.32 | -0.94 | 2.00 | 1.59 | 0.20 | 1.94 |
| A Index | 4.62 | 97.6 | 4.31 | 13.5 | 6.7 | 0.07 | -2.48 | -0.94 | 2.02 | 2.17 | 1.18 | 2.56 |
| BBB Index | 4.61 | 93.5 | 4.81 | 16.9 | 7.5 | -0.09 | -3.03 | -1.25 | 2.26 | 2.48 | 2.48 | 3.06 |
| 5-Year Index | 4.74 | 105.0 | 3.32 | 4.9 | 3.6 | 0.95 | -0.16 | 1.35 | 4.44 | 2.25 | 0.85 | 1.78 |
| 10-Year Index | 4.60 | 103.2 | 3.77 | 9.9 | 6.0 | 0.64 | -1.81 | 0.17 | 2.97 | 2.08 | 0.66 | 2.31 |
| 22+ Year Index | 4.67 | 92.8 | 4.88 | 26.6 | 10.9 | -0.98 | -4.68 | -3.67 | -0.35 | 0.55 | -0.27 | 2.21 |
| Bloomberg High Yield Municipal Bond Index | 4.78 | 65.0 | 5.85 | 19.2 | 7.5 | 0.07 | -2.87 | -0.91 | 3.64 | 3.13 | 3.83 | 4.00 |
| Hospital | 5.35 | 75.2 | 6.13 | 20.4 | 6.9 | -0.32 | -2.98 | -0.56 | 7.84 | 3.27 | 3.64 | 3.45 |
| IDR/PCR | 4.55 | 38.8 | 6.25 | 18.8 | 7.8 | 0.33 | -2.57 | -0.76 | 1.84 | 2.55 | 3.54 | 4.94 |
| Tobacco | 2.44 | 19.3 | 6.45 | 27.1 | 12.3 | 0.05 | -4.07 | -1.24 | 1.36 | 1.60 | 2.73 | 6.35 |
| Puerto Rico | 3.56 | 53.0 | 5.14 | 18.5 | 8.0 | 0.17 | -4.75 | -2.80 | -0.84 | 2.70 | 4.21 | 4.23 |

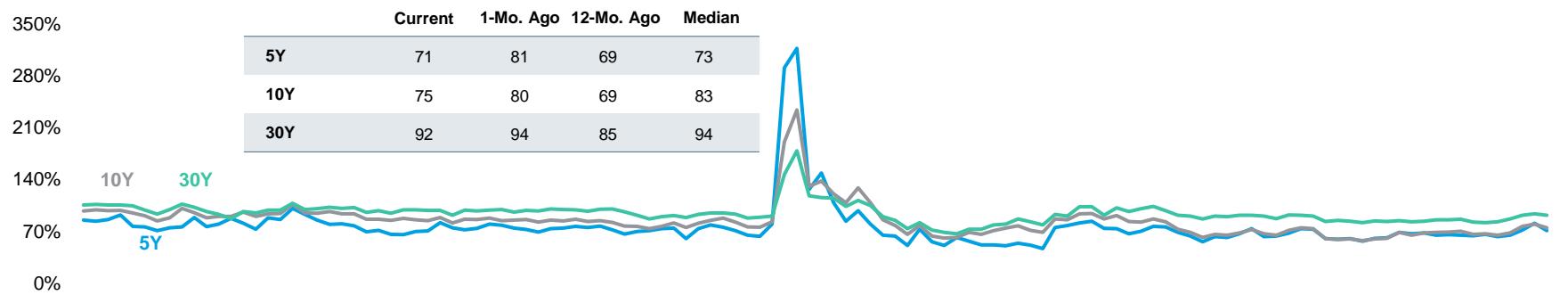
Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Bloomberg, Morningstar as of 5/31/25. Coupon and Yield To Worst figures are based on average market prices while Price is based on an average of par value. Data provided is for informational use only. See end of report for important additional information.

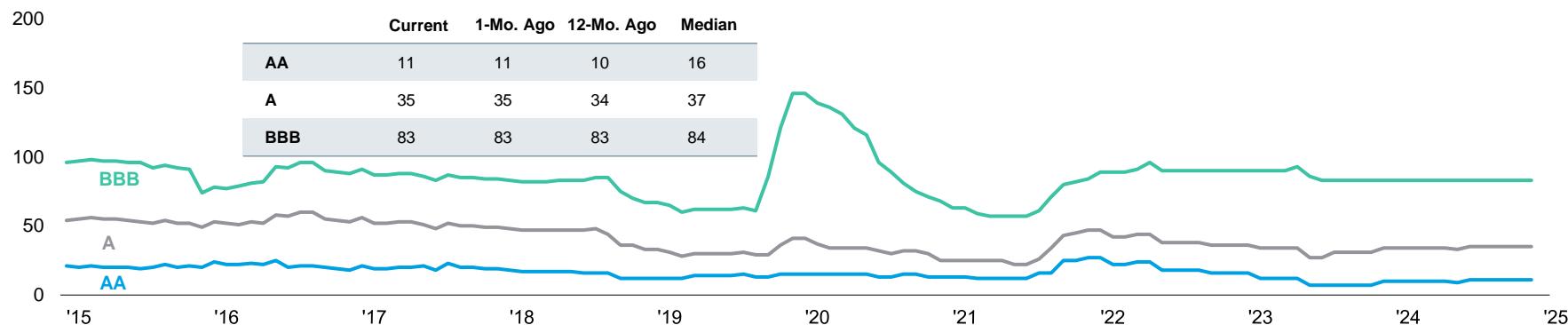
BONDS

Municipal Bond Market Update

AAA Muni-to-Treasury Yield Ratios



Credit Quality Spreads vs. AAA (bps)



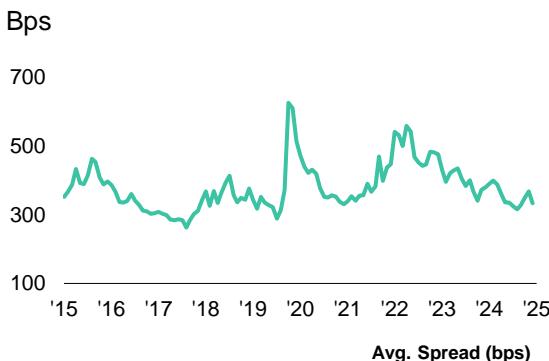
Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Bloomberg as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. All spreads are in basis points and measure option-adjusted yield spread relative to comparable maturity U.S. Treasuries.

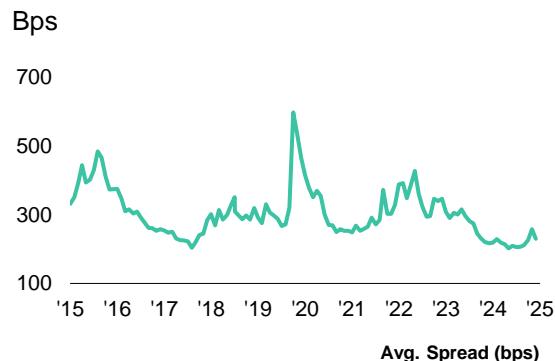
BONDS

Emerging Markets Bond Market Update

Sovereign EMD Spreads (USD)



Corporate EMD Spreads (USD)



Local EMD Yields (%)



| | Coupon (%) | Price (\$) | Yield (%) | Duration | 1-Mo. | 3-Mo. | YTD | 1Y | 3Y | 5Y | 10Y |
|---|------------|------------|-----------|----------|-------|-------|------|------|------|------|------|
| JPMorgan Emerging Markets Bond Index (EMBI) Global Diversified | 5.44 | 86.6 | 7.81 | 6.4 | 1.12 | 0.12 | 3.15 | 8.04 | 5.71 | 2.01 | 3.12 |
| JPMorgan Corporate Emerging Markets Bond Index (CEMBI) Broad Diversified | 5.36 | 94.9 | 6.56 | 4.3 | 0.61 | 0.24 | 2.61 | 7.33 | 5.99 | 3.29 | 3.83 |
| JPMorgan Government Bond Index-Emerging Markets (GBI-EM) Global Diversified | 5.59 | - | 6.07 | 5.3 | 1.41 | 6.32 | 9.22 | 9.53 | 5.86 | 1.42 | 1.71 |

Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: J.P. Morgan, Morningstar as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. All spreads are in basis points and measure option-adjusted yield spread relative to comparable maturity U.S. Treasuries.

BONDS

Asset Class Return Analysis (%)

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | YTD 2025 |
|--------|-----------------------------|---------------------------|----------------------------|----------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|----------------------------|----------------------------|---------------------------|
| Higher | Municipal 3.30 | High Yield 17.49 | EMD (Local Currency) 15.21 | Municipal 1.28 | Investment Grade 14.54 | Global Agg Ex-U.S. 10.11 | High Yield 5.36 | Bank Loan -0.77 | High Yield 13.46 | Bank Loan 8.95 | EMD (Local Currency) 9.22 |
| | MBS 1.51 | EMD (Hard Currency) 10.19 | Global Agg Ex-U.S. 10.51 | MBS 0.99 | EMD (Hard Currency) 14.42 | Investment Grade 9.89 | Bank Loan 5.20 | Municipal -8.53 | Bank Loan 13.32 | High Yield 8.20 | Global Agg Ex-U.S. 7.65 |
| | EMD (Corp. Bonds) 1.30 | Bank Loan 10.16 | EMD (Hard Currency) 9.32 | Treasury 0.86 | High Yield 14.41 | Treasury 8.00 | Municipal 1.52 | High Yield -11.22 | EMD (Local Currency) 12.70 | EMD (Corp. Bonds) 7.63 | EMD (Hard Currency) 3.15 |
| | EMD (Hard Currency) 1.23 | EMD (Local Currency) 9.94 | EMD (Corp. Bonds) 7.96 | Bank Loan 0.44 | EMD (Local Currency) 13.47 | EMD (Corp. Bonds) 7.13 | EMD (Corp. Bonds) 0.91 | EMD (Local Currency) -11.69 | EMD (Hard Currency) 11.09 | EMD (Hard Currency) 6.54 | High Yield 2.64 |
| | Treasury 0.84 | EMD (Corp. Bonds) 9.65 | High Yield 7.48 | EMD (Corp. Bonds) -1.65 | EMD (Corp. Bonds) 13.09 | High Yield 6.17 | Investment Grade -1.04 | MBS -11.81 | EMD (Corp. Bonds) 9.08 | Investment Grade 2.13 | EMD (Corp. Bonds) 2.61 |
| | Investment Grade -0.68 | Investment Grade 6.11 | Investment Grade 6.42 | Global Agg Ex-U.S. -2.15 | Bank Loan 8.64 | EMD (Hard Currency) 5.88 | MBS -1.04 | EMD (Corp. Bonds) -12.26 | Investment Grade 8.52 | MBS 1.20 | Treasury 2.51 |
| | Bank Loan -0.69 | MBS 1.67 | Municipal 5.45 | High Yield -2.26 | Municipal 7.54 | Municipal 5.21 | EMD (Hard Currency) -1.51 | Treasury -12.46 | Municipal 6.40 | Municipal 1.05 | MBS 2.41 |
| | High Yield -4.64 | Global Agg Ex-U.S. 1.49 | Bank Loan 4.12 | Investment Grade -2.51 | Treasury 6.86 | MBS 3.87 | Treasury -2.32 | Investment Grade -15.76 | Global Agg Ex-U.S. 5.72 | Treasury 0.58 | Investment Grade 2.26 |
| | Global Agg Ex-U.S. -6.02 | Treasury 1.04 | MBS 2.47 | EMD (Hard Currency) -4.61 | MBS 6.35 | Bank Loan 3.12 | Global Agg Ex-U.S. -7.05 | EMD (Hard Currency) -16.45 | MBS 5.05 | EMD (Local Currency) -2.38 | Bank Loan 1.99 |
| | EMD (Local Currency) -14.92 | Municipal 0.25 | Treasury 2.31 | EMD (Local Currency) -6.21 | Global Agg Ex-U.S. 5.09 | EMD (Local Currency) 2.69 | EMD (Local Currency) -8.75 | Global Agg Ex-U.S. -18.70 | Treasury 4.05 | Global Agg Ex-U.S. -4.22 | Municipal -0.96 |

Past performance is no guarantee of future results. It is not possible to invest directly in an index. In general, fixed income investments are subject to credit and interest rate risks. High yield investments may have a higher degree of credit and liquidity risk. Foreign securities are subject to currency, political, economic and market risks. Investors should carefully review the risks of each asset class prior to investing. Source: Morningstar as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. Investment Grade represented by Bloomberg U.S. Corporate Index. MBS represented by Bloomberg U.S. Mortgage Backed Securities (MBS) Index. Treasury represented by Bloomberg U.S. Treasury Index. High Yield represented by ICE BofA US High Yield Index. Municipal represented by Bloomberg Municipal Bond Index. Bank Loan represented by Morningstar LSTA U.S. Leveraged Loan Index. Global Agg Ex-U.S. represented by Bloomberg Global Aggregate Ex-USD Index. EMD (Local Currency) represented by J.P. Morgan Government Bond Index-Emerging Markets (GBI-EM) Global Diversified. EMD (Hard Currency) represented by J.P. Morgan Emerging Markets Bond Index (EMBI) Global Diversified. EMD (Corp. Bonds) represented by J.P. Morgan Corporate Emerging Market Bond Index (CEMBI) Broad Diversified.

EQUITIES

Performance: Market Barometer (%)



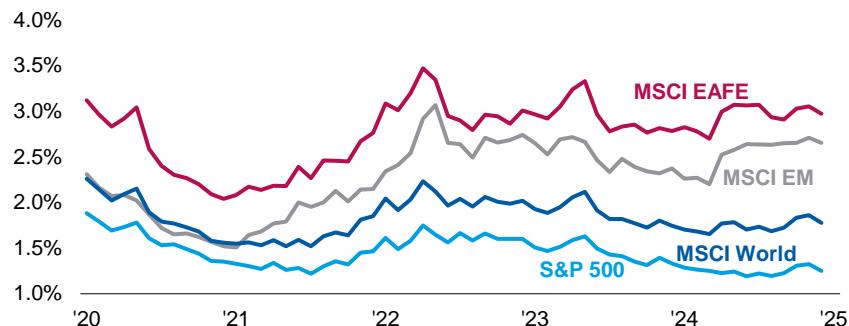
Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Morningstar as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. Returns over 1 year are annualized. Large Cap Value represented by Russell 1000 Value Index. Large Cap Core represented by Russell 1000 Index. Large Cap Growth represented by Russell 1000 Growth Index. Mid Cap Value represented by Russell Mid Cap Value Index. Mid Cap Core represented by Russell Mid Cap Index. Mid Cap Growth represented by Russell Mid Cap Growth Index. Small Cap Value represented by Russell 2000 Value Index. Small Cap Core represented by Russell 2000 Index. Small Cap Growth represented by Russell 2000 Growth Index. Global represented by MSCI ACWI Index. US represented by S&P 500 Index. International represented by MSCI EAFE Index. Emerging Markets represented by MSCI Emerging Markets Index.

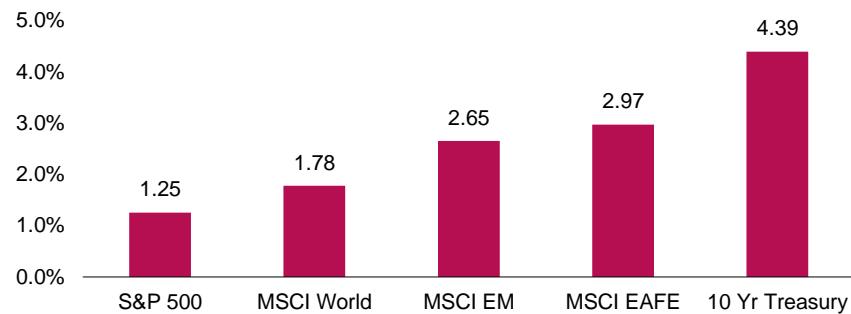
EQUITIES

Dividend Yields and Volatility Analysis

Historical Yields



Current Yields



Correlation of S&P 500 Stocks



CBOE Market Volatility Index (VIX)



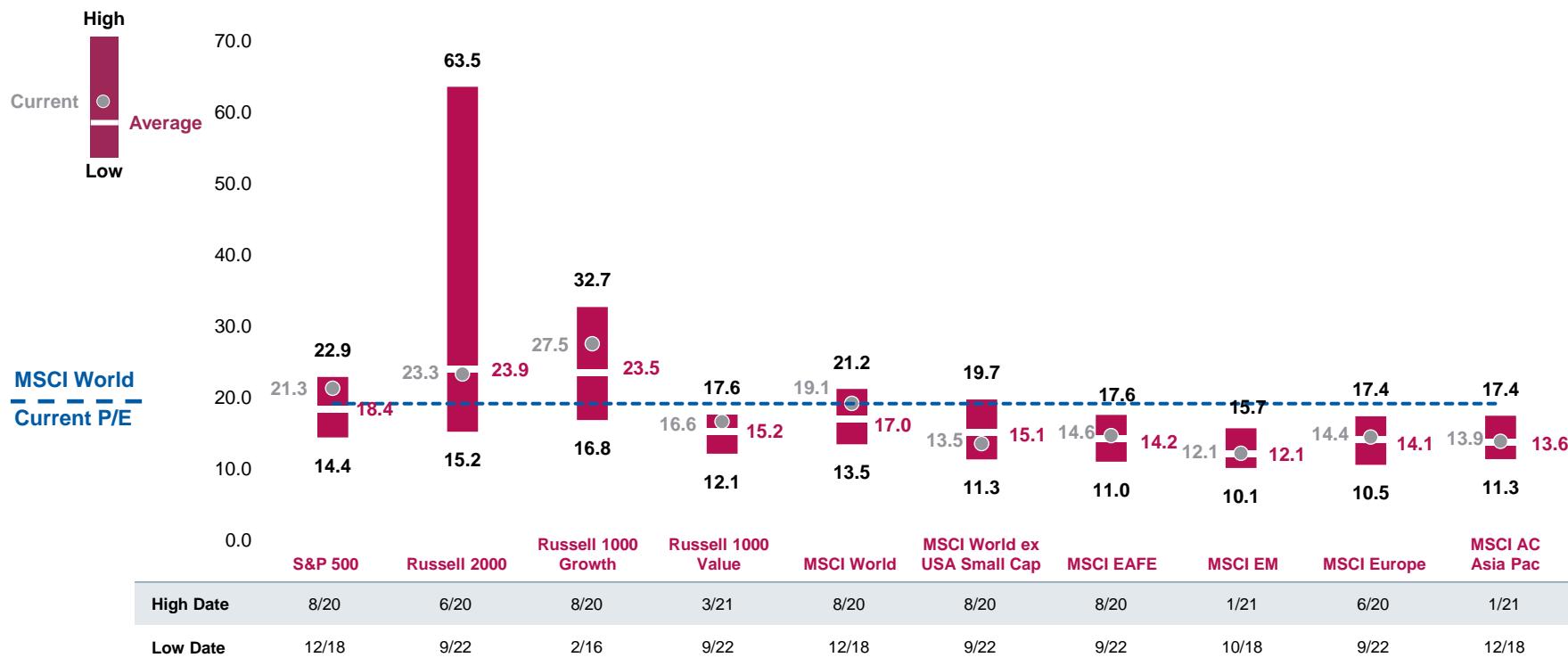
Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: FactSet and Ned Davis Research as of 5/31/25. Correlation of S&P 500 Stocks is measured by the median 63-day rolling correlation of one day returns data provided is for informational use only. See end of report for important additional information.

EQUITIES

Valuation Analysis

Regions/Styles: Current NTM P/E vs. 10-Year High, Low, Average

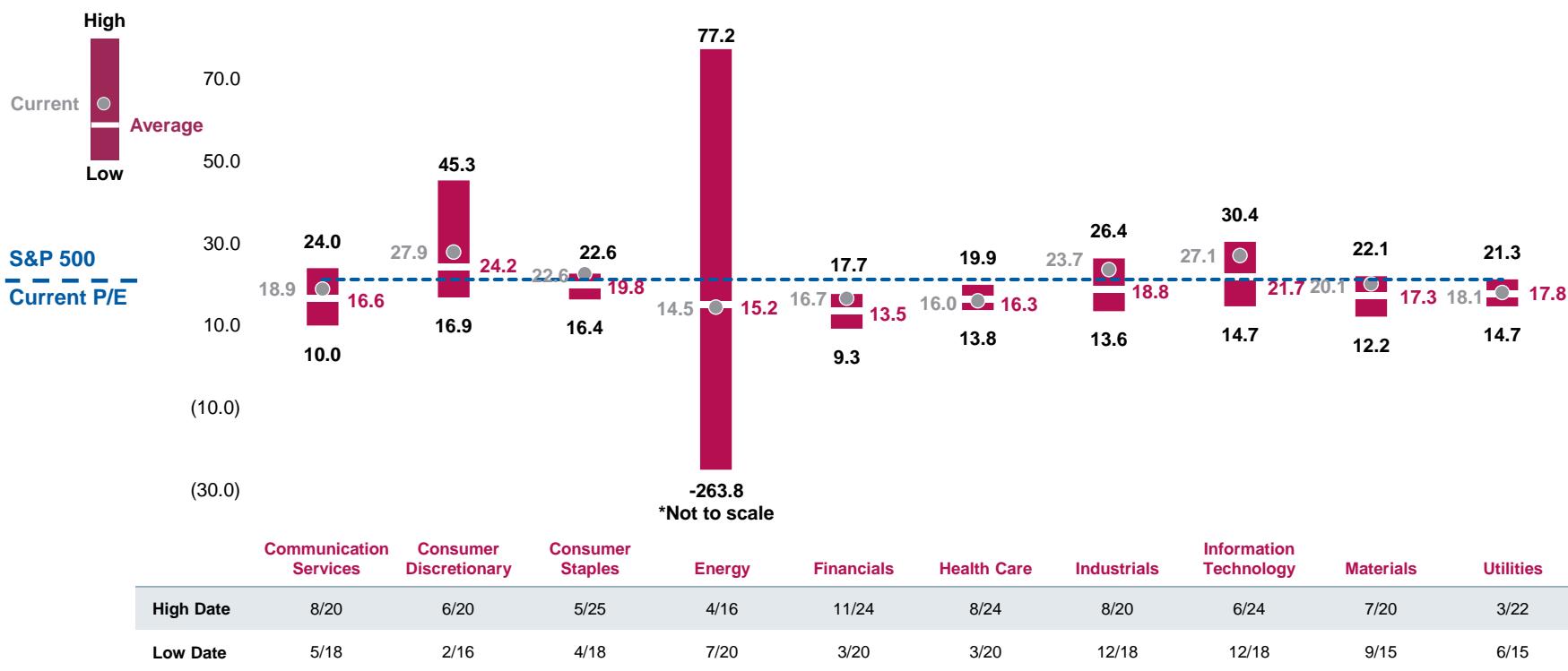


Source: FactSet as of 5/31/25. NTM P/E is market price per share divided by expected earnings per share over the next twelve months. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

EQUITIES

Valuation Analysis

S&P 500 Sectors: Current NTM P/E vs. 10-Year High, Low, Average

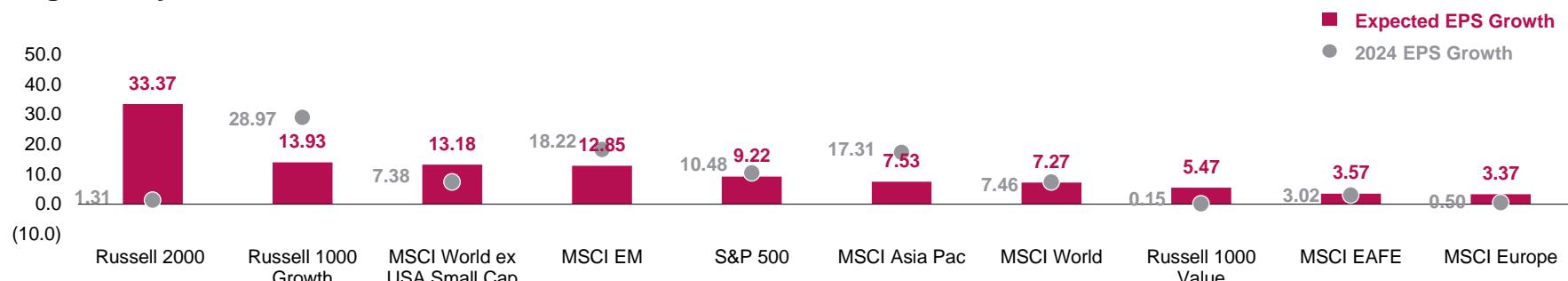


Source: FactSet as of 5/31/25. NTM P/E is market price per share divided by expected earnings per share over the next twelve months. The Real Estate sector is excluded from this 10-year chart since the sector was created on August 31, 2016. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

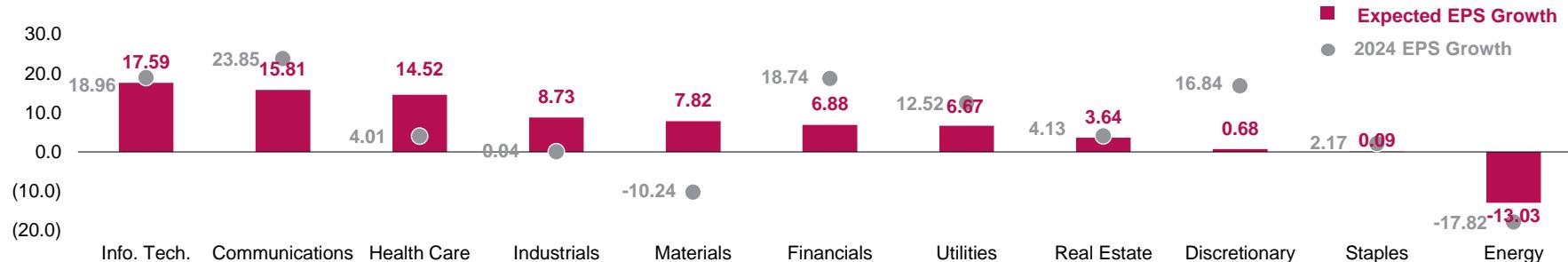
EQUITIES

Corporate Earnings Growth

Regions/Styles



S&P 500 Sectors

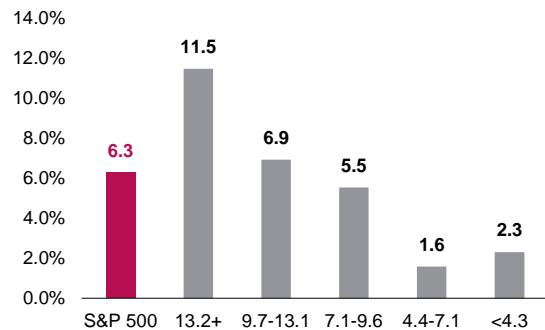


Source: FactSet as of 5/31/25. Expected EPS Growth is defined as the expected % change in the EPS growth from the beginning of the current calendar year through the end of the calendar year. 2024 EPS Growth is defined as the % change in EPS from the beginning of the year through the end of the year. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

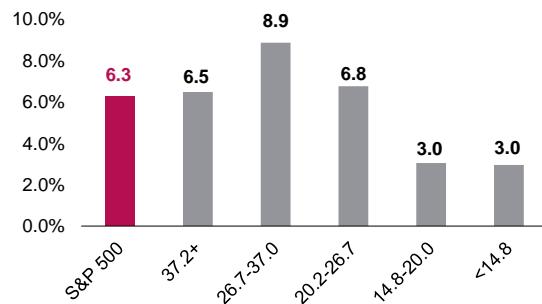
EQUITIES

S&P 500 Index: 1-Month Return Analysis

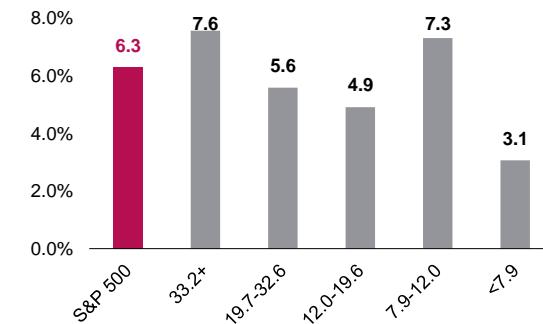
3-5 Year Earnings Growth



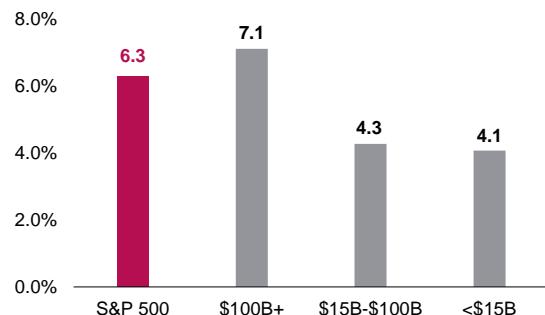
Trailing 12 Month P/E



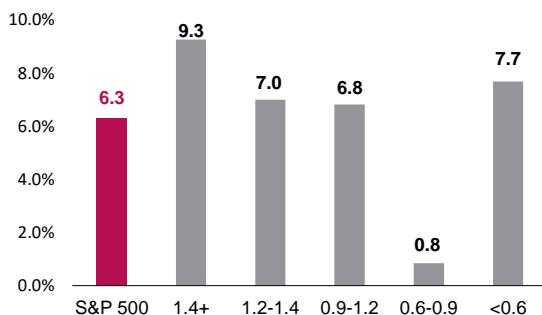
Return On Equity



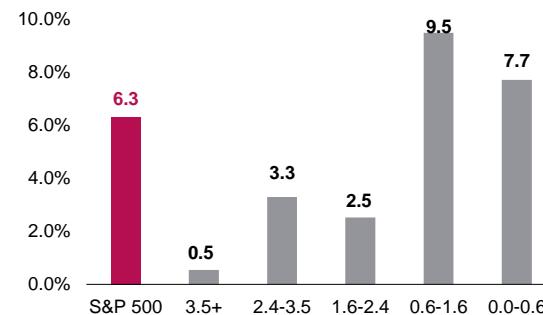
Market Cap



Beta



Dividend Yield



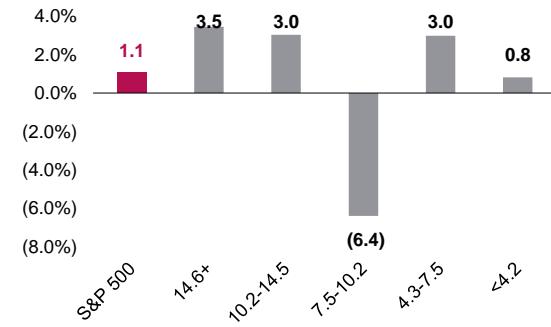
Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: FactSet as of 5/31/25. Data provided is for informational use only. See end of report for important additional information.

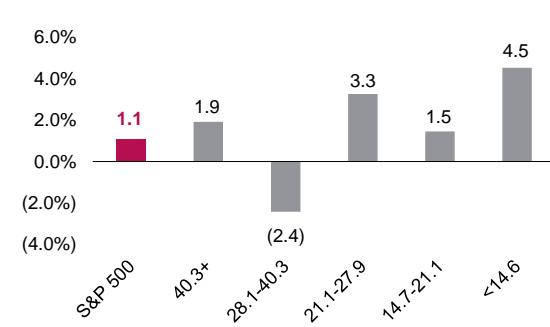
EQUITIES

S&P 500 Index: YTD Analysis

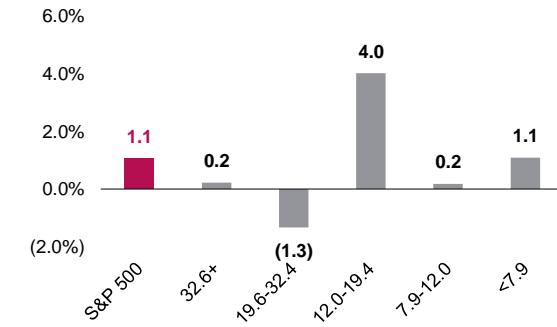
3-5 Year Earnings Growth



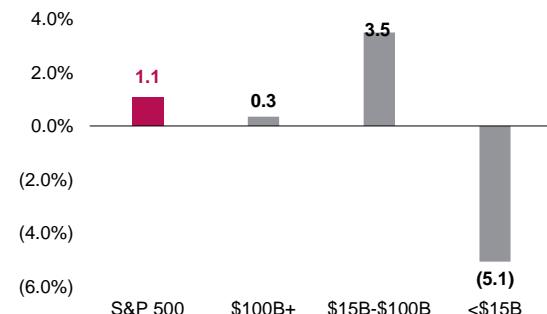
Trailing 12 Month P/E



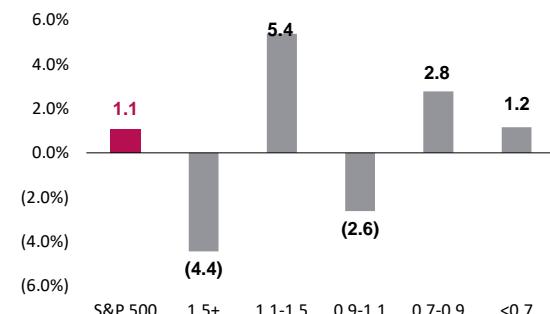
Return On Equity



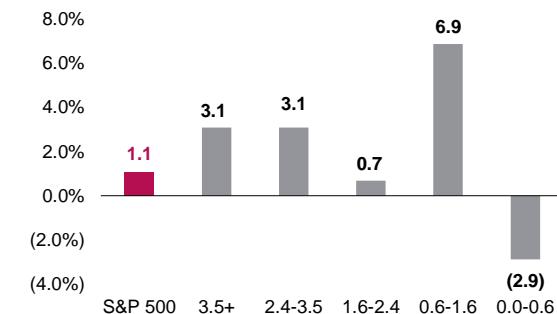
Market Cap



Beta



Dividend Yield



Past performance is no guarantee of future results.

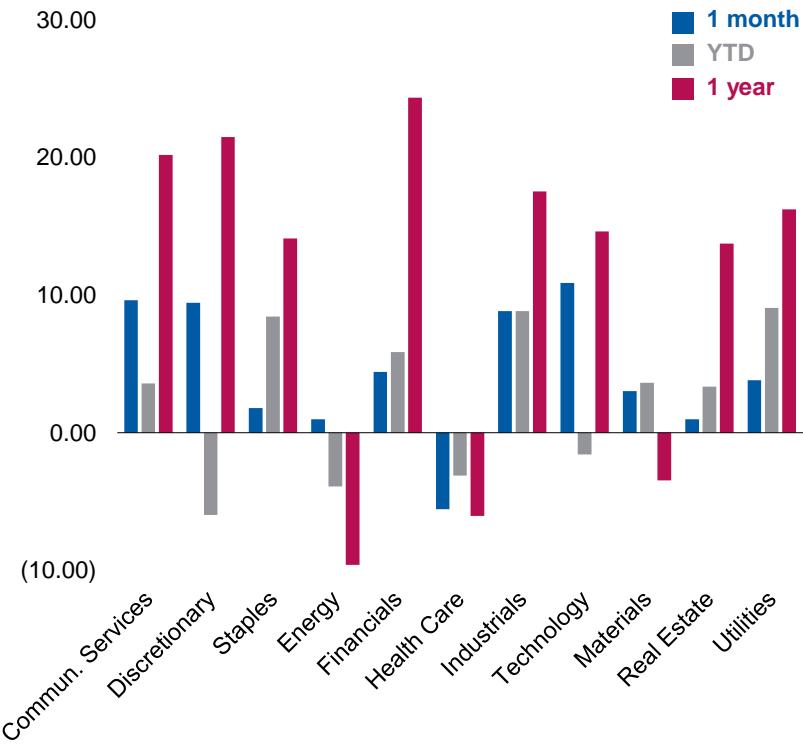
It is not possible to invest directly in an index. Source: FactSet as of 5/31/25. Data provided is for informational use only. See end of report for important additional information.

EQUITIES

Index Sectors: Return Analysis

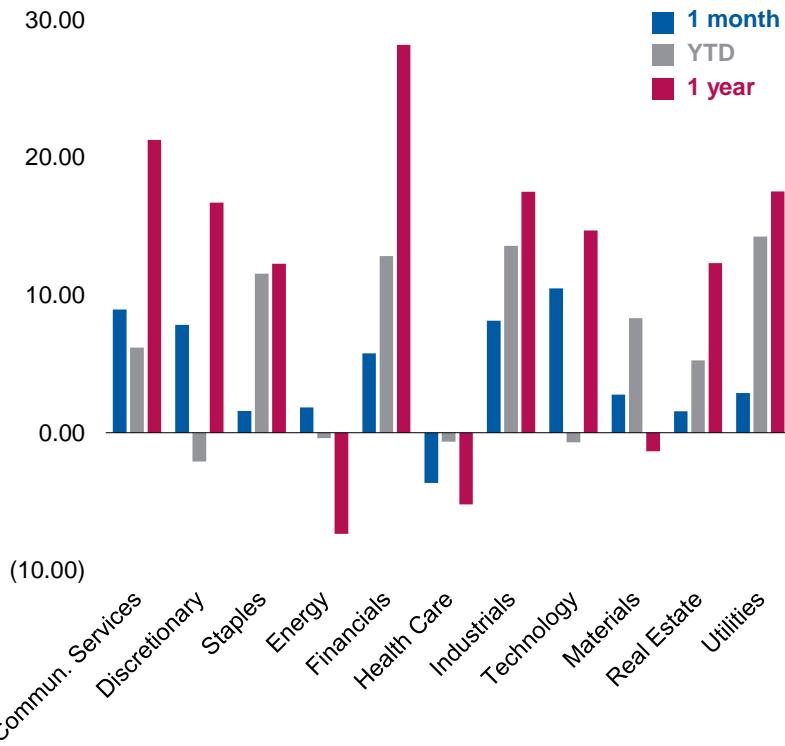
S&P 500

Return %



MSCI World

Return %



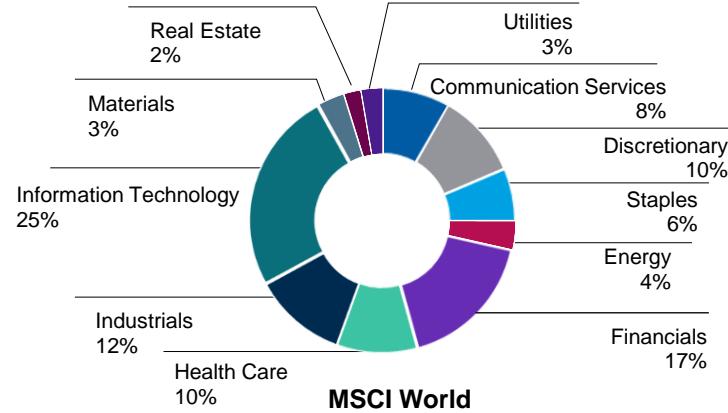
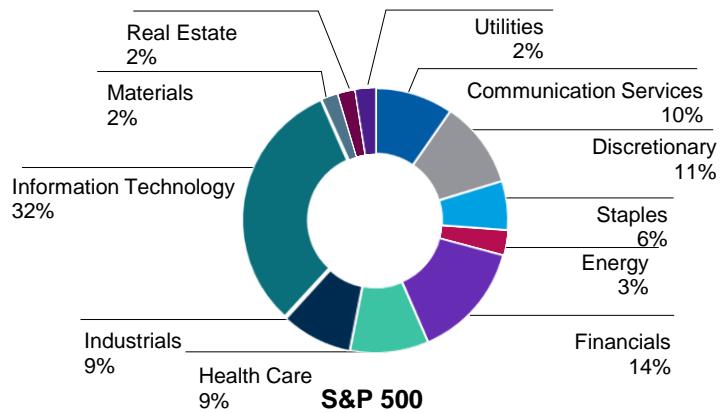
Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Morningstar as of 5/31/25. Data provided is for informational use only. See end of report for important additional information.

EQUITIES

Current Characteristics and Sector Weights

| | S&P 500 | R2000 | R1000G | R1000V | MSCI World | MSCI World ex USA Small Cap | MSCI EAFE | MSCI EM | MSCI Europe | MSCI Asia Pac |
|------------------------------|-------------|----------|-------------|-------------|-------------|-----------------------------|-----------|-----------|-------------|---------------|
| Number of Holdings | 504 | 1932 | 392 | 867 | 1353 | 2187 | 694 | 1206 | 399 | 1256 |
| Maximum Market Cap | \$3,421.65B | \$16.92B | \$3,421.65B | \$1,088.00B | \$3,309.33B | \$13.49B | \$315.21B | \$794.94B | \$315.21B | \$794.94B |
| Minimum Market Cap | \$5.43B | \$0.00B | \$0.39B | \$0.19B | \$0.16B | \$0.06B | \$2.28B | \$0.11B | \$2.32B | \$0.11B |
| Dividend Yield | 1.25 | 1.40 | 0.57 | 2.04 | 1.78 | 3.00 | 2.97 | 2.65 | 3.11 | 2.46 |
| NTM PE | 21.26 | 23.28 | 27.53 | 16.59 | 19.14 | 13.49 | 14.62 | 12.15 | 14.43 | 13.85 |
| Price to Book | 4.90 | 1.91 | 12.43 | 2.67 | 3.55 | 1.45 | 2.06 | 1.91 | 2.28 | 1.83 |
| Price to Cash Flow | 17.81 | 14.40 | 25.58 | 12.61 | 14.74 | 8.67 | 9.82 | 8.05 | 9.27 | 9.69 |
| Price to Sales | 2.99 | 1.18 | 5.57 | 1.77 | 2.37 | 0.93 | 1.51 | 1.51 | 1.54 | 1.49 |
| Est 3-5 Yr EPS Growth | 10.17 | 12.18 | 11.41 | 8.98 | 9.66 | 9.73 | 7.83 | 11.19 | 8.69 | 8.51 |
| 5Yr. Div Growth Rate | 6.28 | 8.90 | 4.53 | 6.43 | 6.62 | 8.24 | 6.89 | 2.08 | 8.35 | 2.60 |



Source: FactSet as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

EQUITIES

Asset Class Return Analysis (%)

| | 1-Mo. | 3-Mo. | YTD | 1Y | 3Y | 5Y | 10Y | 2024 | 2023 | 2022 | 2021 | 2020 |
|-----------------|-----------------------------|-------|--------|-------|-------|-------|-------|-------|-------|-------|--------|-------|
| U.S. Equities | S&P 500 | 6.29 | -0.37 | 1.06 | 13.52 | 14.41 | 15.94 | 12.86 | 25.02 | 26.29 | -18.11 | 28.71 |
| | Russell 1000 Defensive | 3.29 | -1.74 | 0.79 | 10.53 | 11.37 | 12.54 | 11.69 | 18.55 | 20.23 | -16.43 | 26.93 |
| | Russell 1000 Dynamic | 9.51 | 0.97 | 1.22 | 16.95 | 17.14 | 18.60 | 13.28 | 30.63 | 33.34 | -21.94 | 25.57 |
| | Russell 2500 | 5.99 | -2.71 | -3.99 | 3.49 | 6.04 | 11.07 | 7.82 | 12.00 | 17.42 | -18.37 | 18.18 |
| | Russell 1000 Growth | 8.85 | 1.44 | -0.27 | 17.62 | 19.85 | 17.69 | 16.08 | 33.36 | 42.68 | -29.14 | 27.60 |
| | Russell 1000 Value | 3.51 | -2.43 | 2.50 | 8.91 | 8.16 | 13.02 | 8.60 | 14.37 | 11.46 | -7.54 | 25.16 |
| | Russell Mid Cap | 5.72 | -0.22 | 1.06 | 10.32 | 9.05 | 12.69 | 9.26 | 15.34 | 17.23 | -17.32 | 22.58 |
| | Russell 2000 | 5.34 | -4.10 | -6.85 | 1.19 | 5.03 | 9.64 | 6.64 | 11.54 | 16.93 | -20.44 | 14.82 |
| | CBOE S&P 500 Buywrite BXM | 0.90 | -5.35 | -3.81 | 9.30 | 7.39 | 9.56 | 6.10 | 20.12 | 11.82 | -11.37 | 20.47 |
| Global Equities | MSCI World | 5.92 | 2.10 | 4.95 | 13.72 | 13.18 | 14.18 | 9.93 | 18.67 | 23.79 | -18.14 | 21.82 |
| | MSCI EAFE | 4.58 | 8.92 | 16.87 | 13.33 | 11.45 | 11.42 | 5.97 | 3.82 | 18.24 | -14.45 | 11.26 |
| | MSCI EM | 4.27 | 6.31 | 8.73 | 13.04 | 5.15 | 7.07 | 3.93 | 7.50 | 9.83 | -20.09 | -2.54 |
| | MSCI AC Asia Pac | 4.76 | 7.35 | 8.57 | 12.95 | 7.41 | 7.78 | 5.03 | 9.56 | 11.45 | -17.22 | -1.46 |
| | MSCI ACWI | 5.75 | 2.52 | 5.32 | 13.65 | 12.30 | 13.37 | 9.25 | 17.49 | 22.20 | -18.36 | 18.54 |
| | MSCI Europe | 4.56 | 8.80 | 20.57 | 13.39 | 12.42 | 12.82 | 6.23 | 1.79 | 19.89 | -15.06 | 16.30 |
| | MSCI World Small Cap | 5.81 | 2.53 | 2.57 | 7.18 | 6.64 | 10.52 | 6.97 | 8.15 | 15.76 | -18.76 | 15.75 |
| | MSCI World Ex USA Small Cap | 5.89 | 12.42 | 15.53 | 14.18 | 7.39 | 9.23 | 6.01 | 2.76 | 12.62 | -20.59 | 11.14 |
| | FTSE 100 | 4.83 | 8.22 | 17.85 | 16.58 | 11.45 | 13.64 | 5.03 | 7.73 | 14.38 | -7.01 | 17.36 |
| | FTSE All Small | 7.54 | 13.61 | 11.33 | 12.76 | 7.29 | 12.97 | 5.78 | 8.62 | 12.57 | -23.06 | 22.15 |
| | STOXX Europe 600 | 4.69 | 9.30 | 20.73 | 13.75 | 12.43 | 12.68 | 6.33 | 1.97 | 19.87 | -16.14 | 16.09 |
| | Nikkei 225 Average | 4.12 | 7.43 | 4.40 | 9.08 | 9.20 | 6.93 | 6.38 | 8.45 | 22.05 | -19.49 | -4.69 |
| Sectors | S&P 500 Comm. Services | 9.63 | 1.31 | 3.59 | 20.18 | 21.61 | 15.33 | 10.98 | 40.23 | 55.80 | -39.89 | 21.57 |
| | S&P 500 Cons Disc | 9.44 | -0.62 | -5.96 | 21.49 | 13.37 | 12.25 | 12.25 | 30.14 | 42.41 | -37.03 | 24.43 |
| | S&P 500 Cons Staples | 1.81 | 0.56 | 8.45 | 14.11 | 8.72 | 11.55 | 9.20 | 14.87 | 0.52 | -0.62 | 18.63 |
| | S&P 500 Energy | 0.99 | -9.43 | -3.88 | -9.58 | 1.59 | 21.07 | 4.63 | 5.72 | -1.33 | 65.72 | 54.64 |
| | S&P 500 Financials | 4.43 | -2.04 | 5.86 | 24.33 | 14.98 | 19.16 | 12.08 | 30.56 | 12.15 | -10.53 | 35.04 |
| | S&P 500 Health Care | -5.55 | -10.59 | -3.10 | -6.03 | 1.84 | 6.97 | 7.78 | 2.58 | 2.06 | -1.95 | 26.13 |
| | S&P 500 Industrials | 8.83 | 5.13 | 8.83 | 17.54 | 16.69 | 18.07 | 11.75 | 17.47 | 18.13 | -5.48 | 21.12 |
| | S&P 500 Info Tech | 10.89 | 2.74 | -1.57 | 14.62 | 23.65 | 22.42 | 21.53 | 36.61 | 57.84 | -28.19 | 34.53 |
| | S&P 500 Materials | 3.03 | -1.85 | 3.63 | -3.46 | 2.39 | 11.52 | 7.77 | -0.04 | 12.55 | -12.27 | 27.28 |
| | S&P 500 Real Estate | 0.99 | -2.63 | 3.35 | 13.74 | 1.67 | 7.45 | 7.11 | 5.23 | 12.36 | -26.13 | 46.19 |
| | S&P 500 Utilities | 3.83 | 4.20 | 9.07 | 16.23 | 6.68 | 10.01 | 9.94 | 23.43 | -7.08 | 1.57 | 17.67 |

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Morningstar as of 5/31/25. Data provided is for informational use only. Results in US Dollar. See end of report for additional information.

EQUITIES

Asset Class Return Analysis (%)

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | YTD 2025 |
|--------|------------------------------|------------------------------|-------------------------------|--------------------------------|-------------------------------|-------------------------------|-------------------------------|--------------------------------|-------------------------------|------------------------------|-------------------------------|
| Higher | Growth 5.67 | Small-Cap 21.31 | Emerging Markets 37.28 | Growth -1.51 | Growth 36.39 | Growth 38.49 | S&P 500 28.71 | Value -7.54 | Growth 42.68 | Growth 33.36 | International 16.87 |
| | International Small-Cap 5.46 | Value 17.34 | International Small-Cap 31.04 | S&P 500 -4.38 | S&P 500 31.49 | Small-Cap 19.96 | Growth 27.60 | International -14.45 | S&P 500 26.29 | S&P 500 25.02 | International Small-Cap 15.53 |
| | S&P 500 1.38 | Mid-Cap 13.80 | Growth 30.21 | Value -8.27 | Mid-Cap 30.54 | S&P 500 18.40 | Value 25.16 | Mid-Cap -17.32 | Global 22.20 | Global 17.49 | Emerging Markets 8.73 |
| | International -0.81 | S&P 500 11.96 | International 25.03 | Mid-Cap -9.06 | Global 26.60 | Emerging Markets 18.31 | Mid-Cap 22.58 | S&P 500 -18.11 | International 18.24 | Mid-Cap 15.34 | Global 5.32 |
| | Global -2.36 | Emerging Markets 11.19 | Global 23.97 | Global -9.42 | Value 26.54 | Mid-Cap 17.10 | Global 18.54 | Global -18.36 | Mid-Cap 17.23 | Value 14.37 | Value 2.50 |
| | Mid-Cap -2.44 | Global 7.86 | S&P 500 21.83 | Small-Cap -11.01 | Small-Cap 25.52 | Global 16.25 | Small-Cap 14.82 | Emerging Markets -20.09 | Small-Cap 16.93 | Small-Cap 11.54 | Mid-Cap 1.06 |
| | Value -3.83 | Growth 7.08 | Mid-Cap 18.52 | International -13.79 | International Small-Cap 25.41 | International Small-Cap 12.78 | International 11.26 | Small-Cap -20.44 | International Small-Cap 12.62 | Emerging Markets 7.50 | S&P 500 1.06 |
| | Small-Cap -4.41 | International Small-Cap 4.32 | Small-Cap 14.65 | Emerging Markets -14.58 | International 22.01 | International 7.82 | International Small-Cap 11.14 | International Small-Cap -20.59 | Value 11.46 | International 3.82 | Growth -0.27 |
| | Emerging Markets -14.92 | International 1.00 | Value 13.66 | International Small-Cap -18.07 | Emerging Markets 18.42 | Value 2.80 | Emerging Markets -2.54 | Growth -29.14 | Emerging Markets 9.83 | International Small-Cap 2.76 | Small-Cap -6.85 |

Past performance is no guarantee of future results.

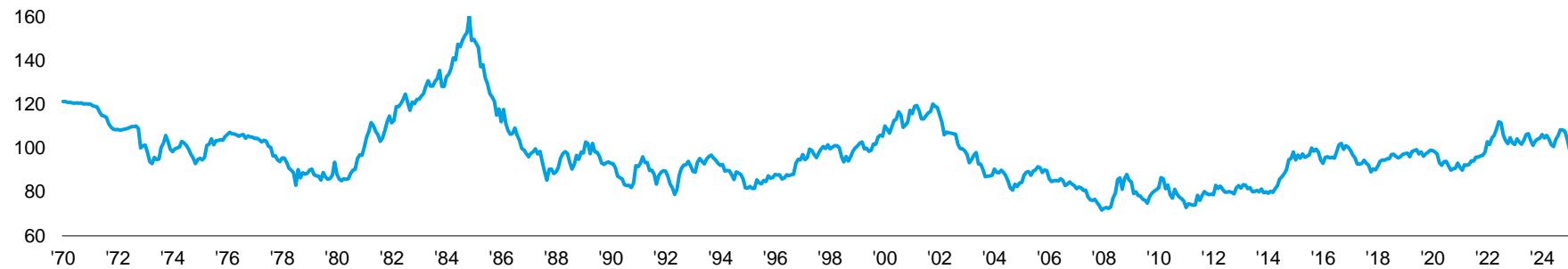
It is not possible to invest directly in an index. In general, Foreign securities are subject to currency, political, economic and market risks. The risks of investing in emerging market countries are greater than investments in foreign developed countries. Investors should carefully review the risks of each asset class prior to investing. Source: Morningstar as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. Small-Cap represented by Russell 2000 Index. Emerging Markets represented by MSCI Emerging Markets Index. Value represented by Russell 1000 Value Index. Mid-Cap represented by Russell Midcap Index. Global represented by MSCI ACWI Index. Growth represented by Russell 1000 Growth Index. International represented by MSCI EAFE Index. International Small-Cap represented by MSCI World Ex USA Small Cap Index.

ALTERNATIVES

Developed Market Currency Performance and Yields

| Currency | Spot Returns vs. USD (%) | | | | | Spot Returns vs. EUR (%) | | | | | Local Interest Rates (%) | |
|--------------------------|--------------------------|-------|-------|-------|-------|--------------------------|-------|-------|-------|-------|--------------------------|--|
| | 1-Mo. | YTD | 1Y | 3Y | 5Y | 1-Mo. | YTD | 1Y | 3Y | 5Y | 1Y | |
| U.S. Dollar (USD) | - | - | - | - | - | 0.13 | -8.79 | -4.37 | -1.92 | -0.41 | 4.12 | |
| Euro (EUR) * | -0.13 | 9.63 | 4.57 | 1.95 | 0.41 | - | - | - | - | - | 1.76 | |
| British Pound (GBP) | 0.96 | 7.68 | 5.92 | 2.28 | 1.75 | 1.10 | -1.78 | 1.29 | 0.32 | 1.34 | 3.83 | |
| Japanese Yen (JPY) | -1.15 | 8.92 | 8.91 | -3.75 | -5.68 | -1.02 | -0.65 | 4.14 | -5.60 | -6.06 | 0.74 | |
| Australian Dollar (AUD) | 0.58 | 3.94 | -3.23 | -3.55 | -0.62 | 0.71 | -5.19 | -7.46 | -5.40 | -1.02 | 3.40 | |
| Canadian Dollar (CAD) | 0.46 | 4.60 | -0.86 | -2.74 | 0.11 | 0.59 | -4.59 | -5.19 | -4.61 | -0.30 | 2.56 | |
| New Zealand Dollar (NZD) | 0.61 | 6.57 | -2.82 | -2.84 | -0.73 | 0.74 | -2.80 | -7.07 | -4.70 | -1.13 | 3.17 | |
| Norwegian Krone (NOK) | 1.50 | 11.16 | 2.78 | -2.74 | -0.99 | 1.63 | 1.39 | -1.71 | -4.60 | -1.40 | 4.00 | |
| Swedish Krona (SEK) | 0.42 | 15.04 | 9.50 | 0.62 | -0.39 | 0.55 | 4.93 | 4.71 | -1.31 | -0.80 | 1.91 | |
| Danish Krone (DKK) | -0.08 | 9.60 | 4.56 | 1.86 | 0.39 | 0.05 | -0.03 | -0.01 | -0.09 | -0.02 | 1.56 | |
| Swiss Franc (CHF) | 0.02 | 10.31 | 9.81 | 5.28 | 3.18 | 0.16 | 0.62 | 5.01 | 3.26 | 2.76 | -0.27 | |

U.S. Dollar Index



Past performance is no guarantee of future results.

It is not possible to invest directly in an index. *German Rate. Source: Factset, Bloomberg as of 5/31/25. Dollar is represented by the US Trade Weighted Dollar Index (DXY). Data provided is for informational use only. See end of report for important additional information.

ALTERNATIVES

Emerging Market Currency Performance and Yields

| Currency | Spot Returns vs. USD (%) | | | | | Spot Returns vs. EUR (%) | | | | | Local Interest Rates (%) | |
|------------------------------|--------------------------|-------|--------|-------|-------|--------------------------|-------|--------|-------|-------|--------------------------|--|
| | 1-Mo. | YTD | 1Y | 3Y | 5Y | 1-Mo. | YTD | 1Y | 3Y | 5Y | 1Y | |
| Asia, excluding Japan | | | | | | | | | | | | |
| Chinese Renminbi (CNY) | 0.93 | 1.44 | 0.67 | -2.56 | -0.14 | 1.07 | -7.47 | -3.73 | -4.43 | -0.55 | 1.44 | |
| Malaysian Ringgit (MYR) | 1.37 | 5.05 | 10.58 | 0.95 | 0.42 | 1.51 | -4.18 | 5.75 | -0.99 | 0.02 | 2.86 | |
| Indian Rupee (INR) | -1.28 | 0.05 | -2.46 | -3.19 | -2.44 | -1.14 | -8.75 | -6.72 | -5.05 | -2.84 | 5.73 | |
| Indonesian Rupiah (IDR) | 1.90 | -1.20 | -0.25 | -3.63 | -2.15 | 2.04 | -9.88 | -4.61 | -5.47 | -2.55 | 6.03 | |
| Philippine Peso (PHP) | 0.11 | 3.67 | 4.88 | -2.08 | -1.93 | 0.24 | -5.44 | 0.30 | -3.95 | -2.33 | 5.62 | |
| Singapore Dollar (SGD) | 1.25 | 5.78 | 4.82 | 2.06 | 1.85 | 1.38 | -3.51 | 0.23 | 0.10 | 1.44 | 2.00 | |
| South Korean Won (KRW) | 3.03 | 6.70 | 0.35 | -3.57 | -2.14 | 3.17 | -2.67 | -4.04 | -5.42 | -2.53 | 2.21 | |
| Taiwanese Dollar (TWD) | 6.72 | 9.40 | 8.09 | -1.06 | 0.04 | 6.86 | -0.22 | 3.37 | -2.96 | -0.37 | 1.28 | |
| Thai Baht (THB) | 1.76 | 3.86 | 12.07 | 1.39 | -0.63 | 1.89 | -5.26 | 7.17 | -0.55 | -1.03 | 1.54 | |
| Latin America | | | | | | | | | | | | |
| Brazilian Real (BRL) | -1.23 | 7.78 | -8.31 | -6.15 | -1.07 | -1.10 | -1.69 | -12.32 | -7.95 | -1.48 | 14.64 | |
| Chilean Peso (CLP) | 1.18 | 5.21 | -2.81 | -4.51 | -3.16 | 1.31 | -4.03 | -7.06 | -6.34 | -3.55 | 5.03 | |
| Colombian Peso (COP) | 1.46 | 5.83 | -7.01 | -3.20 | -2.26 | 1.60 | -3.47 | -11.07 | -5.05 | -2.66 | 8.71 | |
| Mexican Peso (MXN) | 0.87 | 7.15 | -12.12 | 0.52 | 2.66 | 1.00 | -2.27 | -15.97 | -1.40 | 2.24 | 8.27 | |
| Peruvian New Sol (PEN) | 1.18 | 3.45 | 3.12 | 0.50 | -1.10 | 1.31 | -5.64 | -1.39 | -1.43 | -1.51 | 3.95 | |

Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Factset, Bloomberg as of 5/31/25. Data provided is for informational use only. See end of report for important additional information..

ALTERNATIVES

Emerging Market Currency Performance and Yields

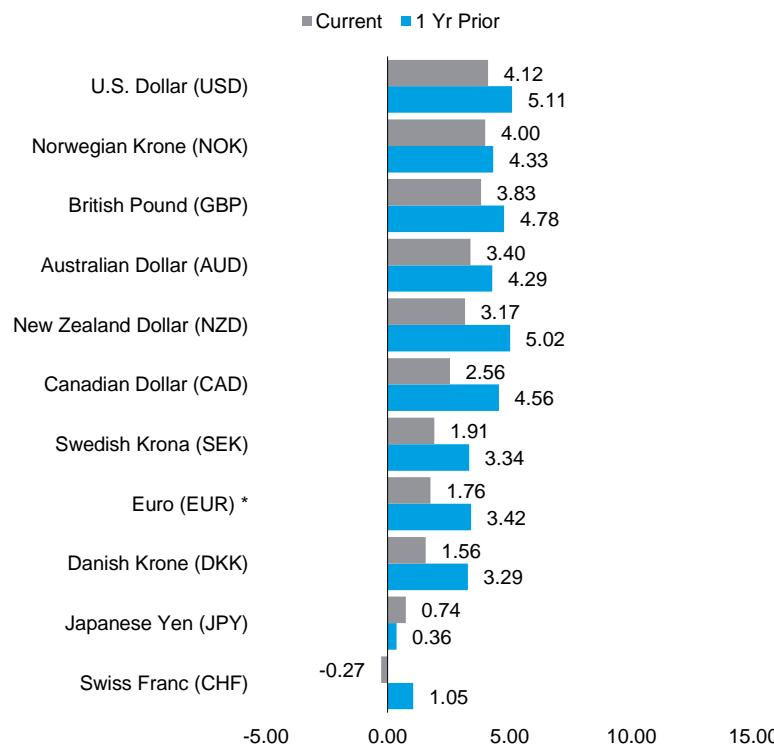
| Currency | Spot Returns vs. USD (%) | | | | | Spot Returns vs. EUR (%) | | | | | Local Interest Rates (%) | |
|-------------------------------|--------------------------|-------|--------|--------|--------|--------------------------|--------|--------|--------|--------|--------------------------|----|
| | 1-Mo. | YTD | 1Y | 3Y | 5Y | 1-Mo. | YTD | 1Y | 3Y | 5Y | 1Y | 5Y |
| Europe | | | | | | | | | | | | |
| Czech Koruna (CZK) | -0.20 | 10.58 | 3.51 | 1.64 | 1.94 | -0.07 | 0.86 | -1.01 | -0.31 | 1.52 | 3.09 | |
| Hungarian Forint (HUF) | -0.03 | 11.63 | 0.96 | 1.35 | -2.64 | 0.11 | 1.82 | -3.45 | -0.59 | -3.03 | 6.17 | |
| Polish Zloty (PLN) | 0.48 | 10.31 | 5.14 | 4.53 | 1.35 | 0.62 | 0.62 | 0.54 | 2.52 | 0.94 | 4.26 | |
| Romanian Leu (RON) | -1.80 | 7.74 | 2.79 | 1.15 | -0.49 | -1.67 | -1.73 | -1.71 | -0.79 | -0.89 | 6.74 | |
| Russian Ruble (RUB) | 4.29 | 39.59 | 14.94 | -7.12 | -2.12 | 4.43 | 27.32 | 9.92 | -8.90 | -2.52 | -- | |
| Turkish New Lira (TRY) | -1.99 | -9.89 | -17.92 | -25.26 | -29.53 | -1.86 | -17.81 | -21.51 | -26.69 | -29.81 | 42.67 | |
| Middle East and Africa | | | | | | | | | | | | |
| Ghanaian Cedi (GHS) | 37.56 | 43.41 | 43.90 | -8.76 | -10.81 | 37.74 | 30.81 | 37.61 | -10.51 | -11.17 | 17.90 | |
| Israeli Shekel (ILS) | 3.41 | 3.54 | 5.72 | -1.83 | -0.09 | 3.54 | -5.56 | 1.09 | -3.71 | -0.50 | 4.24 | |
| Kenyan Shilling (KES) | 0.15 | 0.12 | 1.01 | -3.31 | -3.74 | 0.29 | -8.68 | -3.41 | -5.16 | -4.13 | 10.00 | |
| Moroccan Dirham (MAD) | 0.08 | 9.55 | 7.59 | 2.20 | 1.11 | 0.21 | -0.08 | 2.89 | 0.24 | 0.70 | 2.17 | |
| Nigerian Naira (NGN) | 0.86 | -2.83 | -4.97 | -36.08 | -24.63 | 0.99 | -11.37 | -9.13 | -37.30 | -24.93 | 22.12 | |
| South African Rand (ZAR) | 3.04 | 4.50 | 4.26 | -4.79 | -0.48 | 3.18 | -4.68 | -0.30 | -6.62 | -0.88 | 7.91 | |
| Ugandan Shilling (UGX) | 0.71 | 1.73 | 4.76 | 1.25 | 0.78 | 0.85 | -7.21 | 0.18 | -0.69 | 0.37 | 15.50 | |
| Zambian Kwacha (ZMK) | 4.32 | 4.72 | -2.25 | -13.43 | -7.22 | 4.46 | -4.48 | -6.53 | -15.09 | -7.59 | 14.50 | |

Past performance is no guarantee of future results. 5/31/25. Data provided is for informational use only. See end of report for important additional information..

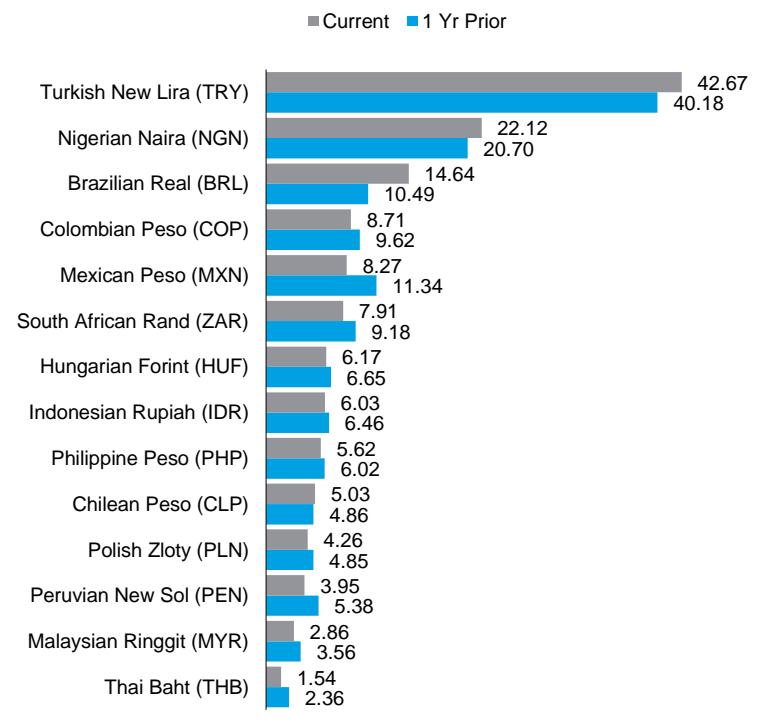
ALTERNATIVES

Local Sovereign Currency Yields

Developed Market Local Interest Rates % (1 Year)



Emerging Market Local Interest Rates % (1 Year)



Past performance is no guarantee of future results.

It is not possible to invest directly in an index. *German Rate. Source: Bloomberg as 5/31/25. Data provided is for informational use only. See end of report for important additional information.

ALTERNATIVES

Commodities Return Analysis (%)

| Index | 1-Mo. | 3-Mo. | YTD | 1Y | 3Y | 5Y |
|----------------------------------|--------------|---------------|--------------|--------------|---------------|--------------|
| Bloomberg Commodity Index | -0.58 | -1.64 | 3.05 | 1.69 | -4.37 | 12.65 |
| Bloomberg Sub Agriculture | -3.29 | -2.53 | -0.17 | -3.69 | -5.20 | 13.15 |
| Coffee | -14.24 | -6.63 | 12.35 | 68.98 | 26.17 | 33.32 |
| Corn | -6.29 | -5.64 | -5.27 | -8.00 | -12.66 | 9.64 |
| Cotton | -1.10 | -0.42 | -5.94 | -15.61 | -16.41 | 7.23 |
| Soybean | 0.09 | 1.57 | 2.17 | -11.78 | -5.13 | 12.41 |
| Soybean Oil | -3.91 | 6.46 | 15.97 | 4.15 | -9.04 | 19.18 |
| Sugar | -0.81 | -5.99 | -1.64 | 4.86 | 8.16 | 16.94 |
| Wheat | 0.97 | -5.37 | -6.14 | -29.13 | -26.93 | -6.05 |
| Bloomberg Sub Energy | 0.47 | -12.47 | -6.60 | -8.91 | -18.35 | 10.83 |
| Brent Crude | 3.25 | -11.58 | -11.28 | -12.49 | -5.62 | 23.82 |
| Heating Oil | 1.39 | -7.95 | -4.43 | -8.28 | -2.32 | 29.85 |
| Natural Gas | -4.83 | -17.00 | 2.76 | -7.35 | -48.05 | -19.66 |
| Unleaded Gas | 1.49 | -7.33 | -7.28 | -8.57 | -2.83 | 30.37 |
| WTI Crude Oil | 5.88 | -10.03 | -11.19 | -9.83 | -8.27 | 20.96 |

| Index | 1-Mo. | 3-Mo. | YTD | 1Y | 3Y | 5Y |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Bloomberg Sub Industrial Metals | 1.21 | -1.83 | 2.26 | -8.04 | -4.43 | 10.68 |
| Aluminum | 2.02 | -6.25 | -3.59 | -8.41 | -4.82 | 8.17 |
| Copper | 1.85 | 2.79 | 15.79 | 2.17 | 4.80 | 14.97 |
| Nickel | -1.33 | -1.69 | -1.21 | -23.76 | -18.86 | 4.32 |
| Zinc | 1.34 | -5.72 | -11.96 | -11.44 | -9.40 | 7.65 |
| Bloomberg Sub Precious Metals | -0.28 | 13.11 | 21.60 | 31.32 | 19.21 | 12.11 |
| Gold | -0.61 | 15.52 | 24.21 | 39.82 | 20.53 | 12.35 |
| Platinum | 9.21 | 12.22 | 16.41 | 0.88 | 4.58 | 4.32 |
| Silver | 0.97 | 5.01 | 12.81 | 7.28 | 14.54 | 11.23 |
| Bloomberg Sub Livestock | 3.37 | 12.31 | 11.50 | 23.40 | 13.38 | 10.36 |
| Lean Hogs | 3.79 | 8.80 | 5.01 | 22.63 | 2.93 | 10.83 |
| Live Cattle | 3.06 | 14.31 | 15.18 | 25.05 | 20.04 | 10.47 |

Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Morningstar as of 5/31/25. Data provided is for informational use only. See end of report for important additional information. Commodity represented by Bloomberg Commodity Index. Agriculture represented by Bloomberg Agriculture Subindex. Energy represented by Bloomberg Energy Subindex. Grains represented by Bloomberg Grains Subindex. Industrial Metals represented by Bloomberg Industrial Metals Subindex. Livestock represented by Bloomberg Livestock Subindex. Precious Metals represented by Bloomberg Precious Metals Subindex.

ALTERNATIVES

Asset Class Return Analysis (%)

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | YTD 2025 |
|--------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|--------------------------------|---------------------------------|--------------------------------|--------------------------------|--------------------------------|
| Higher | Multi-Strategy 3.84 | MLP 18.31 | Long/Short Equity 13.41 | Fixed Income Arbitrage 1.10 | Long/Short Equity 12.17 | Convertible Arbitrage 10.25 | MLP 40.17 | MLP 30.92 | MLP 26.56 | MLP 24.41 | Equity Market Neutral 6.38 |
| | Long/Short Equity 3.55 | Commodity 11.77 | Currency 11.54 | Global Macro -0.11 | Global Macro 10.38 | Long/Short Equity 7.86 | Commodity 27.11 | Managed Futures 19.12 | Long/Short Equity 10.93 | Long/Short Equity 14.78 | Currency 6.13 |
| | Equity Market Neutral 1.69 | Convertible Arbitrage 6.60 | Equity Market Neutral 8.45 | Multi-Strategy -1.05 | Managed Futures 9.01 | Event Driven 6.95 | Event Driven 12.92 | Commodity 16.09 | Event Driven 9.30 | Event Driven 13.03 | Commodity 3.64 |
| | Convertible Arbitrage 0.81 | Multi-Strategy 4.41 | Multi-Strategy 6.83 | Convertible Arbitrage -2.26 | Event Driven 8.22 | Global Macro 6.53 | Global Macro 9.60 | Global Macro 15.89 | Currency 8.44 | Multi-Strategy 8.66 | Fixed Income Arbitrage 3.48 |
| | Fixed Income Arbitrage 0.59 | Fixed Income Arbitrage 4.29 | Fixed Income Arbitrage 6.52 | Currency -3.33 | Convertible Arbitrage 8.15 | Multi-Strategy 5.60 | Long/Short Equity 8.35 | Equity Market Neutral 1.71 | Multi-Strategy 8.04 | Fixed Income Arbitrage 8.49 | Multi-Strategy 2.92 |
| | Global Macro 0.18 | Global Macro 3.58 | Event Driven 6.30 | Event Driven -3.95 | Commodity 7.69 | Fixed Income Arbitrage 3.64 | Managed Futures 8.19 | Multi-Strategy 1.27 | Fixed Income Arbitrage 7.71 | Equity Market Neutral 8.05 | MLP 2.63 |
| | Managed Futures -0.93 | Currency 3.54 | Convertible Arbitrage 5.01 | Long/Short Equity -4.62 | Multi-Strategy 7.25 | Managed Futures 1.86 | Multi-Strategy 6.97 | Fixed Income Arbitrage -0.97 | Equity Market Neutral 6.73 | Convertible Arbitrage 7.35 | Convertible Arbitrage 2.22 |
| | Event Driven -6.29 | Event Driven 2.68 | Managed Futures 3.29 | Equity Market Neutral -5.00 | MLP 6.56 | Currency 1.73 | Convertible Arbitrage 6.33 | Convertible Arbitrage -3.32 | Convertible Arbitrage 4.04 | Global Macro 5.52 | Long/Short Equity 1.67 |
| | Currency -7.61 | Long/Short Equity -3.43 | Global Macro 2.14 | Managed Futures -6.67 | Fixed Income Arbitrage 6.10 | Equity Market Neutral 1.69 | Equity Market Neutral 6.16 | Long/Short Equity -5.77 | Managed Futures -2.78 | Commodity 5.38 | Global Macro 1.18 |
| | Commodity -24.66 | Equity Market Neutral -4.58 | Commodity 1.70 | Commodity -11.25 | Currency 5.20 | Commodity -3.12 | Fixed Income Arbitrage 5.22 | Event Driven -6.80 | Global Macro -5.19 | Managed Futures 2.87 | Event Driven 0.32 |
| Lower | MLP -32.59 | Managed Futures -6.84 | MLP -6.52 | MLP -12.42 | Equity Market Neutral 1.58 | MLP -28.69 | Currency -3.09 | Currency -7.14 | Commodity -7.91 | Currency -1.08 | Managed Futures -6.30 |

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Morningstar as of 4/30/25. *Data is on a 1-month lag. Data provided is for informational use only. Alternative investments often are speculative and include a high degree of risk. See end of report for important additional information. Global Macro represented by Credit Suisse Global Macro Index. MLP represented by Alerian MLP Index. Event Driven represented by Credit Suisse Event Driven Index. Multi-Strategy represented by Credit Suisse Multi-Strategy Index. Long/Short Equity represented by Credit Suisse Long/Short Equity Index. Convertible Arbitrage represented by Credit Suisse Convertible Arbitrage Index. Currency represented by J.P. Morgan EML+ Index. Equity Market Neutral represented by Credit Suisse Equity Market Neutral Index. Fixed Income Arbitrage represented by Credit Suisse Fixed Income Arbitrage Index. Managed Futures represented by Credit Suisse Managed Futures Index. Commodity represented by Bloomberg Commodity Index.

TRANSITION

Major Asset Classes Correlation Table

| | S&P 500 | International | Emerging Markets | Small Cap | U.S. Aggregate | Municipal | High Yield | Bank Loan | Commodities |
|------------------|---------|---------------|------------------|-----------|----------------|-----------|------------|-----------|-------------|
| S&P 500 | 1.00 | 0.85 | 0.69 | 0.86 | 0.38 | 0.42 | 0.80 | 0.60 | 0.38 |
| International | 0.83 | 1.00 | 0.79 | 0.76 | 0.43 | 0.47 | 0.80 | 0.59 | 0.42 |
| Emerging Markets | 0.60 | 0.75 | 1.00 | 0.62 | 0.40 | 0.44 | 0.70 | 0.56 | 0.47 |
| Small Cap | 0.83 | 0.74 | 0.56 | 1.00 | 0.29 | 0.34 | 0.77 | 0.64 | 0.37 |
| U.S. Aggregate | 0.59 | 0.68 | 0.61 | 0.50 | 1.00 | 0.84 | 0.50 | 0.15 | -0.05 |
| Municipal | 0.65 | 0.68 | 0.67 | 0.55 | 0.89 | 1.00 | 0.56 | 0.29 | 0.04 |
| High Yield | 0.83 | 0.80 | 0.65 | 0.76 | 0.74 | 0.74 | 1.00 | 0.80 | 0.49 |
| Bank Loan | 0.58 | 0.58 | 0.56 | 0.59 | 0.34 | 0.37 | 0.68 | 1.00 | 0.49 |
| Commodities | 0.30 | 0.32 | 0.35 | 0.23 | 0.02 | 0.02 | 0.32 | 0.35 | 1.00 |

5 Years ended May 31, 2025

10 Years ended May 31, 2025

Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Morningstar as of 5/31/25. The table above shows the return correlation between various asset classes (represented by market indices as defined in this disclosure) over the past five and ten years. Data provided is for informational use only. See end of report for important additional information. S&P 500 is represented by the S&P 500 Index. International is represented by MSCI EAFE Index. Emerging Markets is represented by MSCI Emerging Markets Index. Small-Cap is represented by Russell 2000 Index. US Aggregate is represented by the Bloomberg Barclays Capital US Aggregate Bond Index. Municipal is represented by Bloomberg Barclays Municipal Bond Index. High Yield is represented by ICE BofA US High Yield Index. Bank Loan is represented by Morningstar LSTA U.S. Leveraged Loan Index. Commodities is represented by Bloomberg Commodity Index.

TRANSITION

Fund and ETF Flows by Category

Top 10 Open-End Mutual Fund Categories by Monthly Flows (\$MM)

| | 1 Mo. | 3 Mo. | 12 Mo. |
|--------------------------|--------|-------|----------|
| Large Blend | 14,763 | 67 | -109,637 |
| Ultrashort Bond | 1,706 | 4,870 | 10,965 |
| Short-Term Bond | 1,459 | 1,478 | -2,001 |
| Miscellaneous Region | 959 | 2,102 | 4,602 |
| Commodities Broad Basket | 823 | 931 | -183 |
| Equity Market Neutral | 702 | 1,823 | 3,692 |
| Trading--Inverse Equity | 379 | 432 | 242 |
| Real Estate | 274 | -24 | 690 |
| Inflation-Protected Bond | 268 | 723 | 6,621 |
| Macro Trading | 156 | 709 | 1,940 |

Bottom 10 Open-End Mutual Fund Categories by Monthly Flows (\$MM)

| | 1 Mo. | 3 Mo. | 12 Mo. |
|-----------------------------|---------|---------|----------|
| Diversified Emerging Mkts | -4,074 | -10,234 | -24,276 |
| Foreign Large Blend | -4,141 | -15,349 | -6,217 |
| Multisector Bond | -4,194 | 2,408 | 32,907 |
| Moderate Allocation | -5,304 | -13,703 | -44,901 |
| High Yield Bond | -5,401 | -4,749 | 5,464 |
| Bank Loan | -5,543 | -5,777 | -5,525 |
| Large Growth | -7,183 | -27,793 | -122,638 |
| Large Value | -7,258 | -19,940 | -73,384 |
| Intermediate Core-Plus Bond | -9,456 | -3,759 | 2,511 |
| Intermediate Core Bond | -22,418 | -21,260 | 13,445 |

Top 10 Exchange-Traded Fund Categories by Monthly Flows (\$MM)

| | 1 Mo. | 3 Mo. | 12 Mo. |
|---------------------------|--------|--------|---------|
| Large Blend | 25,685 | 79,277 | 397,074 |
| Ultrashort Bond | 15,301 | 43,673 | 95,313 |
| Large Value | 8,084 | 28,027 | 76,068 |
| Foreign Large Blend | 7,420 | 21,674 | 68,668 |
| Large Growth | 5,913 | 20,571 | 98,789 |
| Trading--Leveraged Equity | 4,857 | 11,431 | 15,609 |
| Derivative Income | 4,565 | 14,426 | 45,833 |
| Commodities Focused | 4,444 | 16,552 | 21,644 |
| Digital Assets | 2,867 | -539 | 34,438 |
| Intermediate Government | 2,845 | 38 | 25,524 |

Bottom 10 Exchange-Traded Fund Categories by Monthly Flows (\$MM)

| | 1 Mo. | 3 Mo. | 12 Mo. |
|-----------------------|--------|--------|---------|
| Mid-Cap Value | -1,463 | -1,860 | -1,613 |
| Emerging Markets Bond | -1,602 | -1,541 | -2,301 |
| Corporate Bond | -1,994 | 177 | 12,435 |
| Equity Energy | -3,248 | -4,971 | -14,554 |
| Financial | -3,539 | -4,041 | 10,904 |
| China Region | -4,084 | -3,060 | 785 |
| Bank Loan | -4,420 | -7,240 | 3,588 |
| Long Government | -4,563 | -1,142 | 11,630 |
| High Yield Bond | -4,731 | 253 | 14,016 |
| Small Blend | -5,448 | -7,833 | 20,121 |

Source: Morningstar as of 4/30/25. Flow data is on a one-month lag. Data provided is for informational use only. See end of report for important additional information.

TRANSITION

Major Asset Class Return Analysis (%)

| | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | YTD 2025 |
|--------|-------------------------|------------------------|------------------------|-------------------------|------------------------|------------------------|------------------------|-------------------------|------------------------|-----------------------|-----------------------|
| Higher | Municipal 3.30 | Small-Cap 21.31 | Emerging Markets 37.28 | Municipal 1.28 | S&P 500 31.49 | Small-Cap 19.96 | S&P 500 28.71 | Commodities 16.09 | S&P 500 26.29 | S&P 500 25.02 | International 16.87 |
| | S&P 500 1.38 | High Yield 17.49 | International 25.03 | Bank Loan 0.44 | Small-Cap 25.52 | S&P 500 18.40 | Commodities 27.11 | Bank Loan -0.77 | International 18.24 | Small-Cap 11.54 | Emerging Markets 8.73 |
| | US Agg 0.55 | S&P 500 11.96 | S&P 500 21.83 | US Agg 0.01 | International 22.01 | Emerging Markets 18.31 | Small-Cap 14.82 | Municipal -8.53 | Small-Cap 16.93 | Asset Allocation 9.79 | Asset Allocation 3.46 |
| | Bank Loan -0.69 | Commodities 11.77 | Small-Cap 14.65 | High Yield -2.26 | Asset Allocation 18.70 | Asset Allocation 11.95 | Asset Allocation 11.43 | High Yield -11.22 | Asset Allocation 14.09 | Bank Loan 8.95 | Commodities 3.05 |
| | International -0.81 | Emerging Markets 11.19 | Asset Allocation 14.02 | S&P 500 -4.38 | Emerging Markets 18.42 | International 7.82 | International 11.26 | US Agg -13.01 | High Yield 13.46 | High Yield 8.20 | High Yield 2.64 |
| | Asset Allocation -2.03 | Bank Loan 10.16 | High Yield 7.48 | Asset Allocation -5.40 | High Yield 14.41 | US Agg 7.51 | High Yield 5.36 | Asset Allocation -13.04 | Bank Loan 13.32 | Emerging Markets 7.50 | US Agg 2.45 |
| | Small-Cap -4.41 | Asset Allocation 8.61 | Municipal 5.45 | Small-Cap -11.01 | US Agg 8.72 | High Yield 6.17 | Bank Loan 5.20 | International -14.45 | Emerging Markets 9.83 | Commodities 5.38 | Bank Loan 1.99 |
| | High Yield -4.64 | US Agg 2.65 | Bank Loan 4.12 | Commodities -11.25 | Bank Loan 8.64 | Municipal 5.21 | Municipal 1.52 | S&P 500 -18.11 | Municipal 6.40 | International 3.82 | S&P 500 1.06 |
| | Emerging Markets -14.92 | International 1.00 | US Agg 3.54 | International -13.79 | Commodities 7.69 | Bank Loan 3.12 | US Agg -1.54 | Emerging Markets -20.09 | US Agg 5.53 | US Agg 1.25 | Municipal -0.96 |
| | Commodities -24.66 | Municipal 0.25 | Commodities 1.70 | Emerging Markets -14.57 | Municipal 7.54 | Commodities -3.12 | Emerging Markets -2.54 | Small-Cap -20.44 | Commodities -7.91 | Municipal 1.05 | Small-Cap -6.85 |

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Morningstar as of 5/31/25. Data provided is for informational use only. Investing involves risks including the possible loss of principal. Investors should carefully review the risks of each asset class prior to investing. See end of report for important additional information. S&P 500 represented by the S&P 500 Index. International represented by MSCI EAFE Index. Emerging Markets represented by MSCI Emerging Markets Index. Small-Cap represented by Russell 2000 Index. US Aggregate represented by the Bloomberg Capital US Aggregate Bond Index. Municipal represented by Bloomberg Municipal Bond Index. High Yield represented by ICE BofA US High Yield Index. Bank Loan represented by Morningstar LSTA U.S. Leveraged Loan Index. Commodity represented by Bloomberg Commodity Index. The Asset Allocation portfolio assumes the following weights: 25% in the S&P 500 Index, 15% in the MSCI EAFE Index, 5% in the MSCI Emerging Markets Index, 10% in the Russell 2000 Index, 25% in the Bloomberg Capital US Aggregate Bond Index, 5% in the Bloomberg Municipal Bond Index, 5% in the Bloomberg US Corporate High Yield Index, 5% in the Morningstar LSTA U.S. Leveraged Loan Index, and 5% in the Bloomberg Commodity Index.

Portfolio Solutions Group

The Portfolio Solutions Group is a comprehensive multi-asset business, with activity across all asset strategies and type, both traditional and alternative, through solutions that span fully liquid (public assets), comprehensive (public and private assets) and fully private portfolios. Offerings are delivered by a managed portfolio or model, in discretionary or advisory format.

The team's expertise lies in partnering with institutional, intermediaries and high net worth investors to understand their unique needs and crafting solutions to help them achieve their overall investment objectives.



JIM CARON
*Chief Investment Officer
Managing Director*



EWA TUREK SEMMELROTH
Executive Director



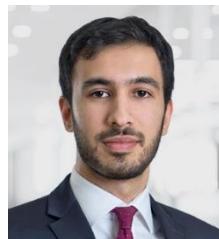
ERIC ZHANG
Executive Director



SCHUYLER HOOPER
Executive Director



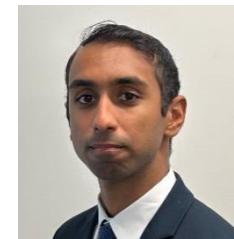
GREG WATERMAN
Executive Director



UMAR MALIK
Vice President



CHRIS CHIA
Vice President



SACHIN RAGHAVAN
Associate

Asset Allocation Committee

The Asset Allocation Committee is an independent group of senior investment professionals across various disciplines within MSIM and Eaton Vance. The Portfolio Solutions Group presents multi-sector research and investment ideas to the Committee, who is responsible for vetting and challenging these ideas to insure they meet their rigorous standards and can then be included in representative asset allocation recommendations.

| | |
|---|--|
| MARK BAVOSO <i>Senior Portfolio Manager, Global Multi-Asset Team</i> | VISHAL KHANDUJA, CFA <i>Portfolio Manager Co-Head of the Broad Markets Fixed Income Team</i> |
| JUSTIN BOURGETTE, CFA <i>Portfolio Manager Head of Investment Strategy for the High Yield Team</i> | KYLE LEE, CFA <i>Portfolio Manager Co-Head of the Emerging Markets Team</i> |
| CRAIG BRANDON, CFA <i>Portfolio Manager Co-Head of the Municipals Team</i> | SCOTT R. NORBY <i>Private Credit and Equity</i> |
| JIM CARON <i>Chief Investment Officer, Portfolio Solutions Group</i> | NISHA PATEL, CFA <i>Senior Portfolio Manager Head of Fixed Income SMA Management, Parametric</i> |
| AARON DUNN, CFA <i>Portfolio Manager Co-Head of the Value Equity Team</i> | CHRISTOPHER REMINGTON <i>Institutional Portfolio Manager Head of Fixed Income Product & Portfolio Strategy</i> |
| GREG FINCK <i>Portfolio Manager Co-Head of the Mortgage and Securitized Team</i> | ANDREW SLIMMON <i>Senior Portfolio Manager Head of Applied Equity Advisors</i> |
| BRAD GODFREY, CFA <i>Co-Head of the Emerging Markets Team</i> | ANDREW SZCZUROWSKI, CFA <i>Portfolio Manager Co-Head of the Mortgage and Securitized Team</i> |
| KATIE HERR <i>Head of Fixed Income Product Strategy</i> | STEVEN TURNER, CFA <i>Head of Investment Selection, Portfolio Solutions Group</i> |
| LAUREN HOCHFELDER <i>Co-Chief Executive Officer of MSREI Head of MSREI Americas</i> | MARK VAN DER ZWAN, CFA <i>Chief Investment Officer and Head of the AIP Hedge Fund Team</i> |
| JITANIA KANDHARI <i>Deputy CIO, Solutions & Multi Asset Group; Head of Macro & Thematic Research, Emerging Markets; Portfolio Manager</i> | |

Index Definitions

The Bloomberg Capital Expenditure Index measures capital expenditure in the U.S.

Bloomberg Commodity Index is a broadly diversified index tracking futures contracts on physical commodities.

The Bloomberg ECO Labor Market Surprise Index measures economic data releases on the labor market compared to market expectations.

Bloomberg Euro-Aggregate Corporates Index consists of bonds issued in the euro or the legacy currencies of the 16 sovereign countries participating in the European Monetary Union (EMU)

Bloomberg Global Aggregate Ex-USD Index is a broad-based measure of global Investment Grade fixed-rate debt investments, excluding USD-denominated debt.

Bloomberg High Yield Municipal Bond Index is an unmanaged index of non-Investment Grade Municipal bonds traded in the U.S.

Bloomberg Magnificent 7 Index is an equal-dollar weighted equity benchmark consisting of Alphabet, Amazon, Apple, Microsoft, Meta, Nvidia and Tesla.

Bloomberg Municipal Bond Index is an unmanaged index of Municipal bonds traded in the U.S.

Bloomberg Pan-European High Yield Index covers the universe of fixed-rate, sub-investment-grade debt denominated in euros or other European currencies (except Swiss francs).

Bloomberg Taxable Municipal Bond Index is an unmanaged index of Taxable Municipal bonds traded in the U.S.

Bloomberg U.S. Agency Index measures agency securities issued by U.S. government agencies, quasi-federal corporations, and corporate or foreign debt guaranteed by the U.S. government.

Bloomberg U.S. Aggregate Index is an unmanaged index of domestic investment-grade bonds, including corporate, government and mortgage-backed securities.

Bloomberg U.S. Asset Backed Securities (ABS) Index measures ABS with the following collateral type: credit and charge card, auto, and utility loans.

Bloomberg U.S. CMBS Index measures the market of conduit and fusion CMBS deals with a minimum current deal size of \$300mn.

Bloomberg U.S. Corporate Investment Grade Index is an unmanaged index that measures the performance of investment-grade corporate securities within the Barclays U.S. Aggregate Index.

Bloomberg U.S. Mortgage-Backed Securities (MBS) Index measures agency mortgage-backed pass-through securities issued by GNMA, FNMA, and FHLMC.

Bloomberg U.S. Treasury Index measures public debt instruments issued by the U.S. Treasury.

CBOE Volatility Index (VIX) tracks the implied volatilities of a wide range of S&P 500 Index options.

CBOE S&P 500 BuyWrite Index measures the performance of a hypothetical buy-write strategy on the S&P 500 Index.

Citigroup Eurozone Economic Surprise Index represents the sum of the difference between official economic results and forecasts in Europe.

Citigroup U.S. Economic Surprise Index represents the sum of the difference between official economic results and forecasts in the U.S.

The DAX consists of the 40 major German blue chip companies trading on the Frankfurt Stock Exchange.

ICE BofA US Inflation-Linked Treasury Index tracks the performance of USD denominated inflation linked sovereign debt publicly issued by the US government.

ICE BofA Fixed Rate Preferred Securities Index is an unmanaged index of fixed-rate, preferred securities issued in the U.S.

ICE BofA European Union Government Bond Index tracks the performance of sovereign debt publicly issued by countries that are members of the European Union.

ICE BofA U.S. High Yield Index is an unmanaged index of below-investment grade U.S. corporate bonds.

ICE BofA Developed Markets High Yield Ex-Subordinated Financial Index (Hedged) is an unmanaged index of global developed market below investment grade corporate bonds, USD hedged.

FTSE 100 Index is an unmanaged market-capitalization weighted index representing the performance of the 100 largest UK listed blue chip companies, which pass screening for size and liquidity.

FTSE All Small Index consists of all the companies in the FTSE SmallCap and FTSE Fledgling indices.

FTSE World Government Bond Index (WGBI) measures the performance of fixed-rate, local currency, investment-grade sovereign bonds.

Goldman Sachs India Financial Conditions Index is a composite indicator used to assess financial conditions in the Indian economy.

J.P. Morgan Corporate Emerging Markets Bond Index (CEMBI) Broad Diversified is an unmanaged index of USD-denominated emerging market corporate bonds.

J.P. Morgan Emerging Markets Bond Index (EMBI) Global Diversified is an unmanaged index of USD-denominated bonds with maturities of more than one year issued by emerging markets governments.

J.P. Morgan Government Bond Index-Emerging Markets (GBI-EM) Global Diversified is an unmanaged index of local-currency bonds with maturities of more than one year issued by emerging market governments.

The MDAX lists German companies trading on the Frankfurt Stock Exchange. It includes the 50 Prime Standard shares that rank in size immediately below the companies included in the DAX index.

Morgan Stanley Capital International (MSCI) Emerging Markets Index is an unmanaged index of emerging markets common stocks

MSCI EMU Index (European Economic and Monetary Union) captures large and mid cap representation across the 10 Developed Markets countries in the EMU. With 229 constituents, the index covers approximately 85% of the free float-adjusted market capitalization of the EMU.

Morgan Stanley Capital International All Country Asia Pacific Index (MSCI AC Asia Pac) is an unmanaged total return, capitalization-weighted index that measures the performance of stock markets in 15 Pacific region countries, including Australia, China, Hong Kong, India, Indonesia, Japan, Korea, Malaysia, New Zealand, Pakistan, the Philippines, Singapore, Sri Lanka, Taiwan and Thailand.

Morgan Stanley Capital International (MSCI) Japan Index is an unmanaged index designed to measure the performance of the large and mid cap segments of the Japan market.

Morgan Stanley Capital International (MSCI) World Index is an unmanaged index of equity securities in the developed markets.

Morgan Stanley Capital International (MSCI) World ex USA Small Cap Index is an unmanaged index of small-cap equity securities in the developed markets, excluding the United States.

Morgan Stanley Capital International All Country World (MSCI AC World) Index is an unmanaged free float-adjusted market-capitalization-weighted index designed to measure the equity market performance of developed and emerging markets.

Morgan Stanley Capital International Europe (MSCI Europe) Index is an unmanaged free float-adjusted market-capitalization-weighted index designed to measure the equity market performance of the developed markets in Europe.

Morgan Stanley Capital International Europe, Australasia, Far East (MSCI EAFE) Index is an unmanaged index of equities in the developed markets, excluding the U.S. and Canada.

MSCI USA Index is designed to measure the performance of the large and mid cap segments of the US market. With 625 constituents, the index covers approximately 85% of the free float-adjusted market capitalization in the US.

MSCI China captures large and mid-cap representation across China A-shares, B-shares, H-shares, Red-chips and P-chips. It reflects the Mainland China and Hong Kong opportunity set from an international investor's perspective.

The **MSCI India Index** is designed to measure the performance of the large and mid cap segments of the Indian market.

ADDITIONAL INFORMATION

Index Definitions, Terms and About Risk

The **MSCI World Index** is a free float adjusted market capitalization weighted index that is designed to measure the global equity market performance of developed markets. The term "free float" represents the portion of shares outstanding that are deemed to be available for purchase in the public equity markets by investors. The performance of the Index is listed in U.S. dollars and assumes reinvestment of net dividends.

The **MSCI USA Health Care Index** is designed to capture the large and mid cap segments of the US equity universe. All securities in the index are classified in the Health Care sector as per the Global Industry Classification Standard.

Morningstar LSTA U.S. Leveraged Loan Index is an unmanaged index of the institutional leveraged loan market. Prior to August 29, 2022, the index name was S&P/LSTA Leveraged Loan Index.

Nikkei 225 Stock Average Index is unmanaged price-weighted index of 225 top-rated Japanese companies listed in the First Section of the Tokyo Stock Exchange.

Russell 1000 Index is an unmanaged index of 1,000 U.S. large-cap stocks.

Russell 1000 Growth Index is an unmanaged index of 1,000 U.S. large-cap growth stocks.

Russell 1000 Value Index is an unmanaged index of 1,000 U.S. large-cap value stocks.

Russell 2000 Index is an unmanaged index of 2,000 U.S. small-cap stocks.

Russell 2500 Index is an unmanaged index of approximately 2,500 U.S. small- and mid-cap U.S. stocks.

Russell Midcap Index is an unmanaged index of U.S. mid-cap stocks.

Standard & Poor's 400 Index is designed to measure the performance of 400 mid-sized U.S. companies, reflecting the distinctive risk and return characteristics of this market segment.

Standard & Poor's 493 Index is designed to measure the performance of the S&P 500 excluding the "Mag 7" i.e. Alphabet, Amazon, Apple, Meta, Microsoft, Nvidia and Tesla.

Standard & Poor's 500 Index is an unmanaged index of large-cap stocks commonly used as a measure of U.S. stock market performance.

STOXX Europe 600 Index is a fixed component number index designed to provide a broad yet liquid representation of large, mid and small capitalization companies in Europe.

ICE BofA Indexes: ICE® BofA® indices are not for redistribution or other uses; provided "as is", without warranties, and with no liability. Eaton Vance has prepared this report and ICE Data Indices, LLC does not endorse it, or guarantee, review, or endorse Eaton Vance's products. BofA® is a licensed registered trademark of Bank of America Corporation in the United States and other countries.

MSCI Indexes: Source: MSCI. MSCI data may not be reproduced or used for any other purpose. MSCI provides no warranties, has not prepared or approved this report, and has no liability hereunder.

J.P. Morgan Indices: Information has been obtained from sources believed to be reliable, but J.P. Morgan does not warrant its completeness or accuracy. The Index is used with permission. The Index may not be copied, used, or distributed without J.P. Morgan's prior written approval. Copyright 2019, J.P. Morgan Chase & Co. All rights reserved.

S&P Dow Jones Indices are a product of S&P Dow Jones Indices LLC ("S&P DJI") and have been licensed for use. S&P® and S&P 500® are registered trademarks of S&P DJI; Dow Jones® is a registered trademark of Dow Jones Trademark Holdings LLC ("Dow Jones"); S&P DJI, Dow Jones and their respective affiliates do not

sponsor, endorse, sell or promote the Fund, will not have any liability with respect thereto and do not have any liability for any errors, omissions, or interruptions of the S&P Dow Jones Indices.

Unless otherwise stated, index returns do not reflect the effect of any applicable sales charges, commissions, expenses, taxes or leverage, as applicable. It is not possible to invest directly in an index. Data provided is for informational use only. Past performance is no guarantee of future results. See end of report for important additional information.

Municipal-to-Treasury Yield Ratios are relative value indicators that measure the richness or cheapness of Municipal bond yields to comparable maturity Treasury bond yields.

Terms

Yield to Worst is a measure which reflects the lowest potential yield earned on a bond without the issuer defaulting. The yield to worst is calculated by making worst-case scenario assumptions by calculating the returns that would be received if provisions, including prepayment, call or sinking fund, are used by the issuer.

About Risk

Bank Loans – There can be no assurance that the liquidation of collateral securing an investment will satisfy the issuer's obligation in the event of non-payment or that collateral can be readily liquidated. The ability to realize the benefits of any collateral may be delayed or limited. **Commodities** – The value of commodities investments will generally be affected by overall market movements and factors specific to a particular industry or commodity including weather, embargoes, tariffs, or health, political, international and regulatory developments. **Credit** – Investments in income securities may be affected by changes in the creditworthiness of the issuer and are subject to the risk of non-payment of principal and interest. The value of income securities also may decline because of real or perceived concerns about the issuer's ability to make principal and interest payments. **Duration** – Securities with longer durations tend to be more sensitive to interest rate changes than securities with shorter durations. **Equity** – Equity investment values are sensitive to stock market volatility. **Foreign** – Investments in foreign instruments or currencies can involve greater risk and volatility than U.S. investments because of adverse market, economic, political, regulatory, geopolitical, or other conditions. In emerging countries, these risks may be more significant. **Gov't Agency** – While certain U.S. Government-sponsored agencies may be chartered or sponsored by acts of Congress, their securities are neither issued nor guaranteed by the U.S. Treasury. **Income Market** – An imbalance in supply and demand in the income market may result in valuation uncertainties and greater volatility, less liquidity, widening credit spreads and a lack of price transparency in the market. There generally is limited public information about Municipal issuers. **Inflation-Linked** – Interest payments on inflation-linked securities may vary widely and will fluctuate as principal and interest are adjusted for inflation. Investments in inflation-linked securities may lose value in the event that the actual rate of inflation is different than the rate of the inflation index. **Interest Rate** – As interest rates rise, the value of certain income investments is likely to decline.. **Lower-Rated** – Investments rated below Investment Grade (typically referred to as "junk") are generally subject to greater price volatility and illiquidity than higher rated investments. **Maturity** – Longer-term bonds typically are more sensitive to interest rate changes than shorter-term bonds. **Preferred Stocks** – When interest rates rise, the value of preferred stocks will generally decline. **Prepayment - MBS** – Mortgage-backed securities are subject to prepayment risk. **Prepayment - Bank Loan** – Bank Loans are subject to prepayment risk. **Real Estate** – Changes in real estate values or economic downturns can have a significant negative effect on issuers in the real estate industry, including REITs.

ADDITIONAL INFORMATION

Risk Considerations

Diversification does not eliminate the risk of loss.

In general, equity securities' values also fluctuate in response to activities specific to a company. Investments in foreign markets entail special risks such as currency, political, economic, and market risks. The risks of investing in emerging market countries are greater than risks associated with investments in foreign developed countries. Fixed income securities are subject to the ability of an issuer to make timely principal and interest payments (credit risk), changes in interest rates (interest-rate risk), the creditworthiness of the issuer and general market liquidity (market risk). In a rising interest-rate environment, bond prices may fall and may result in periods of volatility and increased portfolio redemptions. In a declining interest-rate environment, the portfolio may generate less income. Longer-term securities may be more sensitive to interest rate changes. Alternative investments are speculative, involve a high degree of risk, are highly illiquid, typically have higher fees than other investments, and may engage in the use of leverage, short sales, and derivatives, which may increase the risk of investment loss. These investments are designed for investors who understand and are willing to accept these risks. Performance may be volatile, and an investor could lose all or a substantial portion of its investment.

There is no guarantee that any investment strategy will work under all market conditions, and each investor should evaluate their ability to invest for the long-term, especially during periods of downturn in the market.

A separately managed account may not be appropriate for all investors. Separate accounts managed according to the Strategy include a number of securities and will not necessarily track the performance of any index. Please consider the investment objectives, risks and fees of the Strategy carefully before investing. A minimum asset level is required.

For important information about the investment managers, please refer to Form ADV Part 2.

The views and opinions and/or analysis expressed are those of the author or the investment team as of the date of preparation of this material and are subject to change at any time without notice due to market or economic conditions and may not necessarily come to pass. Furthermore, the views will not be updated or otherwise revised to reflect information that subsequently becomes available or circumstances existing, or changes occurring, after the date of publication. The views expressed do not reflect the opinions of all investment personnel at Morgan Stanley Investment Management (MSIM) and its subsidiaries and affiliates (collectively "the Firm") and may not be reflected in all the strategies and products that the Firm offers.

Forecasts and/or estimates provided herein are subject to change and may not actually come to pass. Information regarding expected market returns and market outlooks is based on the research, analysis and opinions of the authors or the investment team. These conclusions are speculative in nature, may not come to pass and are not intended to predict the future performance of any specific strategy or product the Firm offers. Future results may differ significantly depending on factors such as changes in securities or financial markets or general economic conditions.

This material has been prepared on the basis of publicly available information, internally developed data and other third-party sources believed to be reliable. However, no assurances are provided regarding the reliability of such information and the Firm has not sought to independently verify information taken from public and third-party sources.

This material is a general communication, which is not impartial, and all information provided has been prepared solely for informational and educational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. The information herein has not been based on a consideration of any individual investor circumstances and is not investment advice, nor should it be construed in any way as tax, accounting, legal or regulatory advice. To that end, investors should seek independent legal and financial advice, including advice as to tax consequences, before making any investment decision.

The Firm does not provide tax advice. The tax information contained herein is general and is not exhaustive by nature. It was not intended or written to be used, and it cannot be used by any taxpayer, for the purpose of avoiding penalties that may be imposed on the taxpayer. Each Jurisdiction tax laws are complex and constantly changing. You should always consult your own legal or tax professional for information concerning your individual situation.

Charts and graphs provided herein are for illustrative purposes only. **Past performance is no guarantee of future results.**

The indexes are unmanaged and do not include any expenses, fees or sales charges. It is not possible to invest directly in an index. Any index referred to herein is the intellectual property (including registered trademarks) of the applicable licensor. Any product based on an index is in no way sponsored, endorsed, sold or promoted by the applicable licensor and it shall not have any liability with respect thereto.

This material is not a product of Morgan Stanley's Research Department and should not be regarded as a research material or a recommendation.

The Firm has not authorized financial intermediaries to use and to distribute this material, unless such use and distribution is made in accordance with applicable law and regulation. Additionally, financial intermediaries are required to satisfy themselves that the information in this material is appropriate for any person to whom they provide this material in view of that person's circumstances and purpose. The Firm shall not be liable for, and accepts no liability for, the use or misuse of this material by any such financial intermediary.

This material may be translated into other languages. Where such a translation is made this English version remains definitive. If there are any discrepancies between the English version and any version of this material in another language, the English version shall prevail.

ADDITIONAL INFORMATION

The whole or any part of this material may not be directly or indirectly reproduced, copied, modified, used to create a derivative work, performed, displayed, published, posted, licensed, framed, distributed or transmitted or any of its contents disclosed to third parties without the Firm's express written consent. This material may not be linked to unless such hyperlink is for personal and non-commercial use. All information contained herein is proprietary and is protected under copyright and other applicable law.

Eaton Vance is part of Morgan Stanley Investment Management. Morgan Stanley Investment Management is the asset management division of Morgan Stanley.

DISTRIBUTION

This material is only intended for and will only be distributed to persons resident in jurisdictions where such distribution or availability would not be contrary to local laws or regulations.

MSIM, the asset management division of Morgan Stanley (NYSE: MS), and its affiliates have arrangements in place to market each other's products and services. Each MSIM affiliate is regulated as appropriate in the jurisdiction it operates. MSIM's affiliates are: Eaton Vance Management (International) Limited, Eaton Vance Advisers International Ltd, Calvert Research and Management, Eaton Vance Management, Parametric Portfolio Associates LLC, and Atlanta Capital Management LLC.

This material has been issued by any one or more of the following entities:

EMEA

This material is for Professional Clients/Accredited Investors only.

In the EU, MSIM and Eaton Vance materials are issued by MSIM Fund Management (Ireland) Limited ("FMIL"). FMIL is regulated by the Central Bank of Ireland and is incorporated in Ireland as a private company limited by shares with company registration number 616661 and has its registered address at 24-26 City Quay, Dublin 2, D02 NY19, Ireland.

Outside the EU, MSIM materials are issued by Morgan Stanley Investment Management Limited (MSIM Ltd) is authorised and regulated by the Financial Conduct Authority. Registered in England. Registered No. 1981121. Registered Office: 25 Cabot Square, Canary Wharf, London E14 4QA.

In Switzerland, MSIM materials are issued by Morgan Stanley & Co. International plc, London (Zurich Branch) Authorised and regulated by the Eidgenössische Finanzmarktaufsicht ("FINMA"). Registered Office: Beethovenstrasse 33, 8002 Zurich, Switzerland.

Outside the US and EU, Eaton Vance materials are issued by Eaton Vance Management (International) Limited ("EVMI") 125 Old Broad Street, London, EC2N 1AR, UK, which is authorised and regulated in the United Kingdom by the Financial Conduct Authority.

Italy: MSIM FMIL (Milan Branch), (Sede Secondaria di Milano) Palazzo Serbelloni Corso Venezia, 16 20121 Milano, Italy. **The Netherlands:** MSIM FMIL (Amsterdam Branch), Rembrandt Tower, 11th Floor Amstelplein 1 1096HA, Netherlands. **France:** MSIM FMIL (Paris Branch), 61 rue de Monceau 75008 Paris, France.

Spain: MSIM FMIL (Madrid Branch), Calle Serrano 55, 28006, Madrid, Spain. **Germany:** MSIM FMIL Frankfurt Branch, Große Gallusstraße 18, 60312 Frankfurt am Main, Germany (Gattung: Zweigniederlassung (FDI) gem. § 53b KWG). **Denmark:** MSIM FMIL (Copenhagen Branch), Gorrisen Federspiel, Axel Towers, Axeltorv2, 1609 Copenhagen V, Denmark.

MIDDLE EAST

Dubai: MSIM Ltd (Representative Office, Unit Precinct 3-7th Floor-Unit 701 and 702, Level 7, Gate Precinct Building 3, Dubai International Financial Centre, Dubai, 506501, United Arab Emirates. Telephone: +97 (0)14 709 7158).

This document is distributed in the Dubai International Financial Centre by Morgan Stanley Investment Management Limited (Representative Office), an entity regulated by the Dubai Financial Services Authority ("DFSA"). It is intended for use by professional clients and market counterparties only. This document is not intended for distribution to retail clients, and retail clients should not act upon the information contained in this document.

This document relates to a financial product which is not subject to any form of regulation or approval by the DFSA. The DFSA has no responsibility for reviewing or verifying any documents in connection with this financial product. Accordingly, the DFSA has not approved this document or any other associated documents nor taken any steps to verify the information set out in this document and has no responsibility for it. The financial product to which this document relates may be illiquid and/or subject to restrictions on its resale or transfer. Prospective purchasers should conduct their own due diligence on the financial product. If you do not understand the contents of this document, you should consult an authorised financial adviser.

South Africa: Issued by Morgan Stanley Investment Management Limited (MSIM Ltd) authorised and regulated in the UK by the Financial Conduct Authority. Registered in England. No. 1981121. Registered Office: 25 Cabot Square, Canary Wharf, London E14 4QA. MSIM Ltd is regulated in South Africa by the Financial Sector Conduct Authority ("FSCA") as a Category 1 Financial Services Provider (FSP No 9752) to provide intermediary services in relation to certain financial products.

U.S.

NOT FDIC INSURED | OFFER NO BANK GUARANTEE | MAY LOSE VALUE | NOT INSURED BY ANY FEDERAL GOVERNMENT AGENCY | NOT A DEPOSIT

LATIN AMERICA (Brazil, Chile, Colombia, Mexico, Peru, and Uruguay)

This material is for use with an institutional investor or a qualified investor only. All information contained herein is confidential and is for the exclusive use and review of the intended addressee, and may not be passed on to any third party. This material is provided for informational purposes only and does not constitute a public offering, solicitation or recommendation to buy or sell for any product, service, security and/or strategy. A decision to invest should only be made after reading the strategy documentation and conducting in-depth and independent due diligence.

ADDITIONAL INFORMATION

ASIA PACIFIC

Hong Kong: This material is disseminated by Morgan Stanley Asia Limited for use in Hong Kong and shall only be made available to "professional investors" as defined under the Securities and Futures Ordinance of Hong Kong (Cap 571). The contents of this material have not been reviewed nor approved by any regulatory authority including the Securities and Futures Commission in Hong Kong. Accordingly, save where an exemption is available under the relevant law, this material shall not be issued, circulated, distributed, directed at, or made available to, the public in Hong Kong. **Singapore:** This material is disseminated by Morgan Stanley Investment Management Company and should not be considered to be the subject of an invitation for subscription or purchase, whether directly or indirectly, to the public or any member of the public in Singapore other than (i) to an institutional investor under section 304 of the Securities and Futures Act, Chapter 289 of Singapore ("SFA"); (ii) to a "relevant person" (which includes an accredited investor) pursuant to section 305 of the SFA, and such distribution is in accordance with the conditions specified in section 305 of the SFA; or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. This publication has not been reviewed by the Monetary Authority of Singapore. **Australia:** This material is provided by Morgan Stanley Investment Management (Australia) Pty Ltd ABN 22122040037, AFSL No. 314182 and its affiliates and does not constitute an offer of interests. Morgan Stanley Investment Management (Australia) Pty Limited arranges for MSIM affiliates to provide financial services to Australian wholesale clients. Interests will only be offered in circumstances under which no disclosure is required under the Corporations Act 2001 (Cth) (the "Corporations Act"). Any offer of interests will not purport to be an offer of interests in circumstances under which disclosure is required under the Corporations Act and will only be made to persons who qualify as a "wholesale client" (as defined in the Corporations Act). This material will not be lodged with the Australian Securities and Investments Commission.

Japan: For professional investors, this material is circulated or distributed for informational purposes only. For those who are not professional investors, this material is provided in relation to Morgan Stanley Investment Management (Japan) Co., Ltd. ("MSIMJ")'s business with respect to discretionary investment management agreements ("IMA") and investment advisory agreements ("IAA"). This is not for the purpose of a recommendation or solicitation of transactions or offers any particular financial instruments. Under an IMA, with respect to management of assets of a client, the client prescribes basic management policies in advance and commissions MSIMJ to make all investment decisions based on an analysis of the value, etc. of the securities, and MSIMJ accepts such commission. The client shall delegate to MSIMJ the authorities necessary for making investment. MSIMJ exercises the delegated authorities based on investment decisions of MSIMJ, and the client shall not make individual instructions. All investment profits and losses belong to the clients; principal is not guaranteed. Please consider the investment objectives and nature of risks before investing. As an investment advisory fee for an IAA or an IMA, the amount of assets subject to the contract multiplied by a certain rate (the upper limit is 2.20% per annum (including tax)) shall be incurred in proportion to the contract period. For some strategies, a contingency fee may be incurred in addition to the fee mentioned above. Indirect charges also may be incurred, such as brokerage commissions for incorporated securities. Since these charges and expenses are different depending on a contract and other factors, MSIMJ cannot present the rates, upper limits, etc. in advance. All clients should read the Documents Provided Prior to the Conclusion of a Contract carefully before executing an agreement. This material is disseminated in Japan by MSIMJ, Registered No. 410 (Director of Kanto Local Finance Bureau (Financial Instruments Firms)), Membership: the Japan Securities Dealers Association, The Investment Trusts Association, Japan, the Japan Investment Advisers Association and the Type II Financial Instruments Firms Association.