

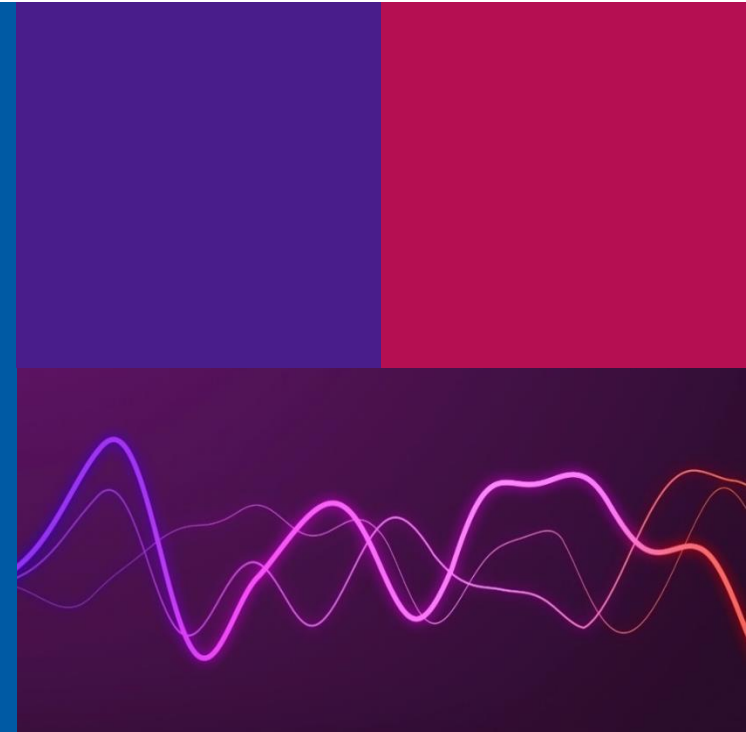
Morgan Stanley

INVESTMENT MANAGEMENT

# The BEAT

Bonds | Equities | Alternatives | Transition

May 2025



Previously known as the Monthly Market Monitor.

|                    |
|--------------------|
| TOP IDEAS<br>3     |
| BONDS<br>23        |
| EQUITIES<br>35     |
| ALTERNATIVES<br>46 |
| TRANSITION<br>52   |

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

Spanning **B**onds, **E**quities, **A**lternatives and **T**ransition \*, 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 May 2025

**Loss of Faith in U.S. Assets?**

**No!** We think the narrative in which there is a loss of trust and faith in U.S. assets - including the U.S. dollar's (USD) reserve currency status - is a great extrapolation and exaggeration of the truth. We believe the USD's performance has mainly been tied to U.S. equity asset performance over the last several years. This prompted an exponential rise in foreign assets converting local currency into USDs to buy U.S. assets. As equity prices fell, there was a repatriation of USDs back into local currency, causing the USD to fall. This spilled over into U.S. Treasuries (USTs) as well. There are many other factors at work, but we think this is the main one. Once a clearing price is reached to adjust for current risks, the USD and assets will resume more traditional relationships.

**Where's the Put?**

**The Fed, or Trump, Put.** A common question asked is where the "policy put" may reside in the markets. The reference is the "Fed put" where the Fed may ease policy to support a weakening equity market. The "Trump put" refers to where communication around tariff and fiscal policy may change to support the equity market. Judging by recent history, the communication on tariff policy changed when the S&P 500 fell toward the 4850 level, so this may represent a support level for equities. But the monetary policy side may be more complicated because inflation is running higher than target, making the Fed more reluctant to cut. However, the Fed may respond more to a rise in the unemployment rate to 4.5% or higher than to a level in the equity market. So, there may still be a Fed put, but it's struck against the 4.5% unemployment rate.

**High Correlation Risks**

**Equities vs. Bond Returns.** It's not supposed to work this way! Longer duration bond yields rose as equities sold off, leaving many to question if there is loss of confidence in USTs. We do not think this is the case, rather there is a technical explanation: 1) Equity and bond return correlations have been rising for the last several years and historically become more highly correlated when inflation persists above the 2% target level; 2) A technical unwind of the "basis trade" (short bond futures v. USTs). Many "fast money" players had this levered arbitrage position on and were forced to rapidly sell USTs to raise cash against falling equity prices. This was a large part of the reason Treasury bonds sold off when equities fell.

**Fiscal Policy Is Up Next**

**From Tariffs to Taxes.** We explained the three components to Trump's policy process: 1) deregulation, 2) tariffs and 3) taxes. 1 & 2 are underway, now we start on 3. So far, Trump's budget has been voted on and approved to be done through a procedural process called reconciliation, which only requires a simple majority, making it easier to pass. In addition to making the 2017 Tax Cut and Jobs Act (TCJA) permanent, there may be an increase in State and Local Tax (SALT) deductions and possibly a reduction in corporate taxes, et. al. None of this is known at the moment, but between the potential for tariff negotiations and the possibility of friendly tax policy, there could be some positive offsets to the negative news surrounding tariffs in April. Will the positives outweigh the negatives? Probably not, but given how negative sentiment has become, positive news has the potential to punch above its weight.

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## TOP IDEAS

## The Portfolio Solutions Group – Our Top 5 Ideas

## Adding Duration

**Dislocation in USTs present a buying opportunity.** As stated, we see the rise in UST yields as mainly technical in nature and we do not believe they are losing safe-haven status. The backup in UST yields is largely due to an unwinding of the basis trade, a leveraged way to own USTs, that was rapidly unwound to raise cash by fast money traders as equities sold-off extremely quickly. If the U.S. economy is slowing due to tariffs, and recession risks are rising, we then believe longer duration USTs have both outright and hedging value to investors. Additionally, the Fed is very capable of managing a disorderly sell-off of USTs, where we think they will readily intercede to provide support if needed.

## Taking a Breather in Emerging Market Debt (EMD)

**Tactically reducing an asset class that has outperformed.** For a given credit rating, EMD generally offers spread pickup versus corporate credit. Today, spreads versus corporate credit look expensive compared to historical averages, albeit still slightly positive. This is understandable as the USD has weakened versus most currencies, making it easier for countries to repay their USD debts. However, with the global economic outlook uncertain, we are cautious that the EMD outperformance may have gone too far and think better relative entry points may appear in the future.

## Adding to Municipals

**Attractive relative value.** Following April's selloff, yields in the municipal bond market are well above one standard deviation wide compared to the index's five-year average. From a relative value perspective, muni-to-treasury ratios look increasingly attractive, rising to over 90% on some parts of the curve. We continue to see relative value in this segment of the credit markets.

## Europe Is Not Germany, and Germany Is Not Europe

**Increasing exposure to Germany.** In Europe we continue to look for market segments that are relatively less exposed to tariff risks, and are direct beneficiaries of the nascent fiscal stimulus wave. German mid-caps fit this bill, as the incoming government's agenda seeks to prioritize re-industrialization by incentivizing equipment and infrastructure investments, cutting bureaucratic red tape and reducing energy costs. While this will have benefits for the broader European ecosystem, we think German mid-caps will stand to benefit the most.

## Exiting Materials Overweight

**When all that glitters is gold.** Earlier this year we initiated an overweight in U.S. materials to gain leverage to a burgeoning recovery in U.S. manufacturing and manufacturing Purchasing Managers' Indexes (PMIs). While we saw some green shoots emerge in early 2025, a worse-than-expected tariff outcome has effectively halted the recovery and sent PMIs back into contraction. While we do expect an eventual recovery in the U.S. manufacturing sector, we opted to exit our overweight position because weaker consumer demand and slower growth pose meaningful headwinds. Despite these challenges, the sector has outperformed the index YTD, but much of that is attributable to its metals and mining segment, where gold miners continue to benefit from the record rally in gold prices.

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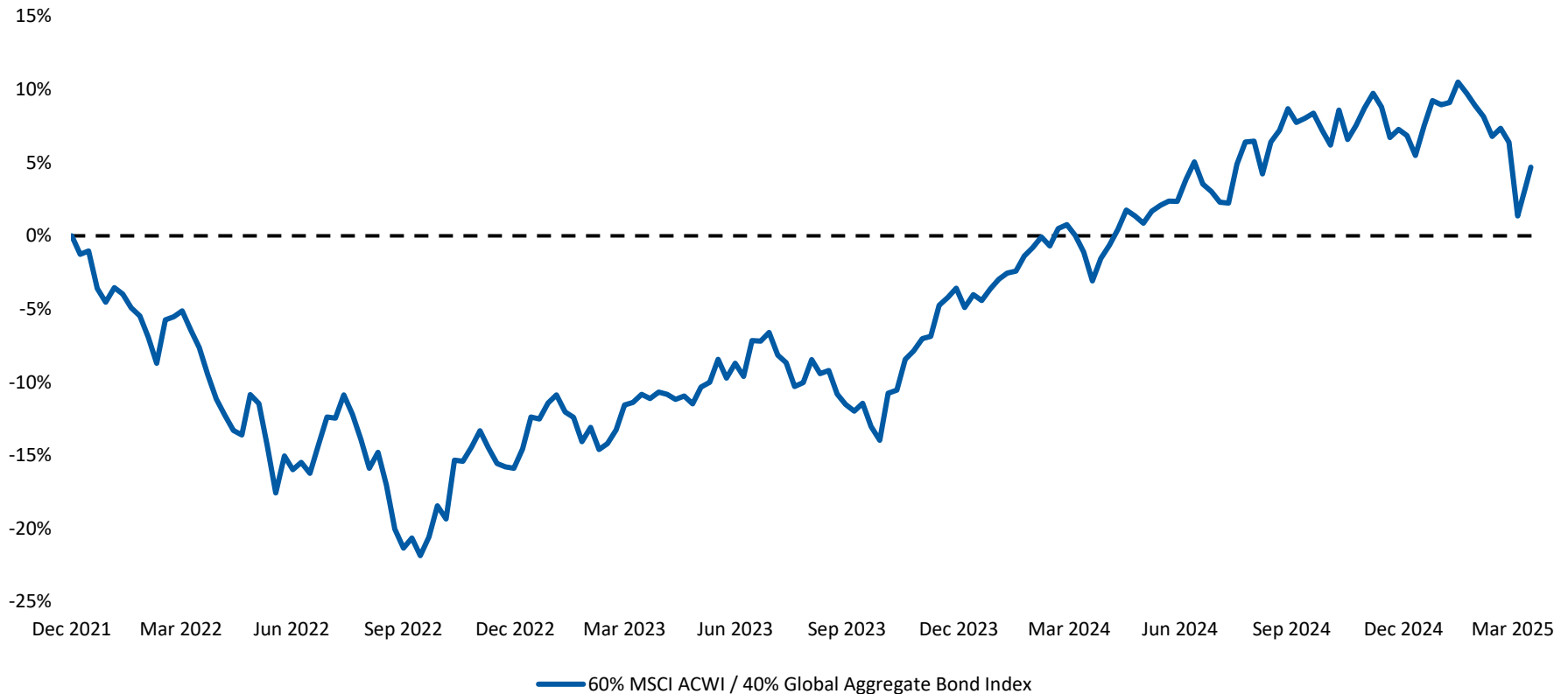
## TOP THEMES

# Rethinking Asset Allocation and Portfolio Risk Management

Passive investing may produce lower returns, as bond and equity return correlations have risen.

## The 60/40 Portfolio Has Delivered Roughly 5% in Total Returns Since 2022

*Cumulative performance of the 60% MSCI ACWI/40% Global Aggregate Bond Index portfolio since 2022*



Source: Bloomberg, MSIM. As of April 15, 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.**

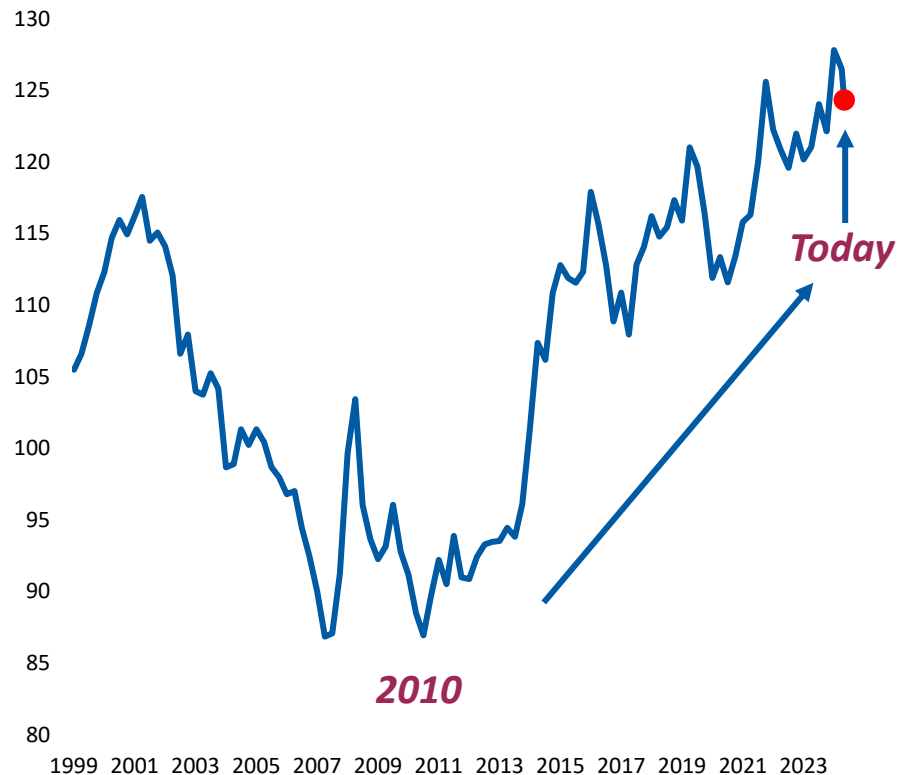
## TOP THEMES

# The U.S. Dollar: Strong and Still a Reserve Currency

The performance of the USD is very much tied to flows from foreign demand to hold U.S. assets. Total foreign holdings of U.S. assets grew exponentially following the Global Financial Crisis (GFC), which has been supportive of the USD.

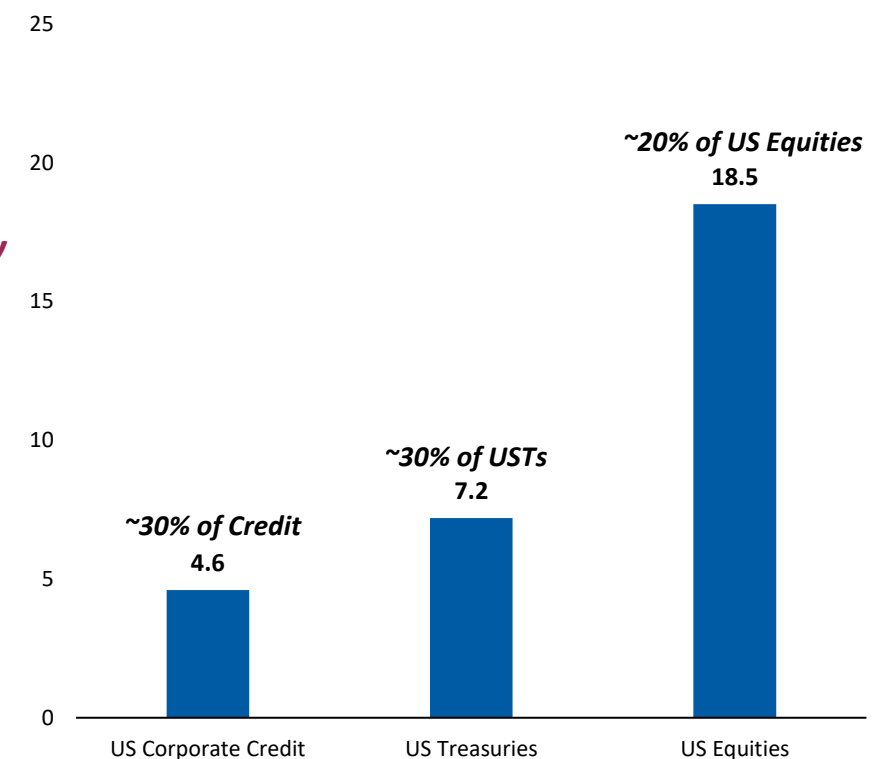
## The USD Has Exhibited Long-Term Stability

*Fed Trade-Weighted Nominal Broad Dollar Index*



## Foreign Demand to Own U.S. Assets Rose Rapidly

*Total foreign holdings by asset type (in \$ trillions)*



Source: Bloomberg, Apollo Chief Economist, MSIM. As of April 15, 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.**

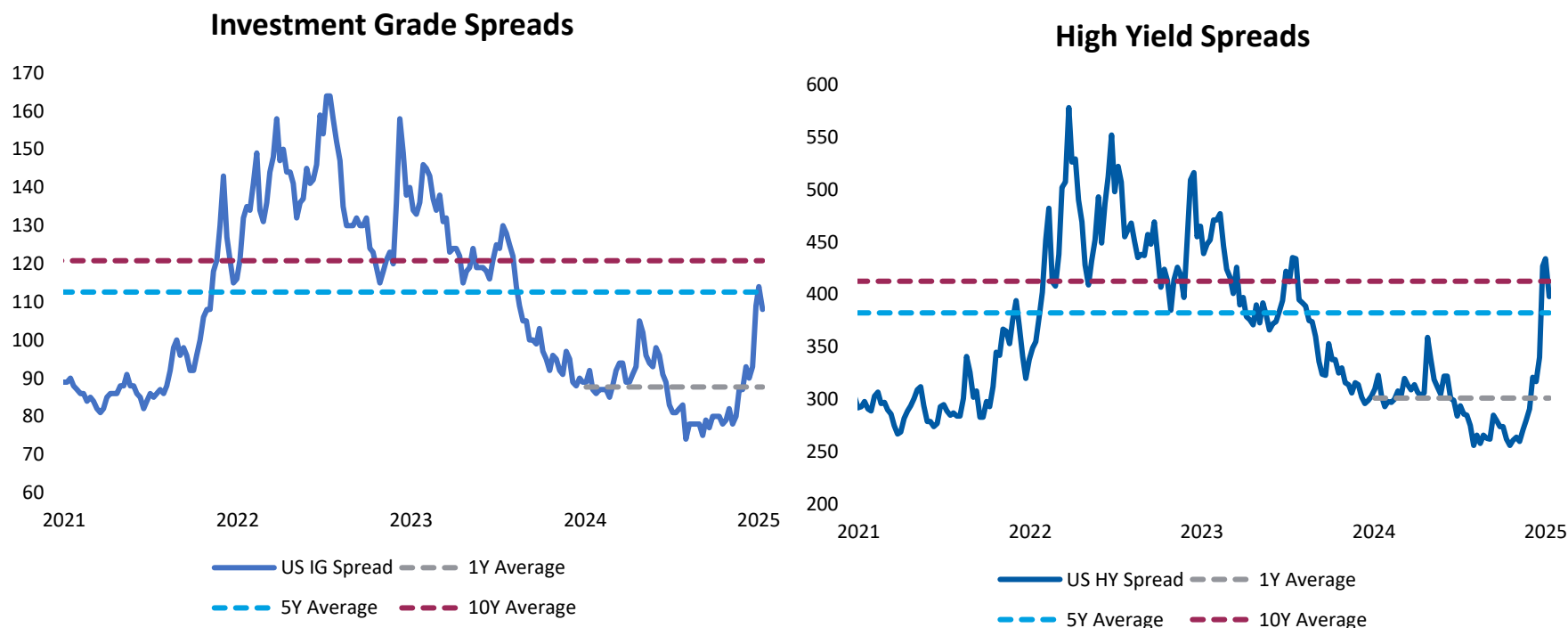
## TOP THEMES

# Credit Spreads Have Widened to Longer Term Averages

After displaying some resilience to the initial derisking in U.S. equities, credit spreads have widened from all-time tight levels back to medium-term averages. Investment Grade (IG) spreads have returned to 5-year averages, while High Yield (HY) spreads briefly broke above their trailing 10-year average.

## IG and HY Credit Spreads Have Widened to Levels at or Above Recent Historical Averages

IG average spread (LH chart); HY average spread (RH chart)



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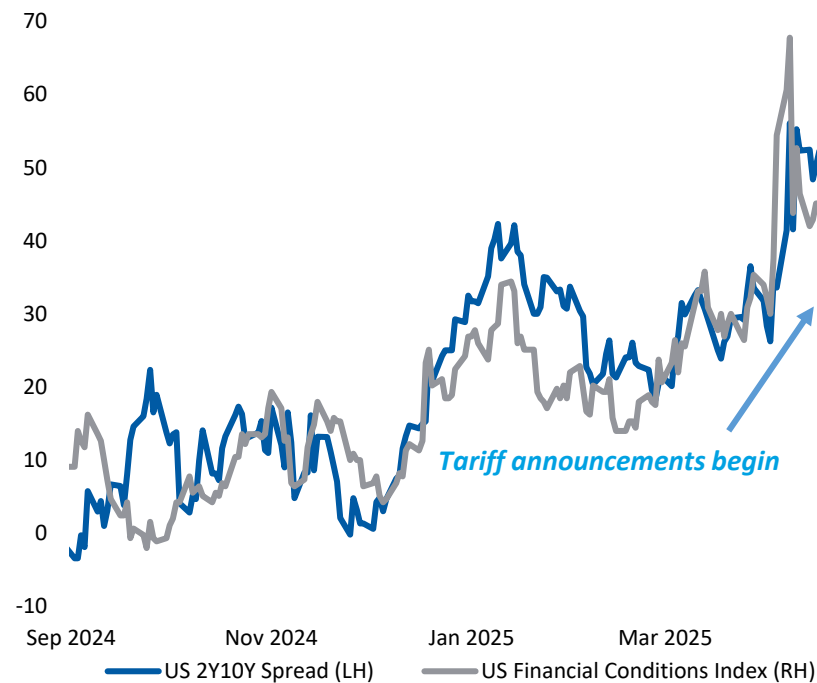
## TOP THEMES

# Tariff News Has Steepened the Curve and Tightened Financial Conditions

Recent tariff announcements have contributed to both the rapid steepening in the yield curve (measured by the 2Y/10Y spread) and the tightening in financial conditions. This has also driven a divergence in monetary policy expectations, with the implied Dec 2025 Fed funds rate falling below the Fed's projected level (median dot as of 3/19/2025).

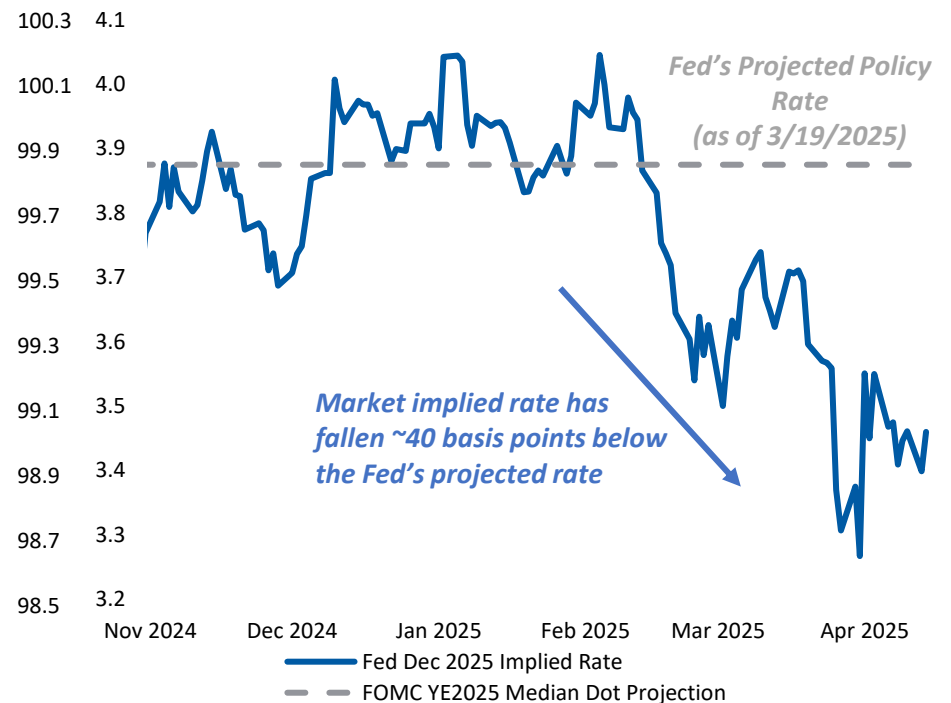
## Tariff Uncertainty Has Tightened Financial Conditions...

2Y/10Y spread (LH, basis points), U.S. Financial Conditions Index (RH)



## ... Leading to Divergent Monetary Policy Expectations

Dec 2025 implied rate, Fed's projected policy rate as of 3/19/2025



Source: Bloomberg, Goldman Sachs (Financial Conditions Index), MSIM. As of April 17, 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.**



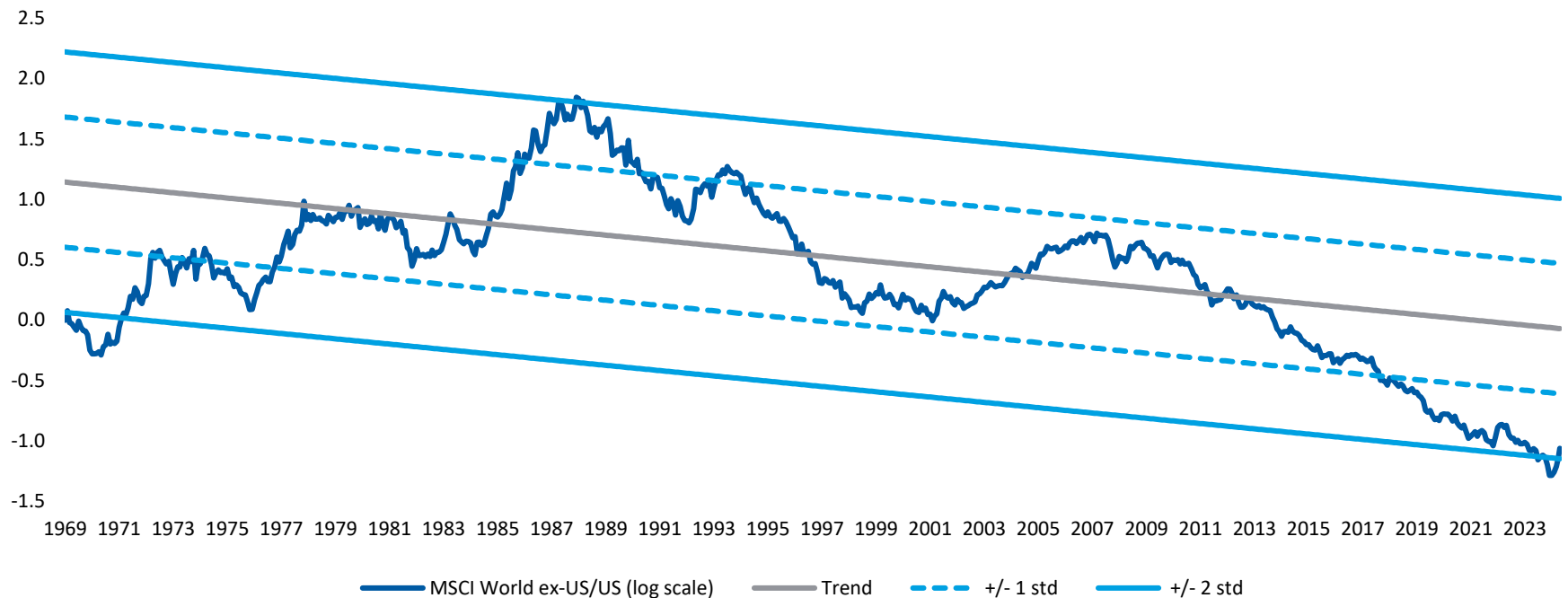
## TOP THEMES

# International Equities Long-Term Relative Performance Hits Historic Lows

Developed markets ex-US equities persistently underperformed the U.S. for over 15 years. While ex-US equities have seen notable year-to-date (YTD) outperformance, the magnitude is small in the context of the long-term trend. The shift in U.S. trade policy marks a significant realignment of global economic relationships. While much remains uncertain, it is reasonable to question if this marks a longer-term inflection in regional equity performance.

## International Equities Long-Term Relative Performance vs. U.S. is ~2 Standard Deviations Below Trend

*MSCI World ex-US/MSCI U.S. relative index ratio with long-term trend and standard deviations (log scale)*



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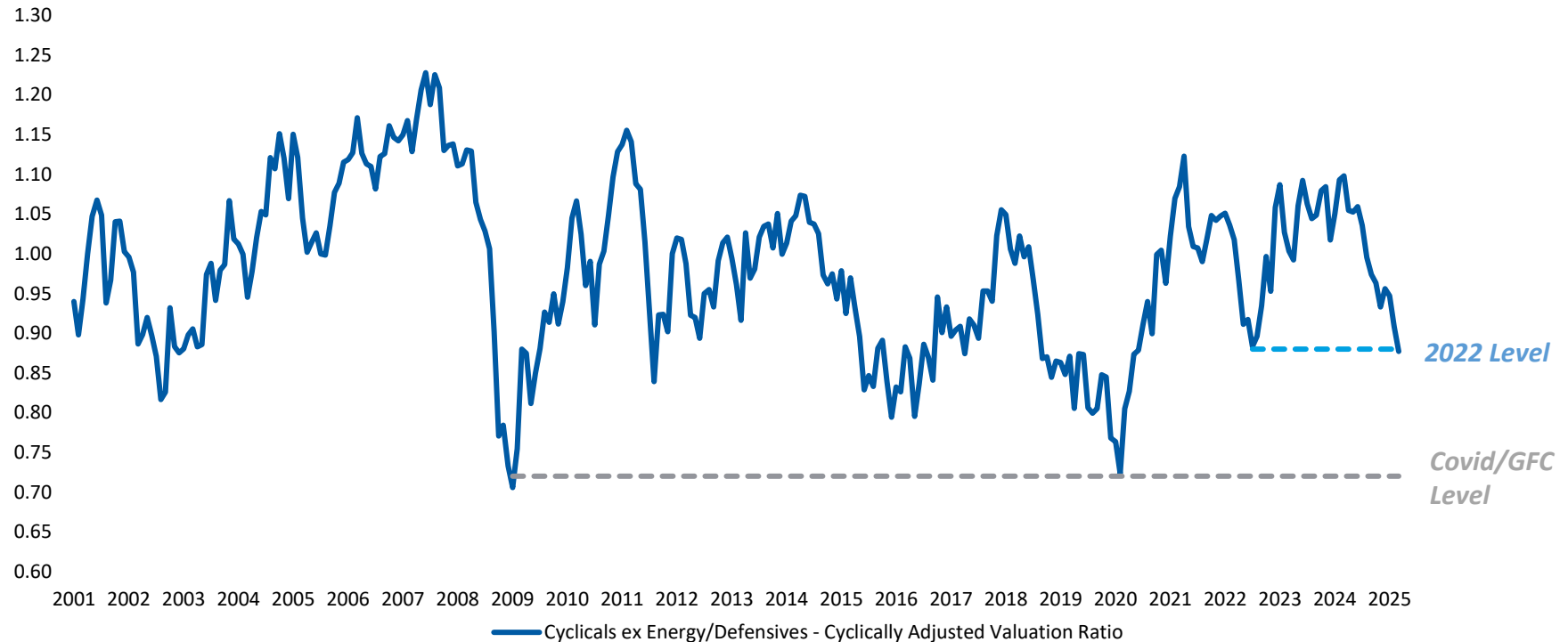
## TOP THEMES

# Cyclicals vs. Defensives: The Recent Move Placed in Historical Context

Amid heightened tariff policy concerns and weaker GDP growth estimates, cyclicals have underperformed defensives in the U.S. YTD 2025. With recent underperformance, cyclical sector valuations relative to defensives have now returned to levels consistent with the slowdown in 2022, with greater moves limited to the GFC and the pandemic.

## U.S. Cyclical Sector Relative Valuations vs. Defensives Have Returned to the Levels of the Slowdown in 2022

*Median cyclical sector (ex-energy) cyclically-adjusted multiple/median defensive sector cyclically adjusted multiple*



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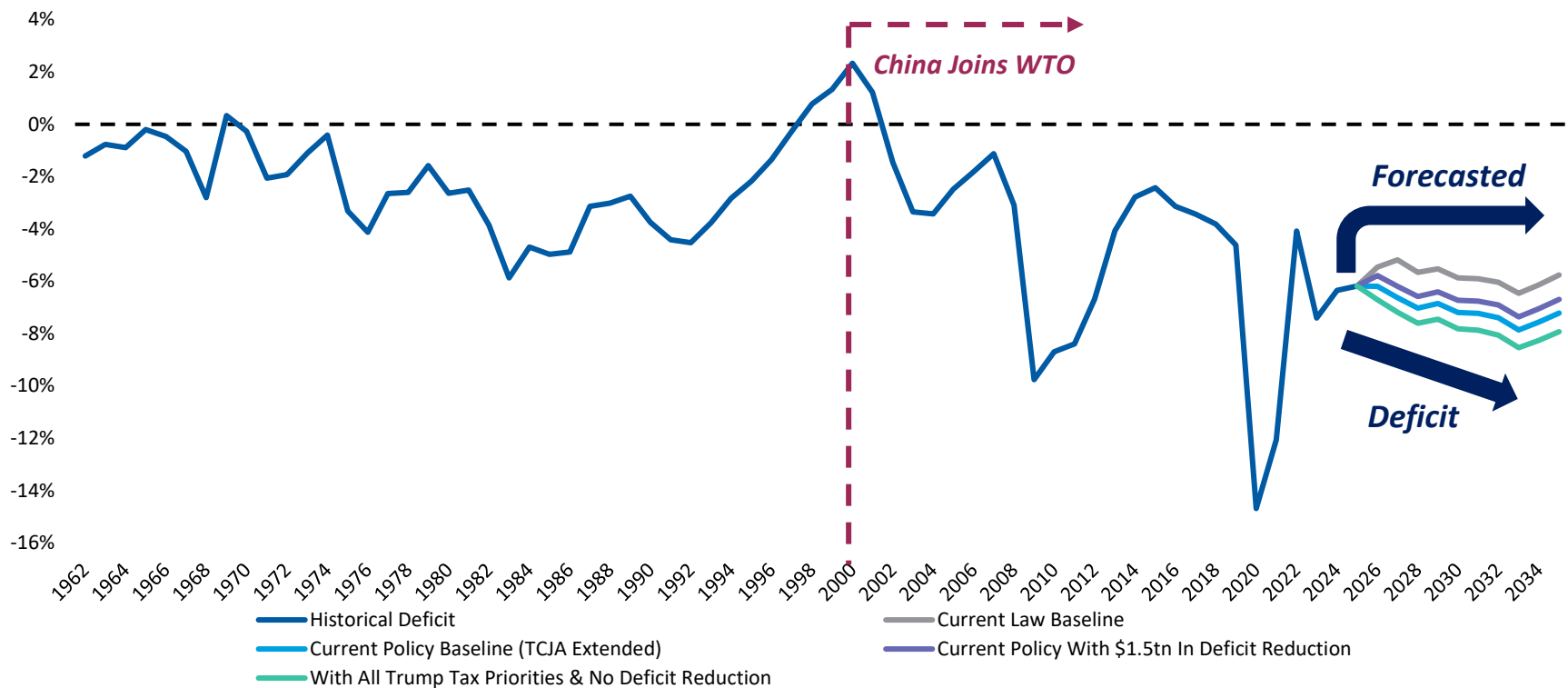
## TOP THEMES

# Without Corrective Measures, the Deficit Can Get Worse

In the absence of significant corrective measures, the deficit can grow over the next decade. The current policy baseline, including a TCJA extension, with \$1.5 trillion in deficit reduction, would serve to keep the deficit at current levels.

## The Deficit Can Grow Unless Corrective Actions Are Taken

Historical budget deficit as % of GDP, with forecasts under different scenarios, 1962 – 2035



Source: Bloomberg, Don Schneider (Piper Sandler), MSIM. As of April 17, 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.**

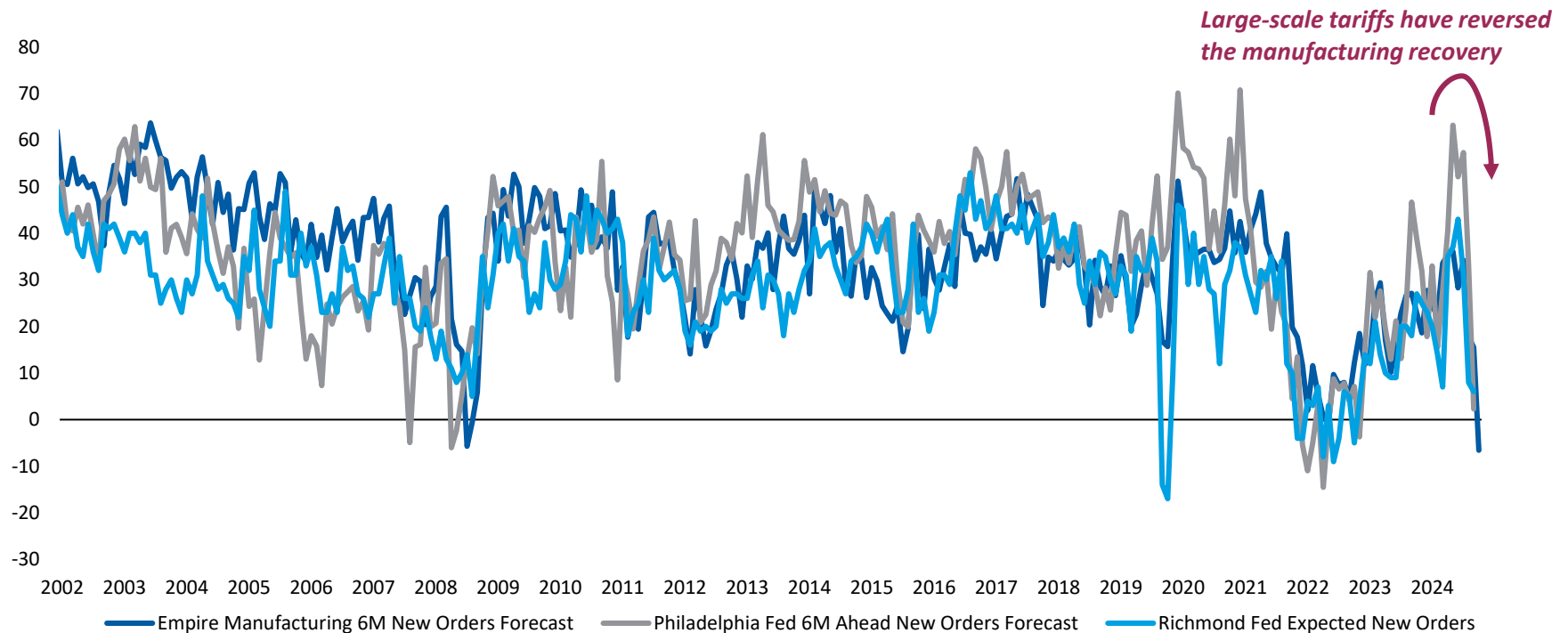
## TOP IDEAS

# Exit U.S. Materials: Trade Headwinds Have Halted Manufacturing Recovery

While we continue to expect an eventual recovery in U.S. manufacturing, the sector faces nearer-term headwinds in the form of higher-than-expected tariffs, weaker consumer demand and weaker global growth. While a recovery looked to have been in play in 2025, recent dynamics have reversed that trend, sending PMIs back into contraction.

## Forward-Looking Manufacturing PMI Surveys Have Dipped Back Into Contraction Following Nascent Recovery

*Regional Fed surveys, 6-month forecasts for new orders*



Source: Bloomberg, MSIM. As of April 15, 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.**

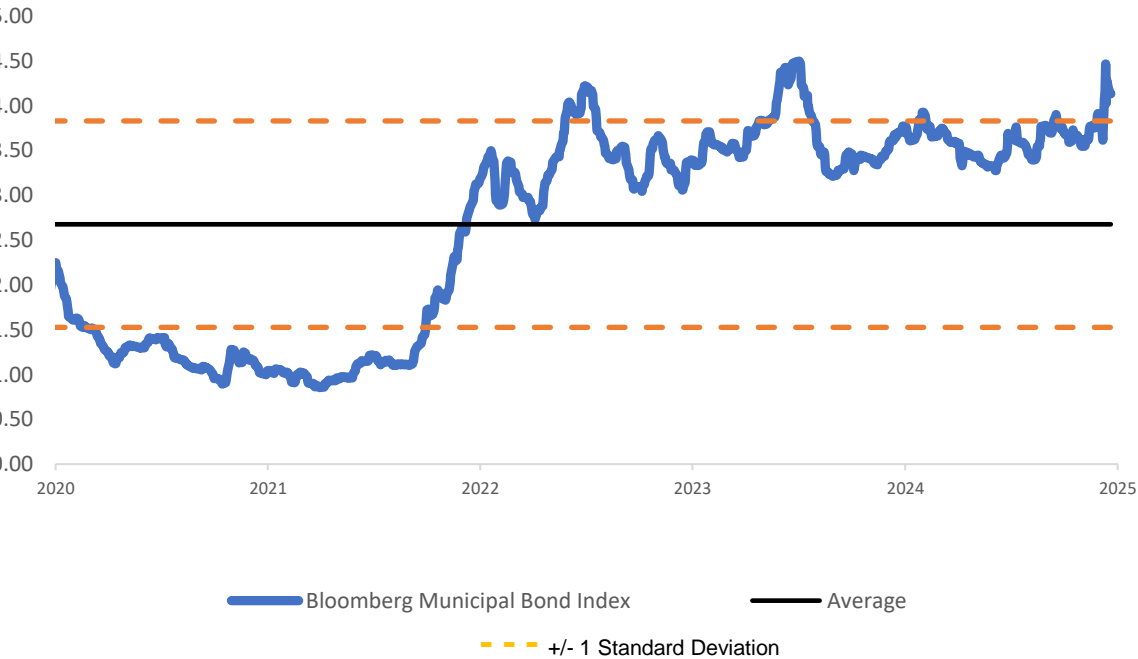
TOP IDEAS

# Municipal Bonds: Elevated Starting Yields and Relative Value

After April’s selloff, yields in the municipal bond market are well above one standard deviation to the index’s 5-year average. From a relative value perspective, muni-to-treasury ratios are attractive, rising to over 90% on some parts of the curve. Between elevated starting yields and compelling relative value, we believe now is a great entry point for the asset class.

## Index Yield-to-Worst is Wide Compared to Historical Averages

*Muni index YTW (%) with 5Y average with +/- 1 standard deviations*



## Muni-UST Ratios Signal Relative Value

*Current muni-UST ratios vs. end of 2024*

| Muni/UST | 4/30/25 | 12/31/24 |
|----------|---------|----------|
| 2-year   | 78%     | 67%      |
| 5-year   | 79%     | 66%      |
| 10-year  | 79%     | 65%      |
| 30-year  | 92%     | 74%      |

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.**

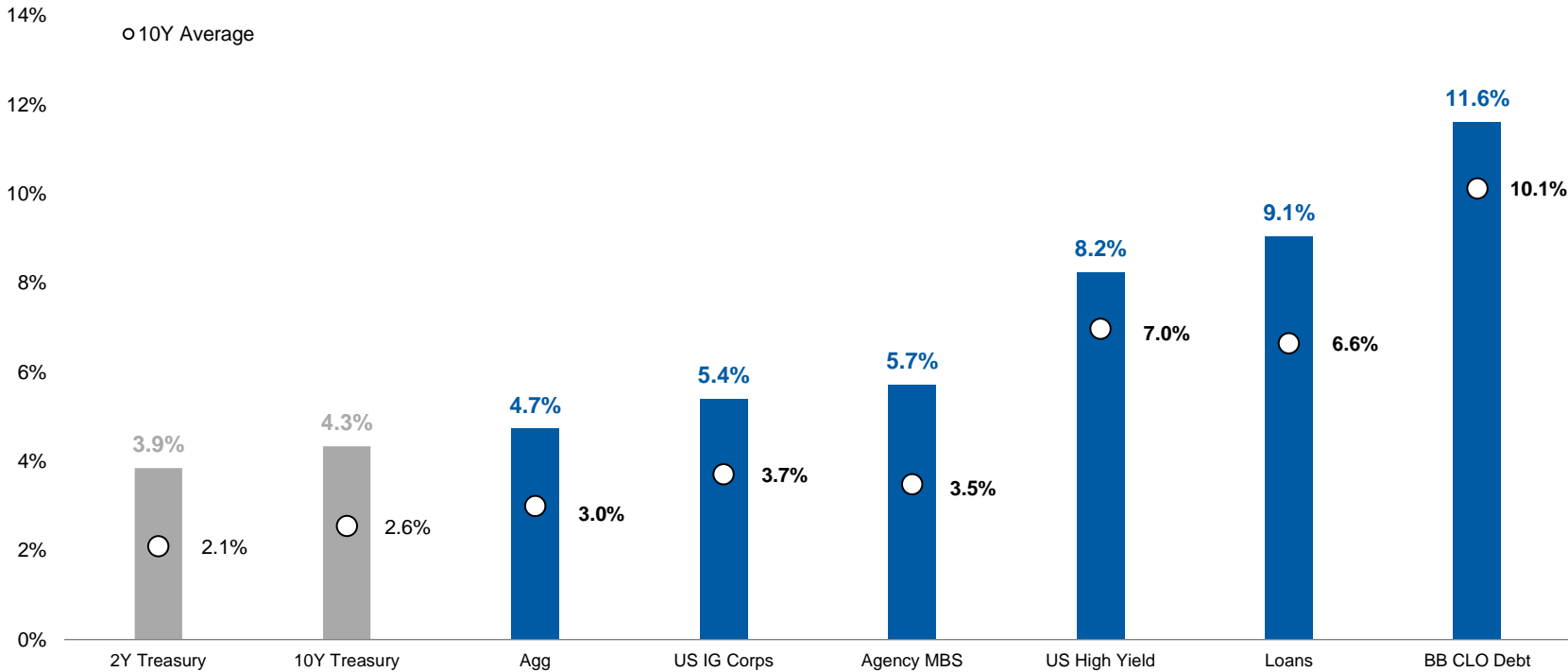
TOP IDEAS

Macro Review

While rates have fallen across most of the curve to start the year, spreads have widened in many sectors, leaving absolute yields at attractive levels vs. the last 10 years.

Current Yield vs. 10-Year Average

Yield to Maturity (%)



Source: Bloomberg. As of 4/15/25. Loans represented by Morningstar LSTA US Leveraged Loan Index. US High Yield represented by ICE BofA US High Yield Index. US IG Corporates represented by ICE BofA US Corporate Index. 10Y Treasury represented by ICE BofA Current 10Y US Treasury Index. Agg represented by the Bloomberg US Aggregate Bond Index. Agency MBS represented by the Fannie Mae Current Coupon MBS Index. BB CLOs represented by the BB portion of the J.P. Morgan CLOIE Post-Crisis 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.**

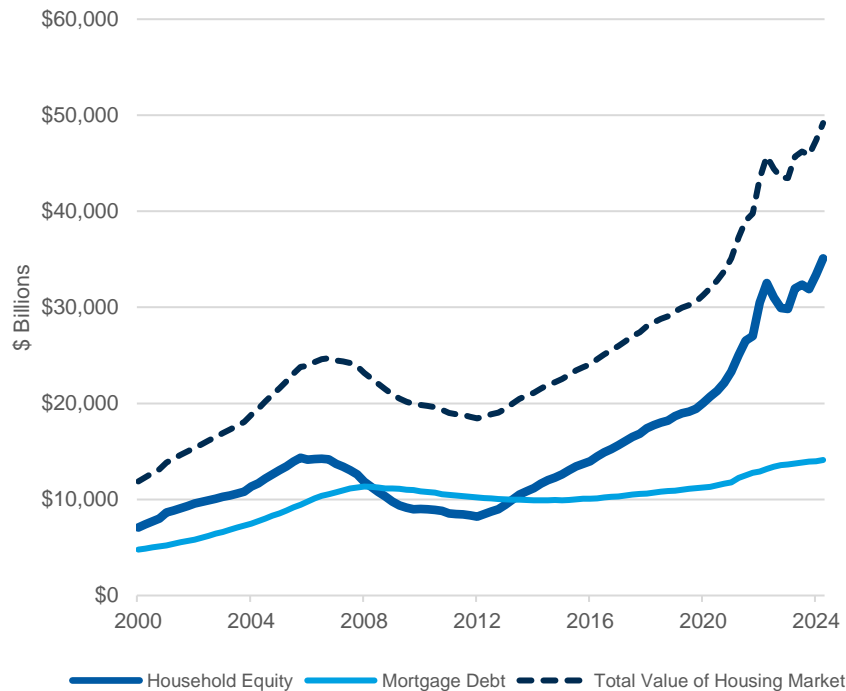
## TOP IDEAS

# Fixed Income Sector Views – Non-Agency MBS

Substantial build-up in home equity has improved risk/reward in non-agency MBS. Meanwhile, there is a massive gap between today's rate vs. outstanding mortgage rates.

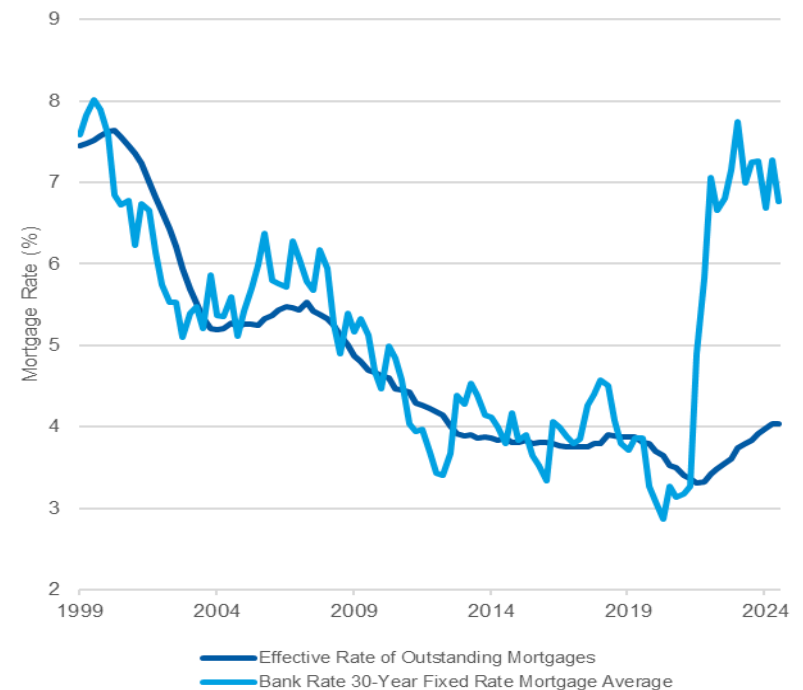
## Housing Market Value vs. Mortgage Debt Outstanding

As of 12/31/24



## Today's vs. Effective Rate of Outstanding Mortgages

As of 3/31/25



Source: Bloomberg, Eaton Vance. As of 3/31/2025. 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

## Fixed Income Sector Views – Below IG Credit

Valuations have become more compelling, but selectivity will be key.

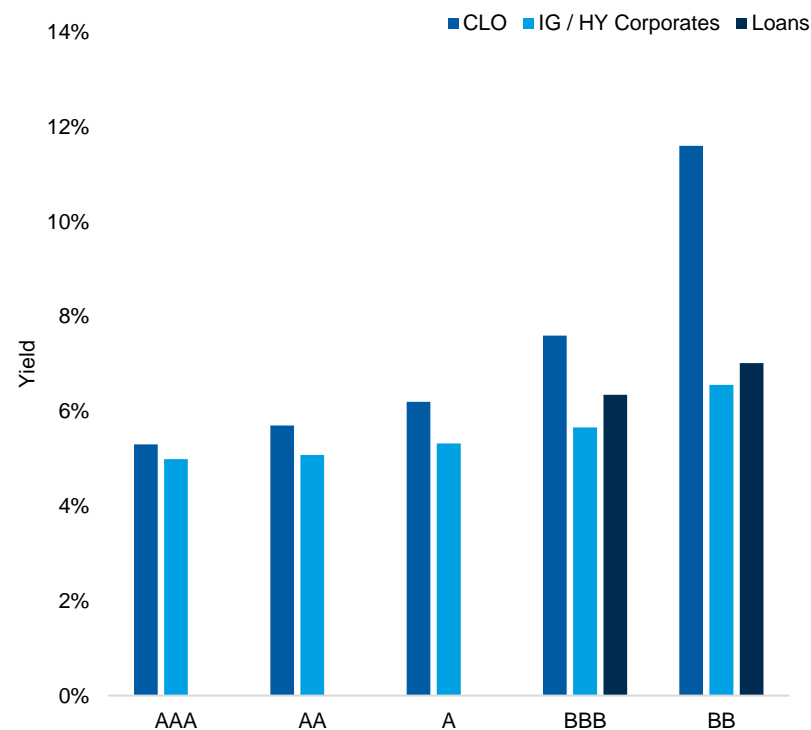
## Credit sector spreads vs. history

As of 4/15/25

| Sector        | Yield  | Spread | 10yr %ile | Low | High  |
|---------------|--------|--------|-----------|-----|-------|
| US IG Corp    | 5.40%  | 114    | 38%       | 78  | 397   |
| US HY Corp    | 8.24%  | 426    | 58%       | 277 | 1,082 |
| US Bank Loans | 9.05%  | 477    | 61%       | 358 | 1,107 |
| EM Corp       | 6.90%  | 300    | 28%       | 231 | 641   |
| BBB CLO       | 7.61%  | 386    | 53%       | 255 | 972   |
| BB CLO        | 11.61% | 777    | 62%       | 509 | 1,756 |

## CLOs offer higher yield rating-for-rating

Yields by credit tier



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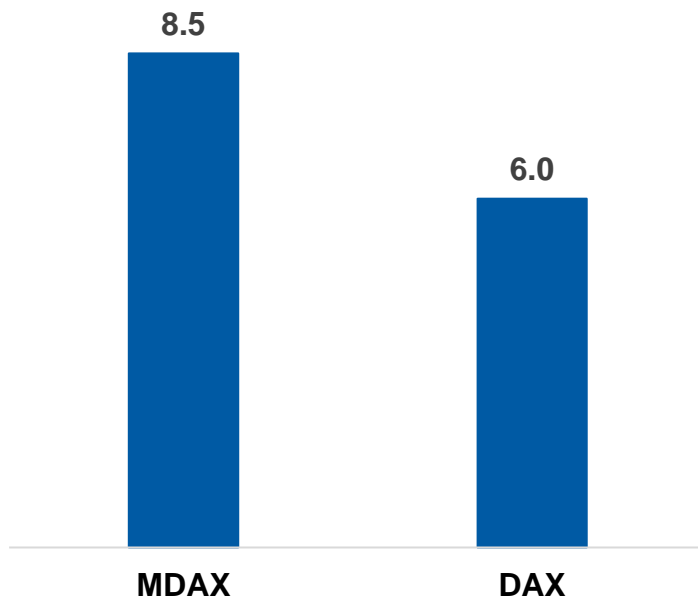


## TOP IDEAS

## Moving to Overweight on the German MDAX (Mid-Cap) Index

In Europe we continue to look for market segments that are relatively less exposed to tariff risks and direct beneficiaries of the nascent fiscal stimulus wave. German mid-caps fit this bill, standing to benefit from the incoming government's push to incentivize re-industrialization investments, cut bureaucratic red tape and reduce energy costs.

**With a Higher Correlation to Domestic Activity and Less Exposure To Tariffs, MDAX Is Our Preferred Exposure**  
*EPS Beta to German Real GDP*



**Valuations Remain Attractive After a Prolonged Manufacturing Slump in Germany**  
*MDAX 12M Forward PE vs MSCI Europe*



Source: Bloomberg, Refinitiv, MSIM. As of April 17, 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.**

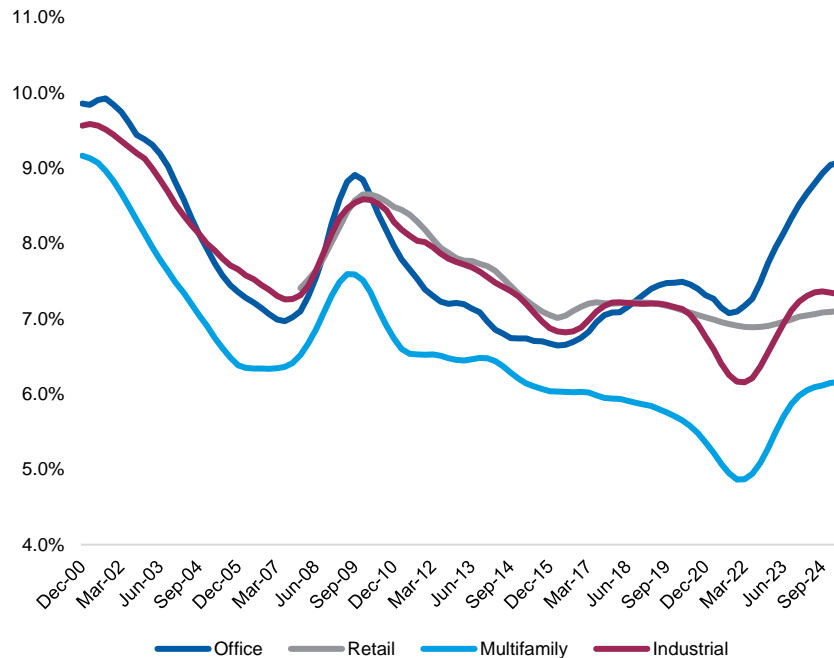
## TOP IDEAS

# 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.

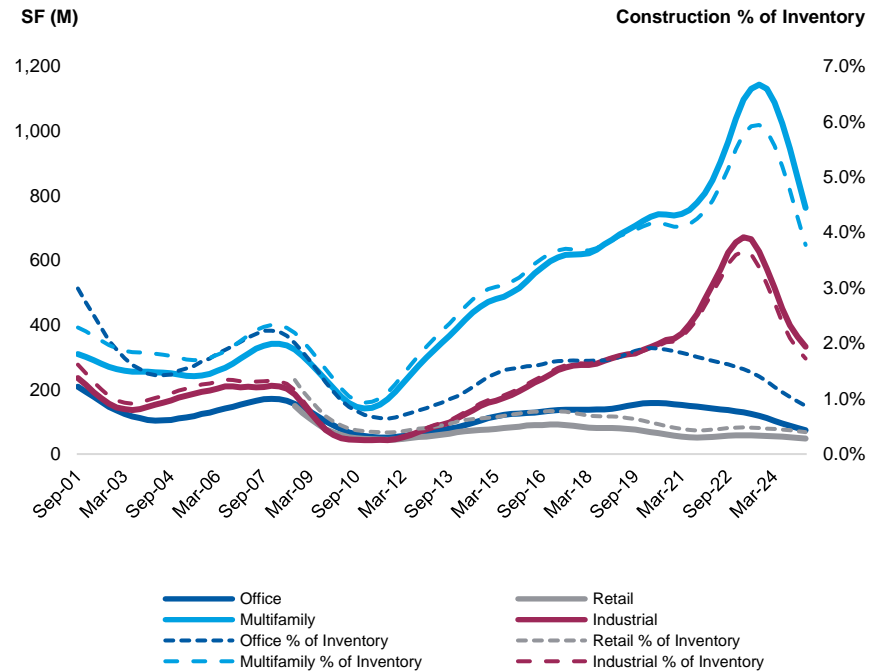
## U.S. Cap Rates Have Stabilized...

Real estate sector cap rates (%)



## ...and the Pace of New Construction Has Slowed

Construction square footage (M, LH), as % of inventory (RH)

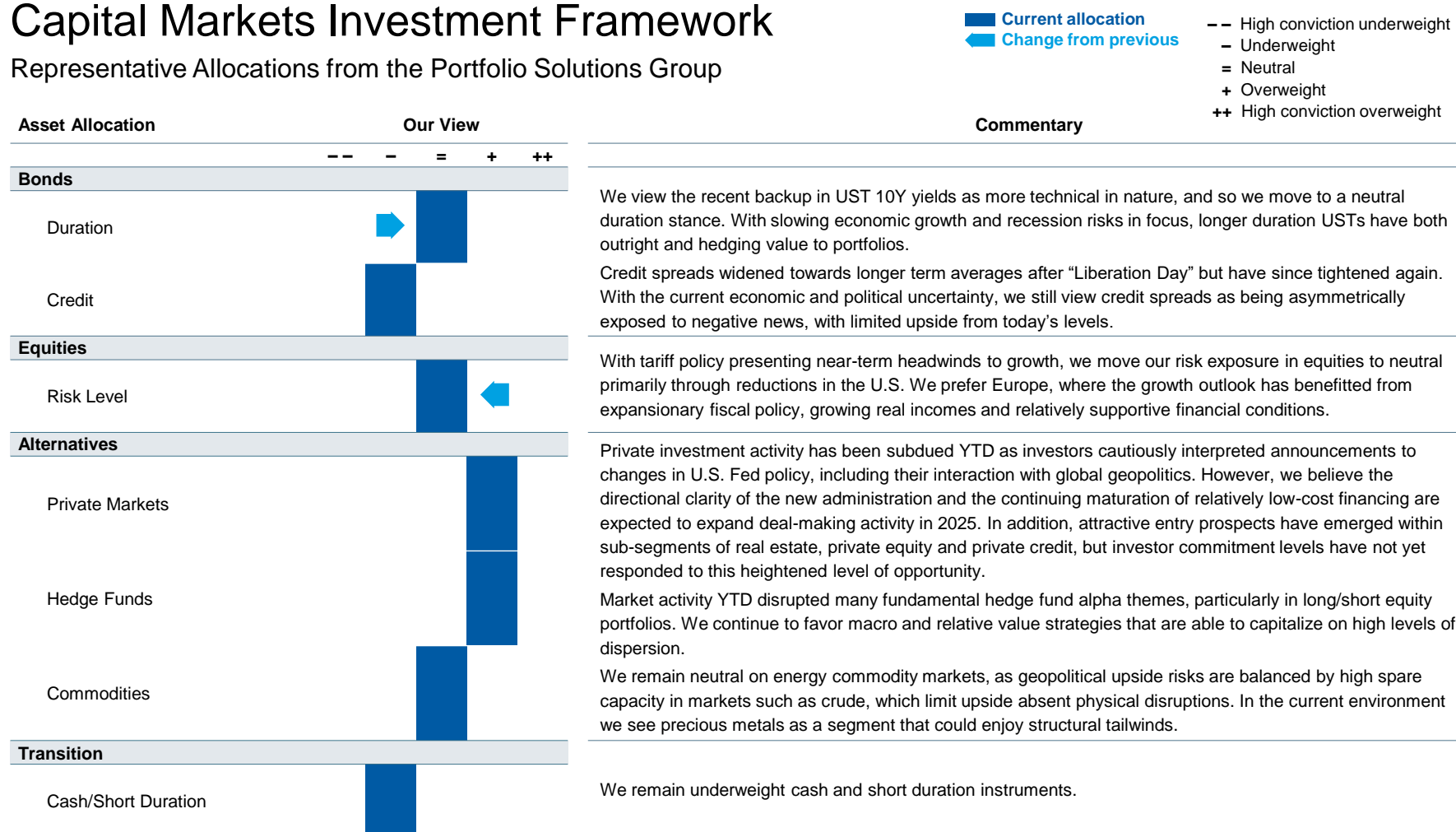


Source: CoStar (Dec 00 – Mar 25) as of April 2025. For illustrative purposes only. Not a recommendation to buy or sell any security. It is not possible to invest directly in an index. The views and opinions expressed are those of the portfolio management team at the time of writing/of this presentation 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

## Capital Markets Investment Framework

Representative Allocations from the Portfolio Solutions Group

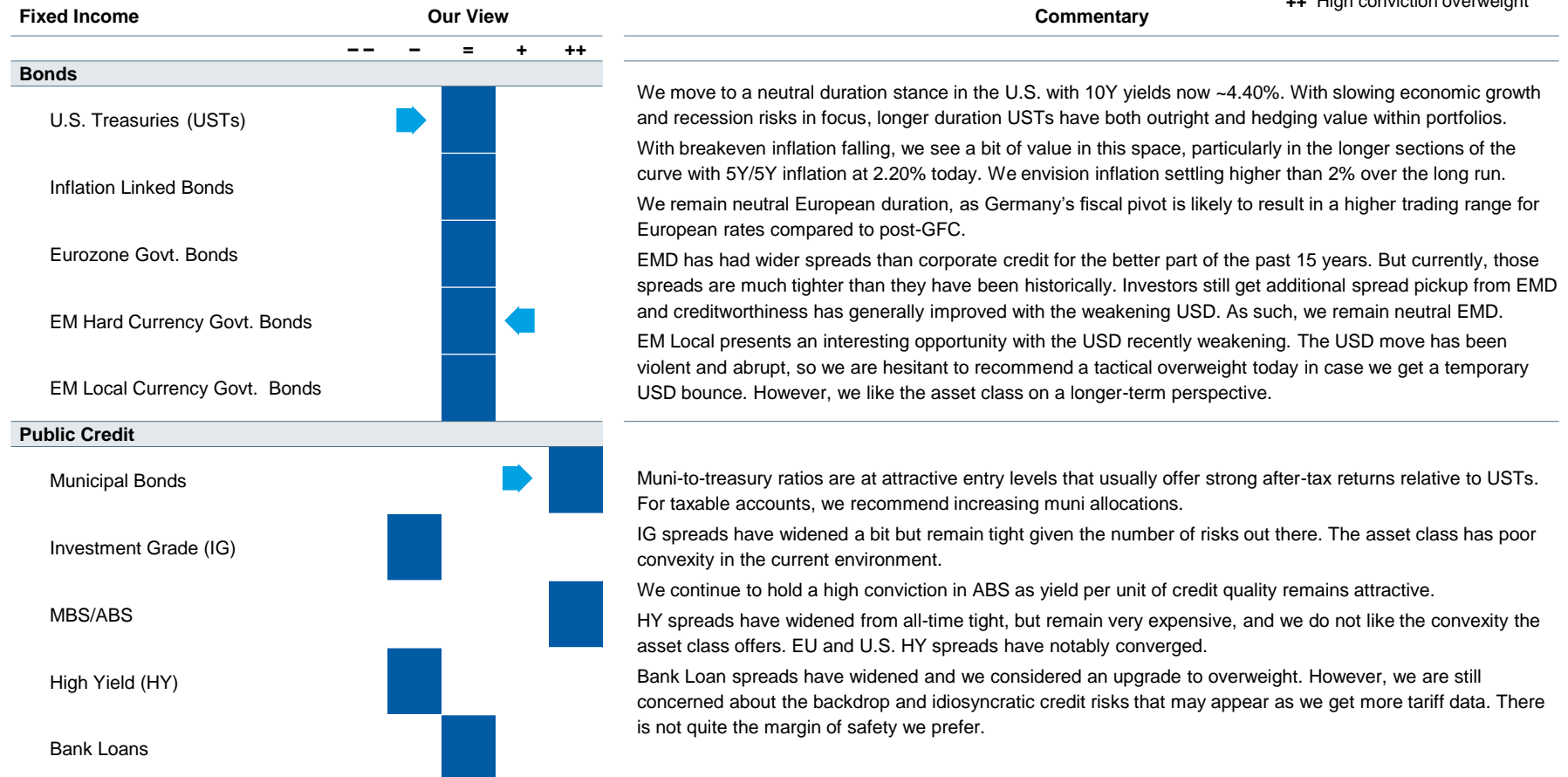


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## TOP IDEAS

## Global Fixed Income

Representative Positioning from Portfolio Solutions Group



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TOP IDEAS

Global Equity

Representative Positioning from Portfolio Solutions Group

| Global Equity   |          |   |   |   |    | Current allocation | Change from previous   | -- High conviction underweight | - Underweight | = Neutral | + Overweight | ++ High conviction overweight |  |
|---|----------|---|---|---|----|--------------------|--|--------------------------------|---------------|-----------|--------------|-------------------------------|--|
| Representative Positioning from Portfolio Solutions Group |          |   |   |   |    |                    |  |                                |               |           |              |                               |  |
| Equity  | Our View |   |   |   |    |                    | Commentary   |                                |               |           |              |                               |  |
|   | --       | - | = | + | ++ |                    |  |                                |               |           |              |                               |  |
| Regional  |          |   |   |   |    |                    |  |                                |               |           |              |                               |  |
| Developed Markets   |          |   |   |   |    |                    | United States: We move to neutral on U.S. equities, as larger-than-expected tariffs present dual headwinds in the form of a) weaker economic growth and b) higher inflationary pressures, while ex-US regions primarily face demand effects.   |                                |               |           |              |                               |  |
| U.S.  |          |   |   |   |    |                    | Europe: We remain overweight European equities with the growth outlook benefiting from several factors: a) more fiscally expansive stance, b) rising real incomes supporting consumption; c) financial conditions relatively more supportive than in the U.S. We continue to prefer segments of the market that are less exposed to tariffs and directly benefit from the nascent fiscal stimulus wave, such as banks, construction and German mid-caps. |                                |               |           |              |                               |  |
| Eurozone  |          |   |   |   |    |                    | Japan: We remain neutral Japanese equities given the scope for rates to increase further and the JPY (yen) to re-value more strongly from a still extremely cheap Real Effective Exchange Rate perspective. We remain optimistic about Japan's structural reforms and longer-term prospects.   |                                |               |           |              |                               |  |
| Japan   |          |   |   |   |    |                    | Emerging Markets: We move to neutral on EM via reduction in our exposure to Chinese equities, where large scale tariffs and subsequent retaliatory measures have shifted the balance of risks back to the downside.  |                                |               |           |              |                               |  |
| Emerging Markets  |          |   |   |   |    |                    |  |                                |               |           |              |                               |  |
| Style   |          |   |   |   |    |                    |  |                                |               |           |              |                               |  |
| Growth vs. Value  |          |   |   |   |    |                    | While we are not looking to take on any excess Big Tech exposure, recent underperformance should help mitigate some of the valuation risk in Growth style indexes.   |                                |               |           |              |                               |  |
| Quality   |          |   |   |   |    |                    | With a weaker Growth outlook, we continue to prefer Quality.   |                                |               |           |              |                               |  |
| Large Cap vs. Small Cap                                   |          |   |   |   |    |                    | Lower quality Small-caps are still best avoided. We prefer Mid-caps, where we hold exposure in both the U.S. and Germany.  |                                |               |           |              |                               |  |
| Cyclical vs. Defensive Sectors                            |          |   |   |   |    |                    | Our current cyclical exposure sits in Europe and rests more on structural growth drivers.  |                                |               |           |              |                               |  |

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

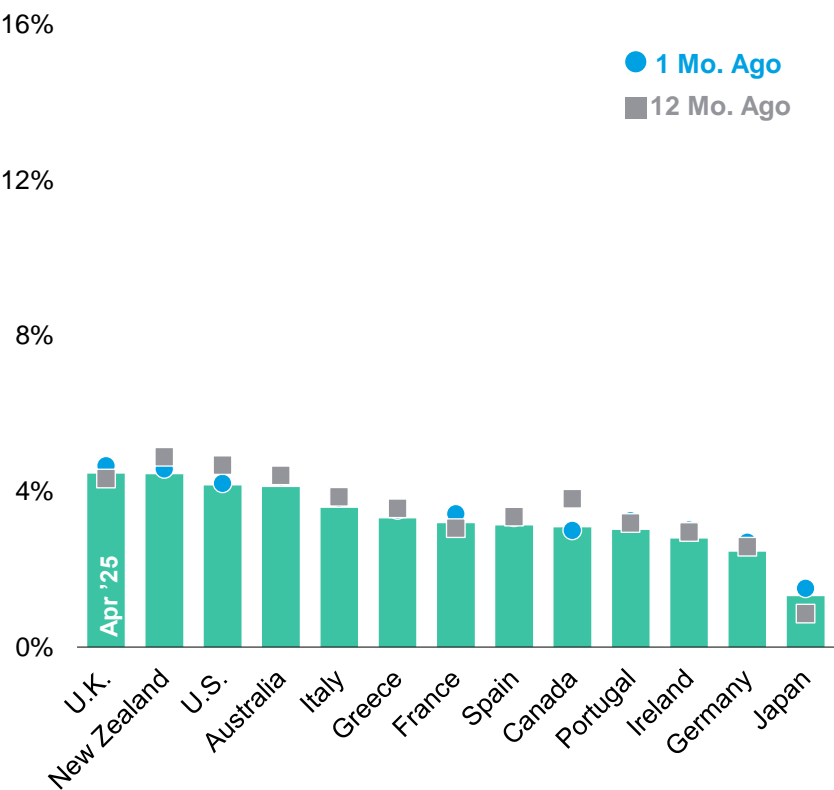
| Alternative Assets  | Commentary  |
|---------------------|---|
| Private Markets     |   |
| Private Equity      | We expect investor cash flows to recover through increasing market activity and asset pricing to offer a fair entry point. We anticipate an increase in performance dispersion going forward, with successful value creation likely being associated with organic growth initiatives utilizing relatively modest leverage, participation in technology advancements, resiliency to upside inflation surprises and successful navigation of adjustments in global trade. We continue to focus on middle-market strategies that rely less on leverage and are well-placed to deliver asset management initiatives to drive this form of earnings growth. Overall, we view the private equity universe as an important diversifier relative to public equities, given lower overall exposure to imports and exports.   |
| Private Real Assets | <p>Commercial real estate is working through its debt maturity wall and pockets of elevated supply, leading to increased transaction volumes at more attractive entry valuations. These reset valuations and retreat of bank lending have created interesting opportunities for commercial real estate lenders. At the same time, fundamentals are constructive, as debt liquidity improves and the future supply in key sectors is materially lower, setting up an attractive opportunity set for commercial real estate equity as well - particularly in secularly growing sectors including industrial, residential and net lease.</p> <p>Private infrastructure continues to participate in the investable opportunities relating to the mega trends of digitization and power generation. These themes converge where data services require power, and generative Artificial Intelligence (AI) is highlighting the fact that the current power mix is insufficient in terms of volume, density and reliability. Private investors are playing a key role in supplying this enabling infrastructure with attractive growth prospects. Recently observable policy changes in the U.S., including high tariffs, are expected to destabilize supply chains. BESS (Battery Energy Storage Systems) are most at risk given reliance on both Chinese materials and manufacturing. Solar PV is also expected to face challenges, albeit not as extreme, given larger onshore manufacturing capacity. The environment is expected to put pressure on poorly capitalized developers. As a result of an expected decreased reliance on the U.S., we view the European infrastructure segment as a net beneficiary. There will be even more focus placed on energy security and localizing critical data which is currently being stored in the U.S. The recent announcement of the €500 billion German Infrastructure Fund is the first in what we expect to be many steps to spur investment in the continent's ailing infrastructure.</p> |
| Private Credit      | Within corporate lending, covenant relief cases and PIK (payment-in-kind) payments have increased as debt service continues to be burdensome. This is providing opportunities for opportunistic and special situation lenders that focus on opportunities that fall outside the purview of direct lending mandates.   |
| Liquid Alternatives |   |
| Hedge Funds         | YTD market activity disrupted many fundamental hedge fund alpha themes, particularly in long/short equity portfolios. We continue to prefer specialist hedge fund portfolio managers best positioned to analyze and adapt to the potential impacts of a multitude of 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.

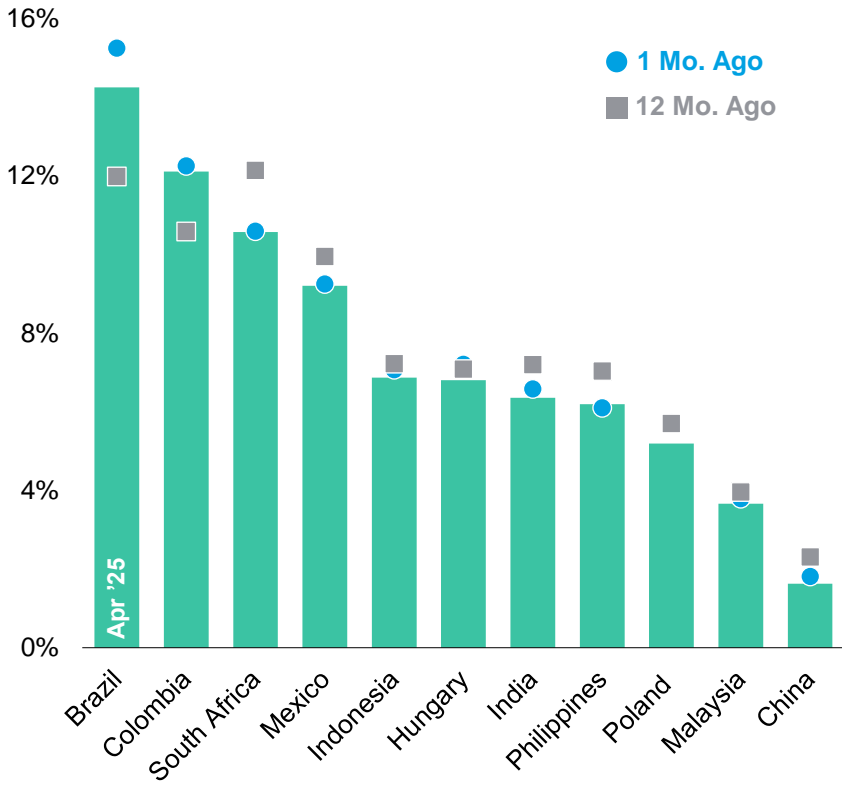
BONDS

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 4/30/25. 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                     | 2.78    | 3.77       | 3.20    | 1.86    | 4.21    |
| Secured Overnight Financing Rate | 4.41    | 5.34       | 4.83    | 4.27    | 5.40    |
| 1-Mo SOFR                        | 4.32    | 5.32       | 4.79    | 4.29    | 5.35    |
| 3-Mo SOFR                        | 4.27    | 5.33       | 4.72    | 4.21    | 5.35    |
| 2-Yr Treasury                    | 3.59    | 5.03       | 4.20    | 3.54    | 4.97    |
| 5-Yr Treasury                    | 3.72    | 4.71       | 4.10    | 3.41    | 4.65    |
| 10-Yr Treasury                   | 4.16    | 4.68       | 4.25    | 3.62    | 4.79    |
| 30-Yr Treasury                   | 4.69    | 4.79       | 4.50    | 3.93    | 4.98    |
| 2-Yr Japan                       | 0.67    | 0.27       | 0.52    | 0.26    | 0.88    |
| 10-Yr Japan                      | 1.31    | 0.87       | 1.09    | 0.80    | 1.58    |
| 2-Yr German Bund                 | 1.69    | 3.10       | 2.32    | 1.66    | 3.11    |
| 10-Yr German Bund                | 2.45    | 2.58       | 2.41    | 2.03    | 2.91    |
| 2-Yr UK Gilt                     | 3.83    | 4.49       | 4.15    | 3.53    | 4.60    |
| 10-Yr UK Gilt                    | 4.46    | 4.34       | 4.31    | 3.74    | 4.89    |
| Bloomberg US Agg                 | 4.51    | 5.31       | 4.72    | 4.10    | 5.24    |
| Bloomberg Global Agg             | 3.46    | 4.06       | 3.64    | 3.26    | 4.04    |
| Bloomberg US Corporate           | 5.14    | 5.73       | 5.19    | 4.64    | 5.68    |
| Bloomberg US Long Corporate      | 5.86    | 5.90       | 5.59    | 5.07    | 6.12    |
| Bloomberg US Municipal           | 4.06    | 3.77       | 3.64    | 3.28    | 4.47    |
| Bloomberg US Long Municipal      | 4.76    | 4.40       | 4.28    | 3.94    | 5.16    |
| US High Yield                    | 7.91    | 8.20       | 7.49    | 6.98    | 8.65    |
| US Loans                         | 8.82    | 9.82       | 9.13    | 8.36    | 9.86    |

**Past performance is no guarantee of future results.**

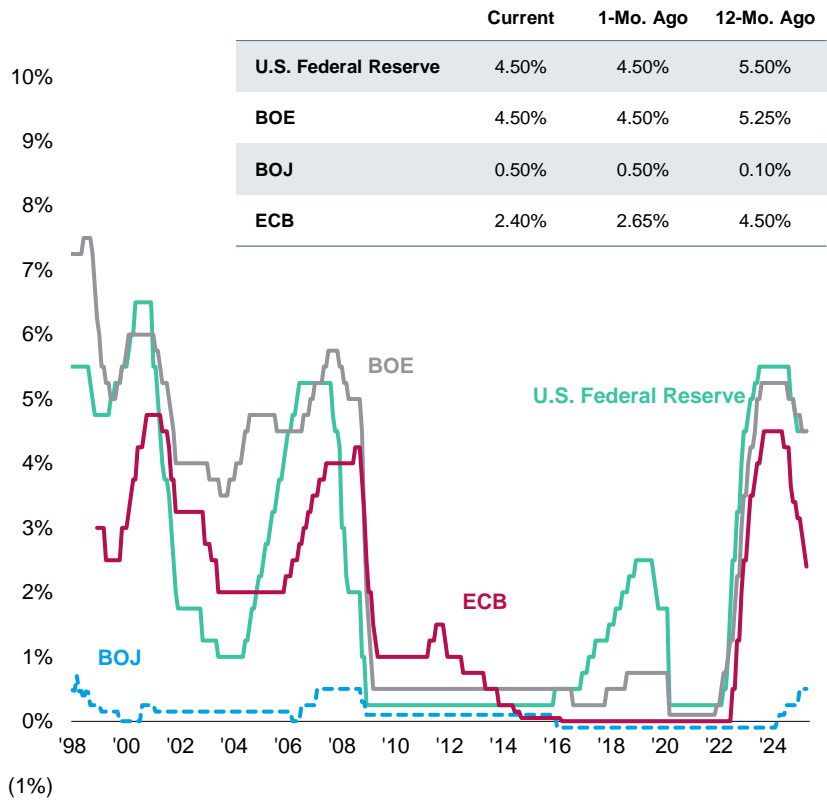
It is not possible to invest directly in an index. Source: Bloomberg, Leveraged Commentary & Data (LCD), and Factset as of 4/30/25. Current represents most recent month. Average, minimum, and maximum measure a 12-month period ending most recent month. Data provided is for informational use only. US High 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.



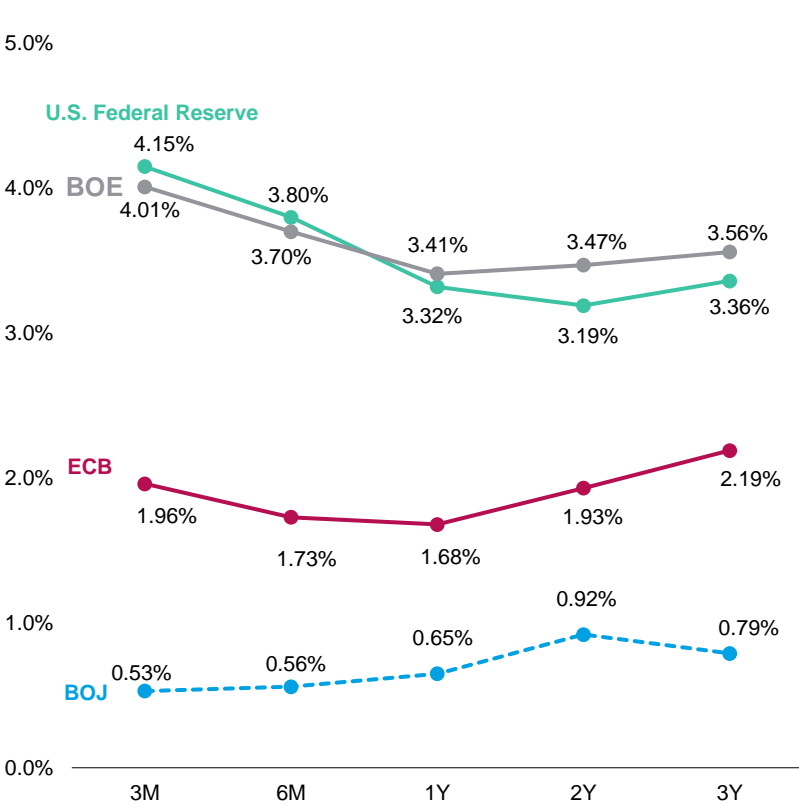
BONDS

Monetary Policy

Central Bank Policy Rates



Market Expectations for Future Central Bank Rates

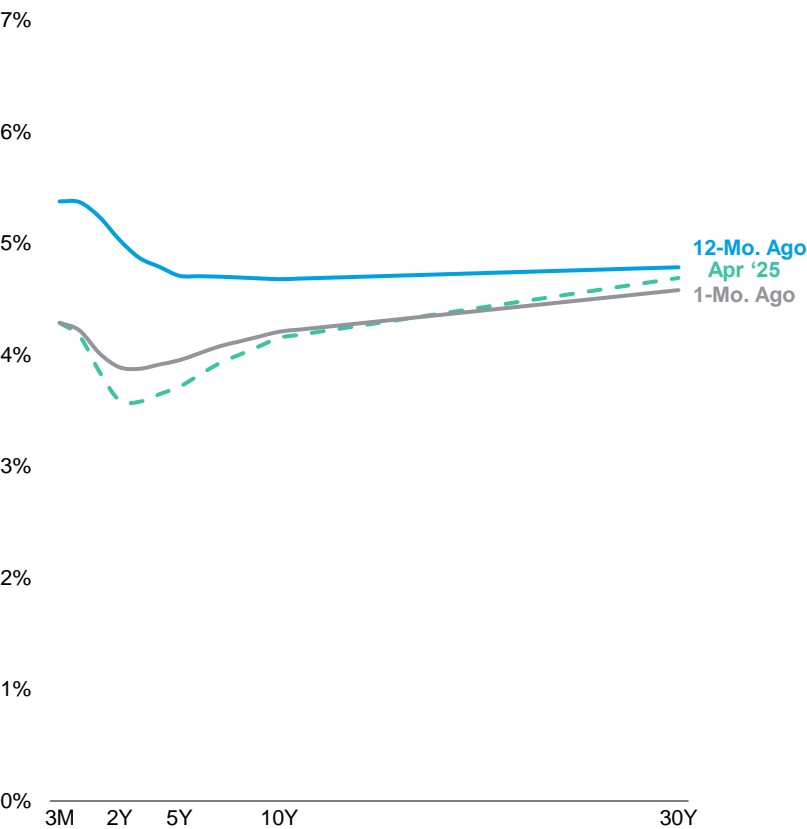


Source: Bloomberg, Factset as of 4/30/25. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

BONDS

U.S. Treasury Yields

U.S. Treasury Yield Curves



| Security        | Yields & Performance |           |            |                  |        |
|-----------------|----------------------|-----------|------------|------------------|--------|
|                 | Yield (%)            |           |            | Total Return (%) |        |
|                 | Current              | 1-Mo. Ago | 12-Mo. Ago | 1-Mo.            | 12-Mo. |
| 3-mo. Treasury  | 4.29                 | 4.29      | 5.38       | 0.34             | 4.88   |
| 6-mo. Treasury  | 4.17                 | 4.22      | 5.37       | 0.34             | 5.06   |
| 2-yr. Treasury  | 3.59                 | 3.89      | 5.03       | 0.81             | 6.41   |
| 3-yr. Treasury  | 3.58                 | 3.88      | 4.87       | 1.14             | 7.54   |
| 5-yr. Treasury  | 3.72                 | 3.95      | 4.71       | 1.36             | 8.38   |
| 10-yr. Treasury | 4.16                 | 4.21      | 4.68       | 0.79             | 8.39   |
| 30-yr. Treasury | 4.69                 | 4.58      | 4.79       | -1.32            | 5.47   |

Source: Factset, Morningstar as of 4/30/25. 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

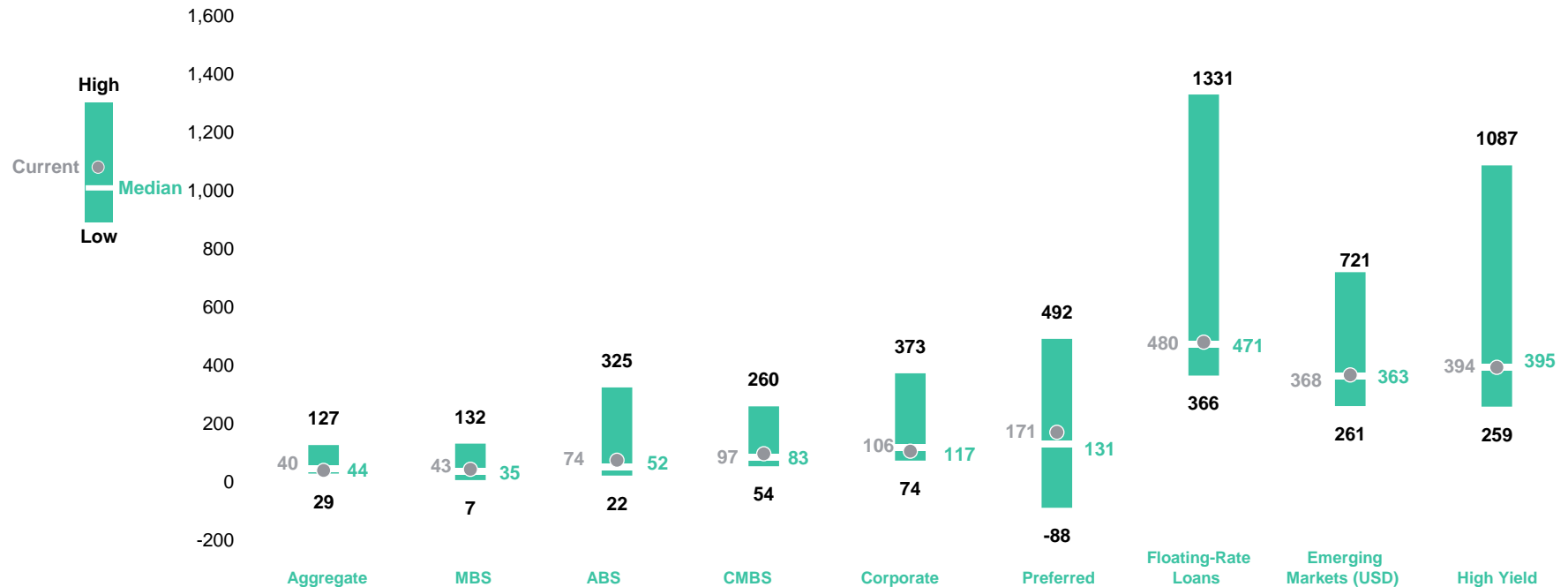
## Characteristics and Performance Analysis

| Index  | Averages   |            |                    |              |                 |                 | Total Returns (%) |       |       |       |      |       |      |
|--|------------|------------|--------------------|--------------|-----------------|-----------------|-------------------|-------|-------|-------|------|-------|------|
|  | Coupon (%) | Price (\$) | Yield to Worst (%) | Spread (bps) | Maturity (yrs.) | Duration (yrs.) | 1-Mo.             | 3-Mo. | YTD   | 1Y    | 3Y   | 5Y    | 10Y  |
| <b>U.S. High Grade</b>   |            |            |                    |              |                 |                 |                   |       |       |       |      |       |      |
| <b>Bloomberg U.S. Aggregate Index</b>                              | 3.52       | 92.4       | 4.51               | 40           | 8.4             | 6.1             | 0.39              | 2.64  | 3.18  | 8.02  | 1.95 | -0.67 | 1.54 |
| U.S. Treasury  | 3.10       | 93.2       | 3.94               | –            | 7.7             | 5.9             | 0.63              | 3.04  | 3.57  | 7.68  | 1.22 | -1.67 | 1.07 |
| U.S. Mortgage Backed Securities                                    | 3.39       | 89.9       | 4.93               | 43           | 7.9             | 6.1             | 0.29              | 2.83  | 3.35  | 8.99  | 1.86 | -0.76 | 1.13 |
| U.S. Asset Backed Securities                                       | 4.78       | 99.9       | 4.49               | 74           | 3.6             | 2.6             | 0.49              | 1.70  | 2.03  | 7.08  | 3.94 | 2.20  | 2.22 |
| U.S. Commercial Mortgage Backed Securities                         | 3.42       | 94.9       | 4.75               | 97           | 4.5             | 4.0             | 0.91              | 2.76  | 3.49  | 9.37  | 3.33 | 1.20  | 2.32 |
| U.S. Corp. Investment Grade  | 4.36       | 92.8       | 5.14               | 106          | 10.4            | 6.8             | -0.03             | 1.71  | 2.27  | 7.60  | 3.04 | 0.47  | 2.50 |
| <b>Bloomberg Municipal Bond Index</b>                              | 4.61       | 99.4       | 4.06               | –            | 13.4            | 6.5             | -0.81             | -1.52 | -1.03 | 1.66  | 2.21 | 1.17  | 2.10 |
| <b>Bloomberg Taxable Municipal Bond Index</b>                      | 4.39       | 92.5       | 4.99               | –            | 14.1            | 7.6             | -0.08             | 2.42  | 2.91  | 7.54  | 2.38 | 0.21  | 2.78 |
| <b>ICE BofA US Inflation-Linked Treasury Index</b>                 | 1.10       | 94.1       | 1.46               | –            | 7.6             | 5.9             | 0.00              | 2.92  | 4.24  | 8.01  | 0.51 | 1.62  | 2.43 |
| <b>ICE BofA Preferred Index (Fixed Rate)</b>                       | 5.42       | 88.7       | 6.45               | 171          | –               | 6.2             | -1.40             | -1.93 | -1.32 | 3.81  | 4.08 | 2.32  | 3.73 |
| <b>U.S. High Yield</b>   |            |            |                    |              |                 |                 |                   |       |       |       |      |       |      |
| <b>ICE BofA US High Yield Index</b>                                | 6.50       | 94.4       | 7.91               | 394          | 4.7             | 3.1             | 0.00              | -0.43 | 0.95  | 8.69  | 6.14 | 6.42  | 4.79 |
| <b>Morningstar LSTA U.S. Leveraged Loan Index</b>                  | S+3.31     | 95.8       | 8.82               | 480          | 4.6             | –               | -0.05             | -0.26 | 0.43  | 6.16  | 7.12 | 8.00  | 4.88 |
| <b>Emerging Markets</b>  |            |            |                    |              |                 |                 |                   |       |       |       |      |       |      |
| <b>J.P. Morgan EM Bond Index (EMBI) Global Diversified</b>         | 5.42       | 86.0       | 7.89               | 368          | –               | 6.5             | -0.22             | 0.57  | 2.02  | 8.77  | 5.33 | 2.99  | 2.97 |
| <b>J.P. Morgan Corp. EM Bond Index (CEMBI) Broad Diversified</b>   | 5.34       | 94.6       | 6.59               | 258          | –               | 4.3             | -0.43             | 1.17  | 1.98  | 8.23  | 5.56 | 3.96  | 3.82 |
| <b>J.P. Morgan Govt. Bond Index-EM (GBI-EM) Global Diversified</b> | 5.59       | –          | 6.09               | –            | –               | 5.3             | 3.25              | 5.53  | 7.70  | 9.75  | 5.98 | 2.16  | 1.30 |
| <b>Global Developed Markets</b>                                    |            |            |                    |              |                 |                 |                   |       |       |       |      |       |      |
| <b>Bloomberg Global Aggregate Ex-U.S. Index</b>                    | 2.30       | 96.3       | 2.57               | 33           | 8.5             | 7.0             | 5.11              | 7.14  | 7.77  | 9.48  | 0.49 | -1.77 | 0.10 |
| <b>FTSE World Government Bond Index</b>                            | 2.58       | –          | 3.32               | –            | –               | 6.9             | 3.34              | 5.50  | 5.99  | 8.32  | 0.18 | -2.56 | 0.17 |
| <b>ICE BofA European Union Government Bond Index</b>               | 2.17       | 94.5       | 2.63               | 44           | 8.9             | 7.3             | 7.25              | 10.26 | 10.58 | 11.31 | 1.90 | -1.35 | 0.03 |
| <b>ICE BofA Developed Mkts HY Ex-Sub Fincl Index (USD Hedged)</b>  | 6.22       | 95.0       | 7.49               | 412          | 3.6             | 3.1             | 0.10              | -0.16 | 1.08  | 8.85  | 6.49 | 6.50  | 4.94 |
| <b>Bloomberg Euro-Aggregate Corporates (EUR)</b>                   | 2.59       | 97.3       | 3.14               | 112          | 5.1             | 4.4             | 0.99              | 0.54  | 0.98  | 6.18  | 2.25 | 0.65  | 1.10 |
| <b>Bloomberg Pan-European High Yield Euro (EUR)</b>                | 4.84       | 97.3       | 5.94               | 359          | 3.7             | 3.1             | 0.28              | 0.27  | 0.90  | 7.63  | 5.55 | 5.05  | 3.51 |

**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 4/30/25. 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 4/30/25. 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 | 4.36       | 92.8       | 5.14               | 106          | 10.4            | 6.8             | -0.03             | 1.71   | 2.27   | 7.60   | 3.04   | 0.47   | 2.50   |
| AAA Index                                   | 3.43       | 83.3       | 4.74               | 42           | 16.6            | 9.9             | -0.07             | 2.38   | 2.62   | 6.39   | 0.32   | -2.80  | 1.61   |
| AA Index                                    | 3.71       | 89.4       | 4.74               | 59           | 12.4            | 7.7             | 0.06              | 2.00   | 2.49   | 7.00   | 1.59   | -1.26  | 1.48   |
| A Index                                     | 4.24       | 93.2       | 4.96               | 88           | 10.2            | 6.8             | 0.15              | 1.98   | 2.53   | 7.53   | 2.72   | -0.20  | 2.23   |
| BBB Index                                   | 4.61       | 93.2       | 5.40               | 132          | 10.2            | 6.6             | -0.22             | 1.40   | 1.99   | 7.78   | 3.63   | 1.41   | 2.90   |
| U.S. High Yield                             |            |            |                    |              |                 |                 |                   |        |        |        |        |        |        |
| ICE BofA U.S. High Yield Index              | 6.50       | 94.4       | 7.91               | 394          | 4.7             | 3.1             | 0.00              | -0.43  | 0.95   | 8.69   | 6.14   | 6.42   | 4.79   |
| BB Index                                    | 5.86       | 96.9       | 6.55               | 254          | 4.9             | 3.4             | 0.17              | 0.33   | 1.62   | 7.89   | 5.72   | 5.37   | 4.81   |
| B Index                                     | 7.26       | 96.3       | 8.08               | 411          | 4.5             | 2.9             | -0.06             | -0.77  | 0.65   | 7.59   | 5.75   | 6.20   | 4.40   |
| CCC Index                                   | 7.08       | 79.9       | 13.79              | 1000         | 4.0             | 2.8             | -0.62             | -2.88  | -1.29  | 14.85  | 8.35   | 11.34  | 5.62   |
| Morningstar LSTA U.S. Leveraged Loan Index  | S+3.31     | 95.8       | 8.82               | 480          | 4.6             | -               | -0.05             | -0.26  | 0.43   | 6.16   | 7.12   | 8.00   | 4.88   |
| BBB Index                                   | S+1.89     | 99.6       | 6.31               | 205          | 5.2             | -               | 0.30              | 0.90   | 1.51   | 6.50   | 6.89   | 5.81   | 4.30   |
| BB Index                                    | S+2.50     | 98.7       | 7.16               | 297          | 5.0             | -               | 0.00              | 0.28   | 0.94   | 6.34   | 7.25   | 6.72   | 4.40   |
| B Index                                     | S+3.56     | 96.6       | 8.93               | 486          | 4.5             | -               | 0.00              | -0.32  | 0.35   | 6.50   | 7.55   | 8.49   | 5.20   |
| CCC Index                                   | S+4.71     | 78.2       | 19.95              | 1535         | 3.3             | -               | -1.74             | -3.23  | -2.30  | 1.83   | 3.64   | 9.91   | 5.54   |
| D Index                                     | -          | 28.3       | -                  | -            | -               | -               | -4.58             | -15.53 | -13.60 | -19.79 | -32.09 | -18.85 | -19.05 |

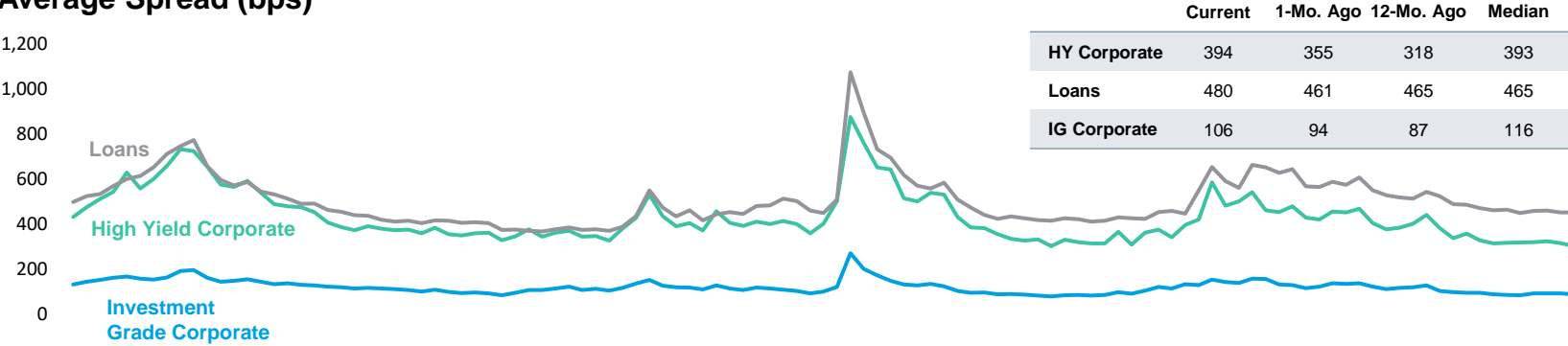
**Past performance is no guarantee of future results.**

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 4/30/25. 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.

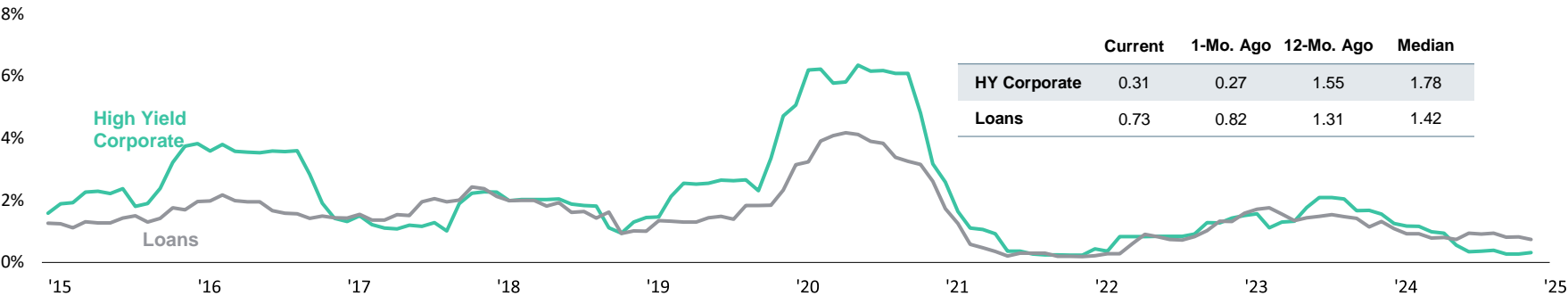
BONDS

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 4/30/25. 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         |
| <b>Bloomberg Municipal Bond Index</b>            | <b>4.61</b> | <b>99.4</b> | <b>4.06</b>        | <b>13.4</b>     | <b>6.5</b>      | <b>-0.81</b>      | <b>-1.52</b> | <b>-1.03</b> | <b>1.66</b> | <b>2.21</b> | <b>1.17</b> | <b>2.10</b> |
| AAA Index  | 4.54        | 100.3       | 3.87               | 12.9            | 6.7             | -0.63             | -1.51        | -0.96        | 1.56        | 1.92        | 0.49        | 1.69        |
| AA Index   | 4.64        | 100.4       | 3.94               | 13.0            | 6.4             | -0.74             | -1.44        | -1.04        | 1.54        | 2.11        | 0.82        | 1.90        |
| A Index  | 4.61        | 97.8        | 4.31               | 13.6            | 6.5             | -0.98             | -1.61        | -1.01        | 1.83        | 2.57        | 1.77        | 2.51        |
| BBB Index  | 4.62        | 94.1        | 4.80               | 17.1            | 7.4             | -1.30             | -1.95        | -1.16        | 2.49        | 2.84        | 3.12        | 3.03        |
| 5-Year Index                                     | 4.74        | 104.3       | 3.49               | 4.9             | 3.7             | -0.51             | -0.24        | 0.40         | 2.79        | 2.45        | 1.22        | 1.65        |
| 10-Year Index                                    | 4.59        | 102.8       | 3.83               | 9.9             | 5.9             | -0.73             | -1.28        | -0.47        | 1.10        | 2.41        | 1.18        | 2.21        |
| 22+ Year Index                                   | 4.66        | 93.9        | 4.76               | 26.6            | 10.5            | -1.27             | -2.79        | -2.72        | 1.10        | 1.49        | 0.74        | 2.27        |
| <b>Bloomberg High Yield Municipal Bond Index</b> | <b>4.76</b> | <b>64.6</b> | <b>5.84</b>        | <b>19.2</b>     | <b>7.2</b>      | <b>-1.78</b>      | <b>-1.72</b> | <b>-0.98</b> | <b>4.35</b> | <b>3.48</b> | <b>4.65</b> | <b>4.11</b> |
| Hospital   | 5.34        | 75.6        | 6.05               | 20.5            | 6.6             | -1.67             | -1.09        | -0.24        | 9.36        | 3.05        | 4.36        | 3.50        |
| IDR/PCR  | 4.50        | 38.3        | 6.26               | 18.9            | 7.8             | -1.97             | -1.76        | -1.09        | 2.08        | 3.18        | 4.35        | 4.86        |
| Tobacco  | 2.48        | 19.4        | 6.42               | 27.1            | 12.4            | -2.63             | -2.80        | -1.29        | 1.67        | 3.01        | 3.94        | 6.28        |
| Puerto Rico                                      | 3.56        | 53.1        | 5.20               | 18.7            | 7.8             | -3.41             | -3.96        | -2.97        | -0.39       | 3.06        | 5.37        | 4.68        |

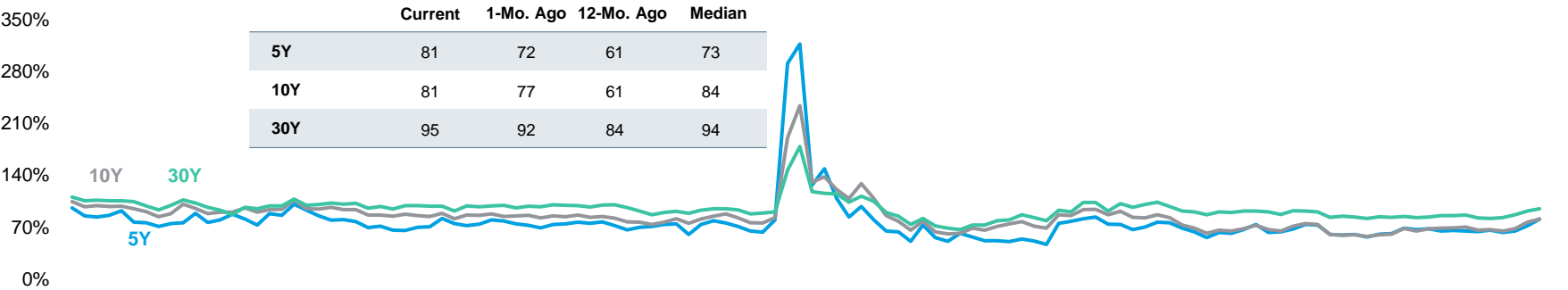
**Past performance is no guarantee of future results.**

It is not possible to invest directly in an index. Source: Bloomberg, Morningstar as of 4/30/25. 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.

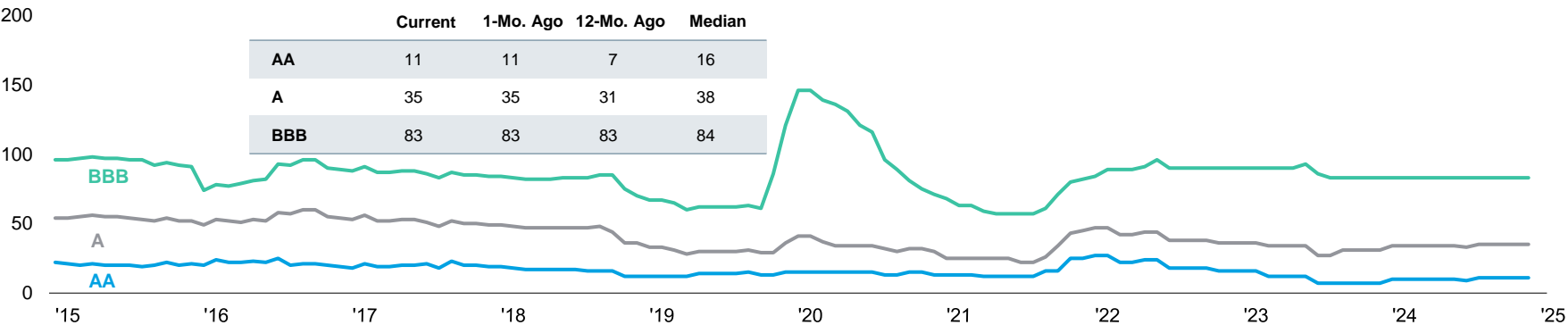
BONDS

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 4/30/25. 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)

Bps

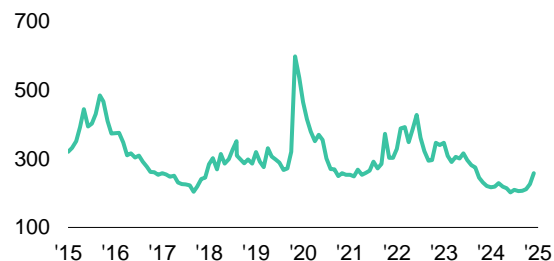


Avg. Spread (bps)

|                   |     |
|-------------------|-----|
| <b>Current</b>    | 368 |
| <b>1-Mo. Ago</b>  | 349 |
| <b>12-Mo. Ago</b> | 373 |
| <b>Median</b>     | 368 |

## Corporate EMD Spreads (USD)

Bps

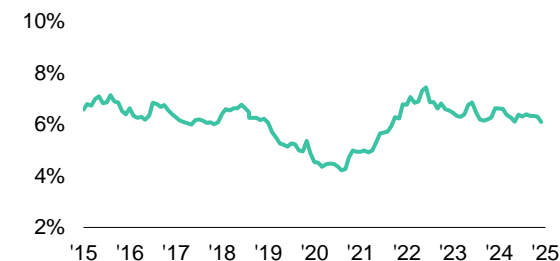


Avg. Spread (bps)

|                   |     |
|-------------------|-----|
| <b>Current</b>    | 258 |
| <b>1-Mo. Ago</b>  | 226 |
| <b>12-Mo. Ago</b> | 221 |
| <b>Median</b>     | 296 |

## Local EMD Yields (%)

Bps



Avg. Yield (%)

|                   |      |
|-------------------|------|
| <b>Current</b>    | 6.09 |
| <b>1-Mo. Ago</b>  | 6.30 |
| <b>12-Mo. Ago</b> | 6.63 |
| <b>Median</b>     | 6.29 |

## Averages

|  | Coupon (%) | Price (\$) | Yield (%) | Duration |
|--|------------|------------|-----------|----------|
| <b>JPMorgan Emerging Markets Bond Index (EMBI) Global Diversified</b>              | 5.42       | 86.0       | 7.89      | 6.5      |
| <b>JPMorgan Corporate Emerging Markets Bond Index (CEMBI) Broad Diversified</b>    | 5.34       | 94.6       | 6.59      | 4.3      |
| <b>JPMorgan Government Bond Index-Emerging Markets (GBI-EM) Global Diversified</b> | 5.59       | –          | 6.09      | 5.3      |

## Total Returns (%)

| 1-Mo. | 3-Mo. | YTD  | 1Y   | 3Y   | 5Y   | 10Y  |
|-------|-------|------|------|------|------|------|
| -0.22 | 0.57  | 2.02 | 8.77 | 5.33 | 2.99 | 2.97 |
| -0.43 | 1.17  | 1.98 | 8.23 | 5.56 | 3.96 | 3.82 |
| 3.25  | 5.53  | 7.70 | 9.75 | 5.98 | 2.16 | 1.30 |

## Past performance is no guarantee of future results.

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## BONDS

## Asset Class Return Analysis (%)

|        | 2015                              | 2016                            | 2017                             | 2018                             | 2019                             | 2020                            | 2021                             | 2022                              | 2023                             | 2024                             | YTD 2025                        |
|--------|-----------------------------------|---------------------------------|----------------------------------|----------------------------------|----------------------------------|---------------------------------|----------------------------------|-----------------------------------|----------------------------------|----------------------------------|---------------------------------|
| Higher | Municipal<br>3.30                 | High Yield<br>17.49             | EMD (Local<br>Currency)<br>15.21 | Municipal<br>1.28                | Investment<br>Grade<br>14.54     | Global Agg<br>Ex-U.S.<br>10.11  | High Yield<br>5.36               | Bank Loan<br>-0.77                | High Yield<br>13.46              | Bank Loan<br>8.95                | Global Agg<br>Ex-U.S.<br>7.77   |
|        | MBS<br>1.51                       | EMD (Hard<br>Currency)<br>10.19 | Global Agg<br>Ex-U.S.<br>10.51   | MBS<br>0.99                      | EMD (Hard<br>Currency)<br>14.42  | Investment<br>Grade<br>9.89     | Bank Loan<br>5.20                | Municipal<br>-8.53                | Bank Loan<br>13.32               | High Yield<br>8.20               | EMD (Local<br>Currency)<br>7.70 |
|        | EMD (Corp. Bonds)<br>1.30         | Bank Loan<br>10.16              | EMD (Hard<br>Currency)<br>9.32   | Treasury<br>0.86                 | High Yield<br>14.41              | Treasury<br>8.00                | Municipal<br>1.52                | High Yield<br>-11.22              | EMD (Local<br>Currency)<br>12.70 | EMD (Corp. Bonds)<br>7.63        | Treasury<br>3.57                |
|        | EMD (Hard<br>Currency)<br>1.23    | EMD (Local<br>Currency)<br>9.94 | EMD (Corp. Bonds)<br>7.96        | Bank Loan<br>0.44                | EMD (Local<br>Currency)<br>13.47 | EMD (Corp. Bonds)<br>7.13       | EMD (Corp. Bonds)<br>0.91        | EMD (Local<br>Currency)<br>-11.69 | EMD (Hard<br>Currency)<br>11.09  | EMD (Hard<br>Currency)<br>6.54   | MBS<br>3.35                     |
|        | Treasury<br>0.84                  | EMD (Corp. Bonds)<br>9.65       | High Yield<br>7.48               | EMD (Corp. Bonds)<br>-1.65       | EMD (Corp. Bonds)<br>13.09       | High Yield<br>6.17              | Investment<br>Grade<br>-1.04     | MBS<br>-11.81                     | EMD (Corp. Bonds)<br>9.08        | Investment<br>Grade<br>2.13      | Investment<br>Grade<br>2.27     |
|        | Investment<br>Grade<br>-0.68      | Investment<br>Grade<br>6.11     | Investment<br>Grade<br>6.42      | Global Agg<br>Ex-U.S.<br>-2.15   | Bank Loan<br>8.64                | EMD (Hard<br>Currency)<br>5.88  | MBS<br>-1.04                     | EMD (Corp. Bonds)<br>-12.26       | Investment<br>Grade<br>8.52      | MBS<br>1.20                      | EMD (Hard<br>Currency)<br>2.02  |
|        | Bank Loan<br>-0.69                | MBS<br>1.67                     | Municipal<br>5.45                | High Yield<br>-2.26              | Municipal<br>7.54                | Municipal<br>5.21               | EMD (Hard<br>Currency)<br>-1.51  | Treasury<br>-12.46                | Municipal<br>6.40                | Municipal<br>1.05                | EMD (Corp. Bonds)<br>1.98       |
|        | High Yield<br>-4.64               | Global Agg<br>Ex-U.S.<br>1.49   | Bank Loan<br>4.12                | Investment<br>Grade<br>-2.51     | Treasury<br>6.86                 | MBS<br>3.87                     | Treasury<br>-2.32                | Investment<br>Grade<br>-15.76     | Global Agg<br>Ex-U.S.<br>5.72    | Treasury<br>0.58                 | High Yield<br>0.95              |
|        | Global Agg<br>Ex-U.S.<br>-6.02    | Treasury<br>1.04                | MBS<br>2.47                      | EMD (Hard<br>Currency)<br>-4.61  | MBS<br>6.35                      | Bank Loan<br>3.12               | Global Agg<br>Ex-U.S.<br>-7.05   | EMD (Hard<br>Currency)<br>-16.45  | MBS<br>5.05                      | EMD (Local<br>Currency)<br>-2.38 | Bank Loan<br>0.43               |
| Lower  | EMD (Local<br>Currency)<br>-14.92 | Municipal<br>0.25               | Treasury<br>2.31                 | EMD (Local<br>Currency)<br>-6.21 | Global Agg<br>Ex-U.S.<br>5.09    | EMD (Local<br>Currency)<br>2.69 | EMD (Local<br>Currency)<br>-8.75 | Global Agg<br>Ex-U.S.<br>-18.70   | Treasury<br>4.05                 | Global Agg<br>Ex-U.S.<br>-4.22   | Municipal<br>-1.03              |

**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 4/30/25. 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

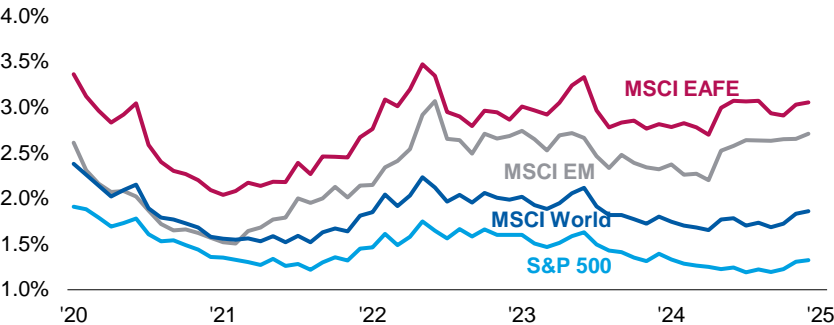
Performance: Market Barometer (%)



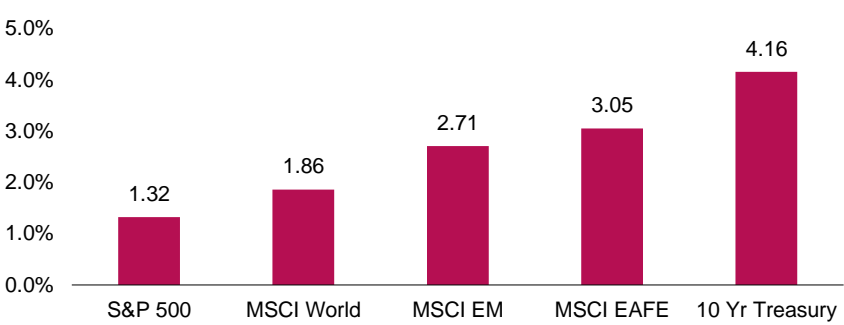
EQUITIES

Dividend Yields and Volatility Analysis

Historical Yields



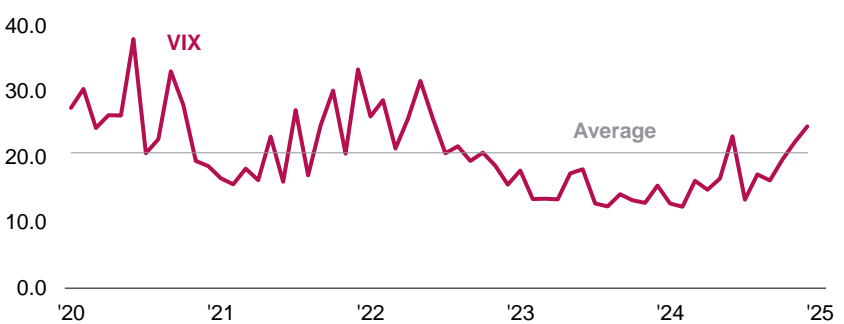
Current Yields



Correlation of S&P 500 Stocks



CBOE Market Volatility Index (VIX)

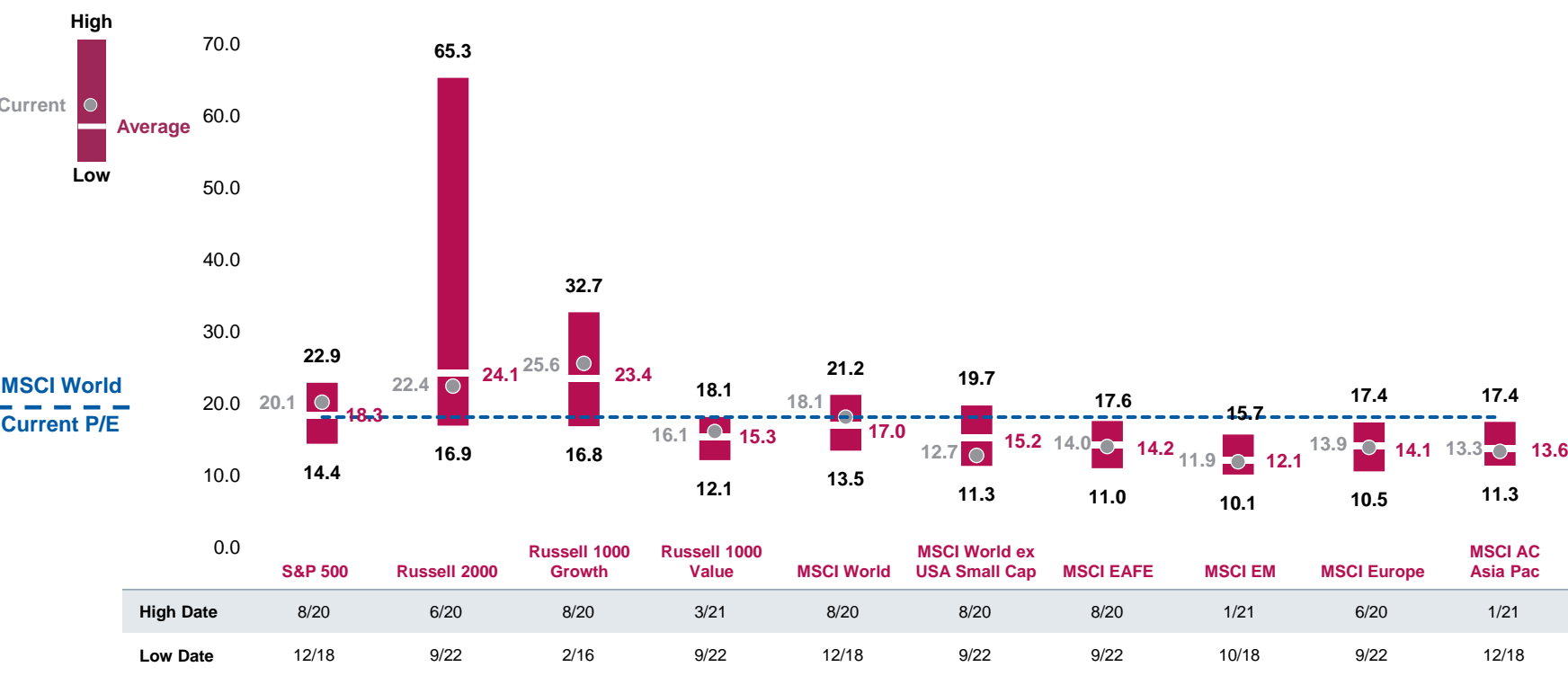


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It is not possible to invest directly in an index. Source: FactSet and Ned Davis Research as of 4/30/25. Correlation of S&P 500 Stocks is measured by the median 63-day rolling correlation of one day returns data provided is for informational use only. See end of report for important additional information.

EQUITIES

Valuation Analysis

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

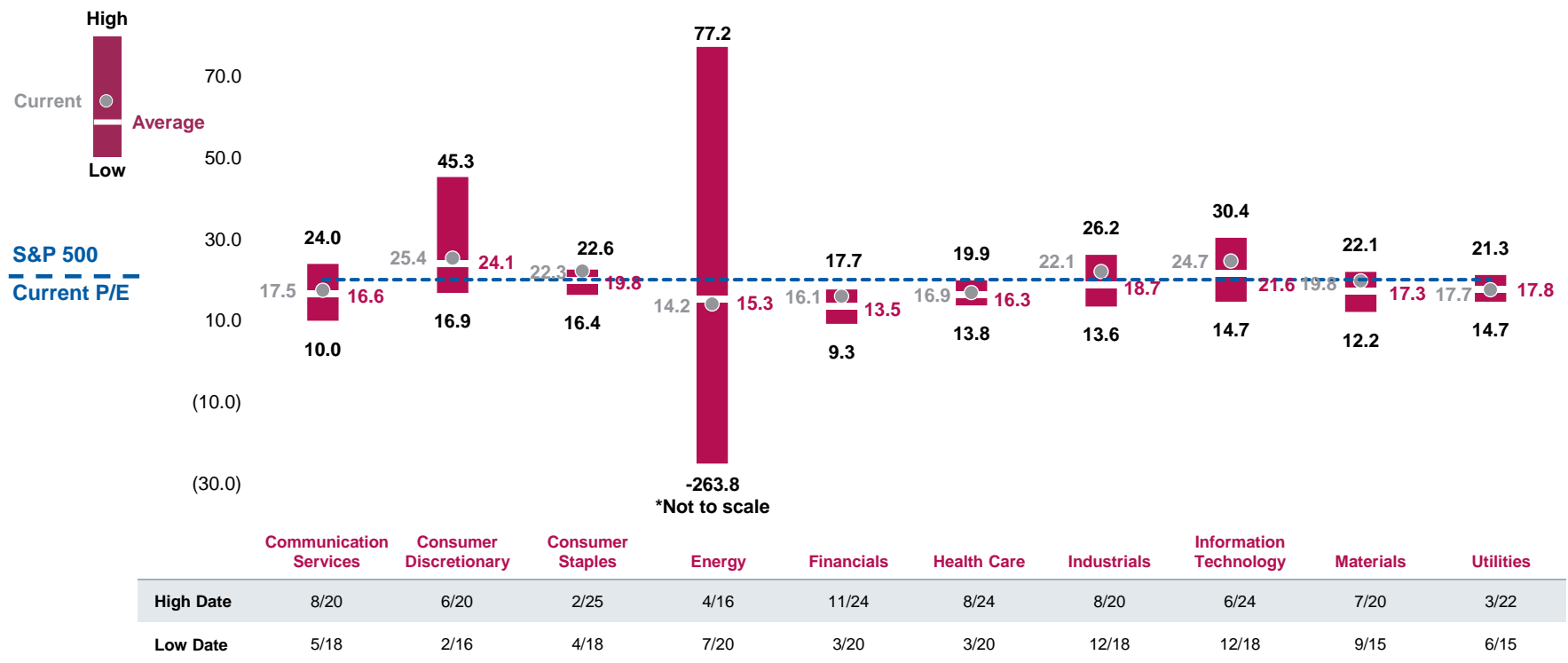


Source: FactSet as of 4/30/25. NTM P/E is market price per share divided by expected earnings per share over the next twelve months. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

## EQUITIES

## Valuation Analysis

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

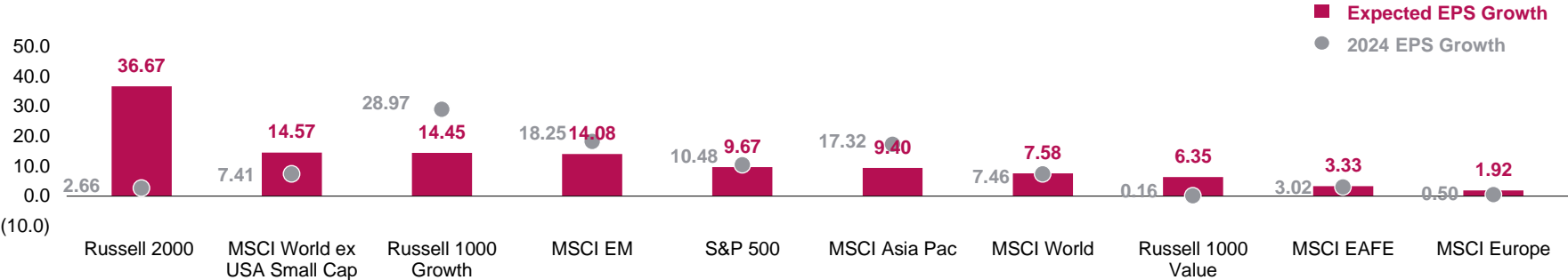


Source: FactSet as of 4/30/25. NTM P/E is market price per share divided by expected earnings per share over the next twelve months. The Real Estate sector is excluded from this 10-year chart since the sector was created on August 31, 2016. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

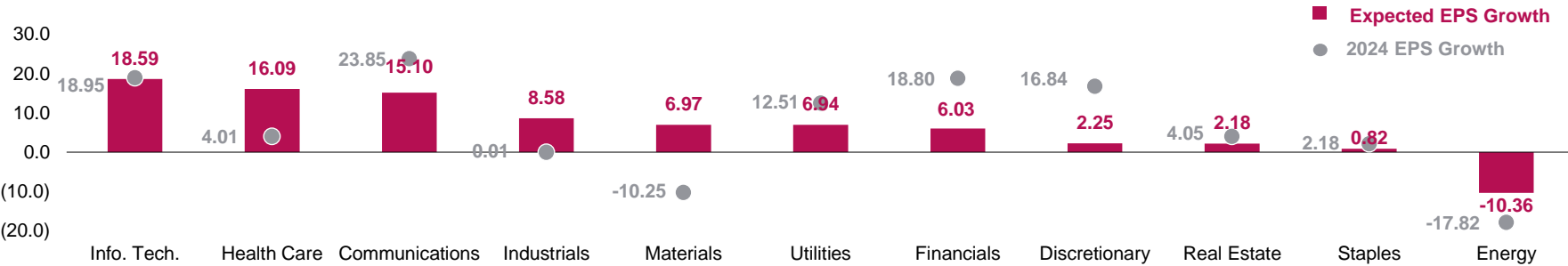
EQUITIES

Corporate Earnings Growth

Regions/Styles



S&P 500 Sectors

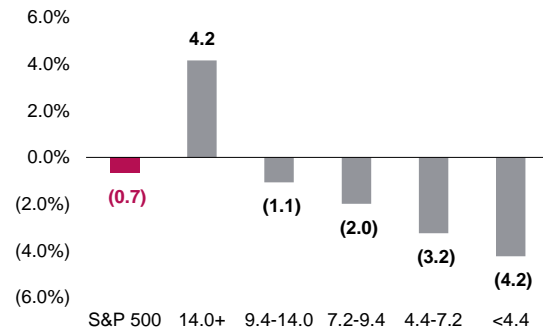


Source: FactSet as of 4/30/25. Expected EPS Growth is defined as the expected % change in the EPS growth from the beginning of the current calendar year though the end of the calendar year. 2024 EPS Growth is defined as the % change in EPS from the beginning of the year through the end of the year. Data 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.

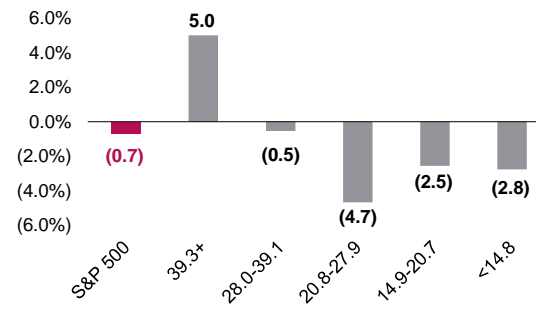
## EQUITIES

# S&P 500 Index: 1-Month Return Analysis

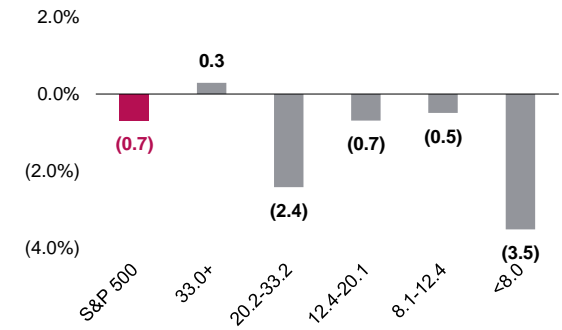
### 3-5 Year Earnings Growth



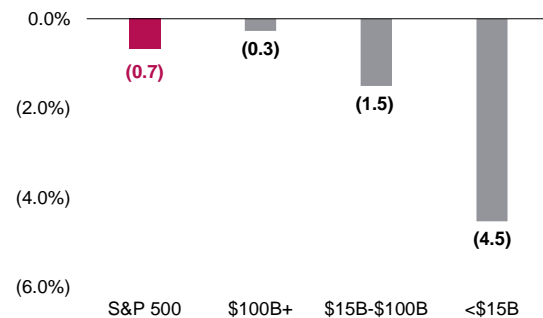
### Trailing 12 Month P/E



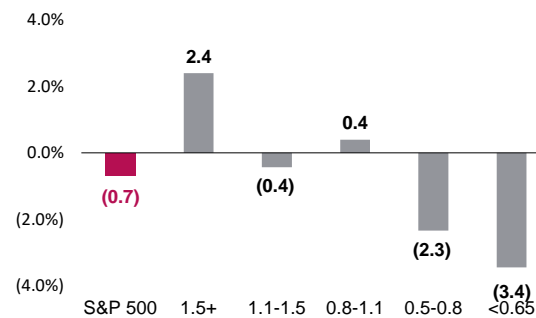
### Return On Equity



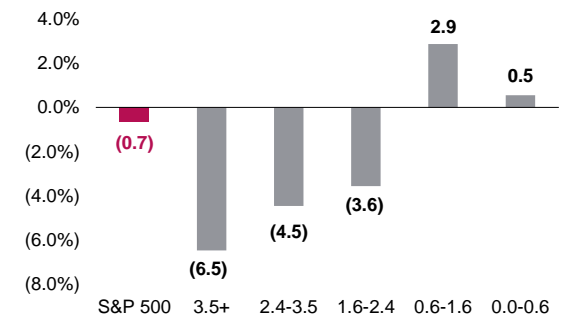
### Market Cap



### Beta



### Dividend Yield



Past performance is no guarantee of future results.

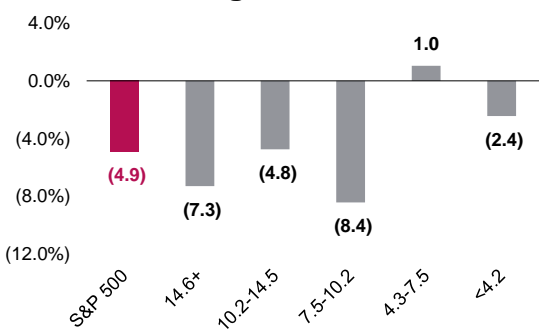
It is not possible to invest directly in an index. Source: FactSet as of 4/30/25. Data provided is for informational use only. See end of report for important additional information.



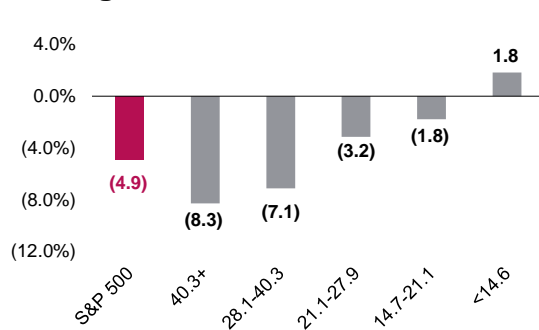
EQUITIES

S&P 500 Index: YTD Analysis

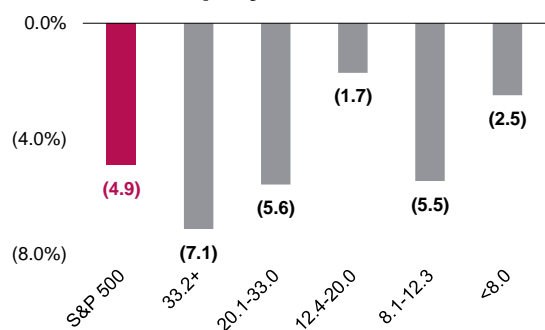
3-5 Year Earnings Growth



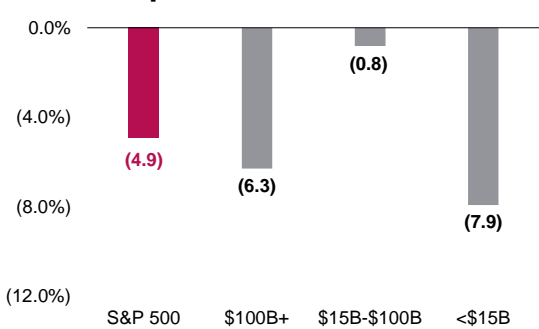
Trailing 12 Month P/E



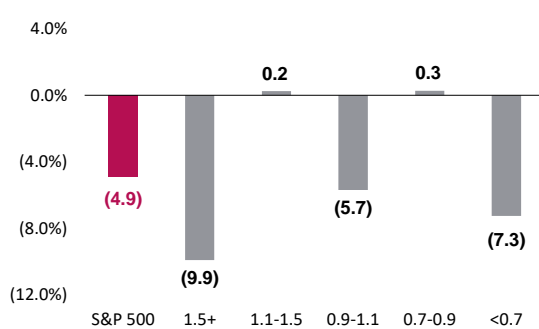
Return On Equity



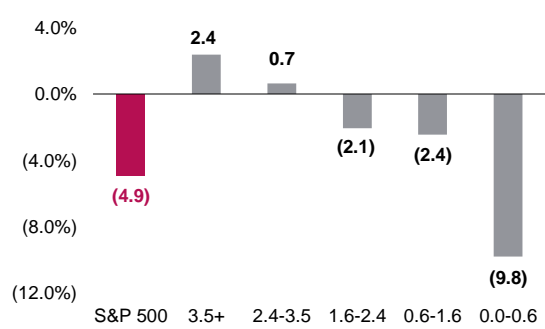
Market Cap



Beta



Dividend Yield

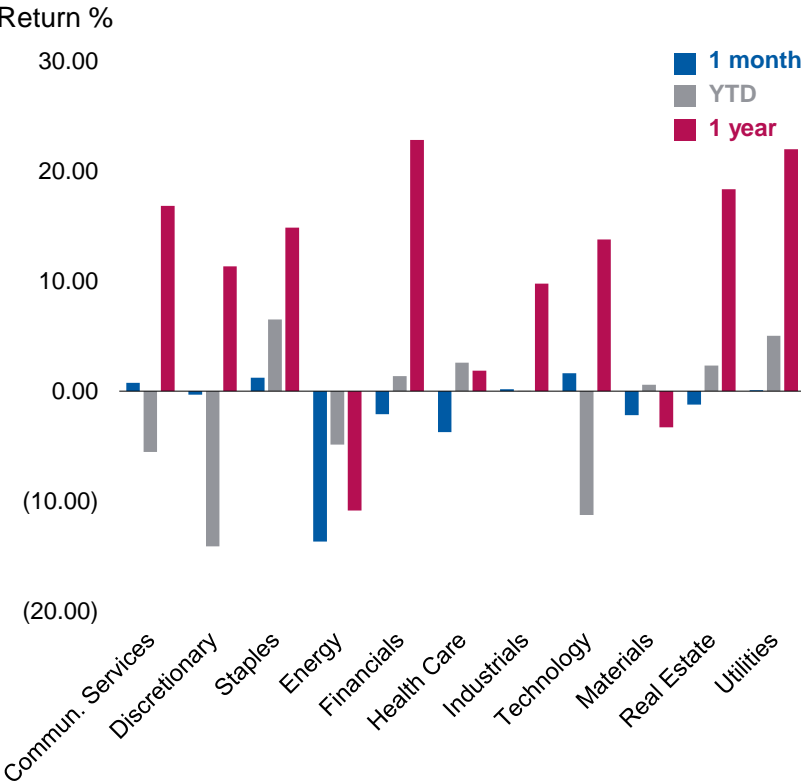


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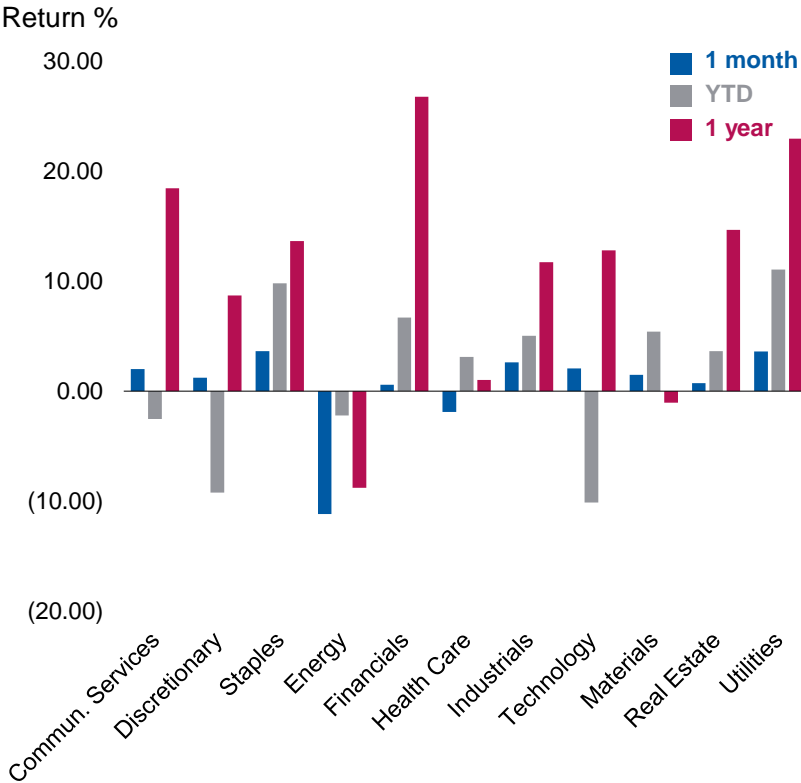
EQUITIES

Index Sectors: Return Analysis

S&P 500



MSCI World

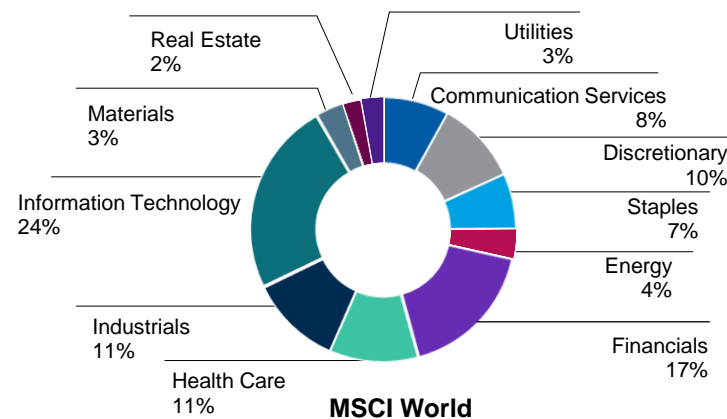
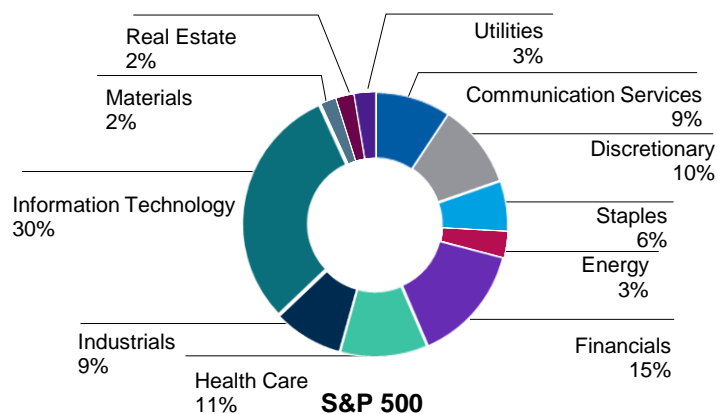


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# EQUITIES

## 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    | 503         | 1936     | 392         | 869         | 1352        | 2195                        | 694       | 1206      | 399         | 1256          |
| Maximum Market Cap    | \$3,192.19B | \$17.79B | \$3,192.19B | \$1,150.76B | \$3,195.55B | \$11.99B                    | \$303.05B | \$699.42B | \$303.05B   | \$699.42B     |
| Minimum Market Cap    | \$5.63B     | \$0.01B  | \$0.56B     | \$0.24B     | \$1.62B     | \$0.10B                     | \$2.28B   | \$0.11B   | \$2.38B     | \$0.11B       |
| Dividend Yield        | 1.32        | 1.46     | 0.61        | 2.10        | 1.86        | 3.09                        | 3.05      | 2.71      | 3.18        | 2.51          |
| NTM PE                | 20.14       | 22.40    | 25.55       | 16.06       | 18.09       | 12.75                       | 13.98     | 11.86     | 13.86       | 13.32         |
| Price to Book         | 4.68        | 1.84     | 11.83       | 2.61        | 3.42        | 1.40                        | 2.02      | 1.88      | 2.28        | 1.77          |
| Price to Cash Flow    | 16.69       | 13.73    | 24.02       | 11.95       | 14.38       | 8.78                        | 10.32     | 8.04      | 9.34        | 10.39         |
| Price to Sales        | 2.84        | 1.14     | 5.21        | 1.73        | 2.27        | 0.91                        | 1.48      | 1.48      | 1.51        | 1.45          |
| Est 3-5 Yr EPS Growth | 10.32       | 12.60    | 12.05       | 8.63        | 9.90        | 10.20                       | 8.35      | 12.41     | 8.79        | 9.86          |
| 5Yr. Div Growth Rate  | 10.48       | #N/A     | 11.95       | 7.18        | 5.10        | 5.34                        | 3.80      | 2.47      | 4.29        | 1.22          |



Source: FactSet as of 4/30/25. 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                     | -0.68  | -7.50  | -4.92  | 12.10  | 12.18 | 15.61 | 12.32 | 25.02 | 26.29  | -18.11 | 28.71 | 18.40  |
|                    | Russell 1000 Defensive      | -1.10  | -5.04  | -2.42  | 11.39  | 10.00 | 12.76 | 11.43 | 18.55 | 20.23  | -16.43 | 26.93 | 13.93  |
|                    | Russell 1000 Dynamic        | -0.08  | -10.77 | -7.57  | 12.46  | 13.72 | 17.90 | 12.44 | 30.63 | 33.34  | -21.94 | 25.57 | 27.69  |
|                    | Russell 2500                | -2.06  | -12.51 | -9.41  | 1.70   | 4.12  | 11.37 | 7.43  | 12.00 | 17.42  | -18.37 | 18.18 | 19.99  |
|                    | Russell 1000 Growth         | 1.77   | -10.15 | -8.37  | 14.53  | 15.60 | 17.23 | 15.27 | 33.36 | 42.68  | -29.14 | 27.60 | 38.49  |
|                    | Russell 1000 Value          | -3.05  | -5.36  | -0.98  | 8.55   | 7.61  | 13.00 | 8.36  | 14.37 | 11.46  | -7.54  | 25.16 | 2.80   |
|                    | Russell Mid Cap             | -1.03  | -8.30  | -4.40  | 7.33   | 7.08  | 12.96 | 8.81  | 15.34 | 17.23  | -17.32 | 22.58 | 17.10  |
|                    | Russell 2000                | -2.31  | -13.83 | -11.57 | 0.87   | 3.27  | 9.88  | 6.32  | 11.54 | 16.93  | -20.44 | 14.82 | 19.96  |
|                    | CBOE S&P 500 Buywrite BXM   | -1.63  | -6.72  | -4.67  | 9.50   | 5.72  | 10.32 | 6.10  | 20.12 | 11.82  | -11.37 | 20.47 | -2.75  |
| Global Equities    | MSCI World                  | 0.89   | -4.30  | -0.92  | 12.16  | 11.06 | 13.95 | 9.34  | 18.67 | 23.79  | -18.14 | 21.82 | 15.90  |
|                    | MSCI EAFE                   | 4.58   | 6.18   | 11.76  | 12.57  | 10.07 | 11.37 | 5.45  | 3.82  | 18.24  | -14.45 | 11.26 | 7.82   |
|                    | MSCI EM                     | 1.31   | 2.45   | 4.28   | 9.02   | 3.85  | 6.35  | 3.07  | 7.50  | 9.83   | -20.09 | -2.54 | 18.31  |
|                    | MSCI AC Asia Pac            | 2.73   | 2.16   | 3.63   | 9.65   | 5.98  | 7.19  | 4.43  | 9.56  | 11.45  | -17.22 | -1.46 | 19.71  |
|                    | MSCI ACWI                   | 0.93   | -3.64  | -0.40  | 11.84  | 10.27 | 13.07 | 8.63  | 17.49 | 22.20  | -18.36 | 18.54 | 16.25  |
|                    | MSCI Europe                 | 4.37   | 7.88   | 15.31  | 13.69  | 11.04 | 12.82 | 5.68  | 1.79  | 19.89  | -15.06 | 16.30 | 5.38   |
|                    | MSCI World Small Cap        | 0.70   | -6.31  | -3.06  | 5.91   | 4.58  | 10.78 | 6.52  | 8.15  | 15.76  | -18.76 | 15.75 | 15.96  |
|                    | MSCI World Ex USA Small Cap | 5.52   | 5.74   | 9.10   | 12.54  | 5.12  | 9.46  | 5.47  | 2.76  | 12.62  | -20.59 | 11.14 | 12.78  |
|                    | FTSE 100                    | 2.80   | 6.70   | 12.42  | 15.43  | 10.27 | 12.86 | 4.53  | 7.73  | 14.38  | -7.01  | 17.36 | -8.73  |
|                    | FTSE All Small              | 4.62   | 3.93   | 3.53   | 11.40  | 4.14  | 11.83 | 5.28  | 8.62  | 12.57  | -23.06 | 22.15 | 10.77  |
|                    | STOXX Europe 600            | 4.53   | 8.01   | 15.33  | 13.97  | 10.95 | 12.75 | 5.78  | 1.97  | 19.87  | -16.14 | 16.09 | 6.83   |
| Nikkei 225 Average | 6.10                        | -0.40  | 0.27   | 5.14   | 8.57   | 7.62  | 6.12  | 8.45  | 22.05 | -19.49 | -4.69  | 23.99 |        |
| Sectors            | S&P 500 Comm. Services      | 0.75   | -13.40 | -5.50  | 16.83  | 18.64 | 14.56 | 9.77  | 40.23 | 55.80  | -39.89 | 21.57 | 23.61  |
|                    | S&P 500 Cons Disc           | -0.32  | -17.70 | -14.08 | 11.34  | 8.21  | 11.32 | 11.39 | 30.14 | 42.41  | -37.03 | 24.43 | 33.30  |
|                    | S&P 500 Cons Staples        | 1.23   | 4.40   | 6.53   | 14.84  | 6.39  | 11.49 | 9.10  | 14.87 | 0.52   | -0.62  | 18.63 | 10.75  |
|                    | S&P 500 Energy              | -13.65 | -6.76  | -4.83  | -10.81 | 6.32  | 21.28 | 4.02  | 5.72  | -1.33  | 65.72  | 54.64 | -33.68 |
|                    | S&P 500 Financials          | -2.08  | -4.87  | 1.37   | 22.82  | 14.36 | 18.77 | 11.80 | 30.56 | 12.15  | -10.53 | 35.04 | -1.69  |
|                    | S&P 500 Health Care         | -3.70  | -3.93  | 2.59   | 1.86   | 4.29  | 8.90  | 8.88  | 2.58  | 2.06   | -1.95  | 26.13 | 13.45  |
|                    | S&P 500 Industrials         | 0.19   | -4.79  | 0.00   | 9.78   | 13.26 | 17.34 | 10.84 | 17.47 | 18.13  | -5.48  | 21.12 | 11.06  |
|                    | S&P 500 Info Tech           | 1.62   | -8.58  | -11.24 | 13.79  | 19.12 | 21.56 | 20.56 | 36.61 | 57.84  | -28.19 | 34.53 | 43.89  |
|                    | S&P 500 Materials           | -2.17  | -4.75  | 0.58   | -3.28  | 1.76  | 12.36 | 7.50  | -0.04 | 12.55  | -12.27 | 27.28 | 20.73  |
|                    | S&P 500 Real Estate         | -1.20  | 0.49   | 2.34   | 18.35  | -0.39 | 7.65  | 6.97  | 5.23  | 12.36  | -26.13 | 46.19 | -2.17  |
|                    | S&P 500 Utilities           | 0.10   | 2.05   | 5.04   | 21.98  | 6.84  | 10.14 | 9.60  | 23.43 | -7.08  | 1.57   | 17.67 | 0.48   |

**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 provided is for informational use only. Results in US Dollar. See end of report for additional information.

## EQUITIES

## Asset Class Return Analysis (%)

Higher ↑

|  | 2015                            | 2016                            | 2017                             | 2018                              | 2019                             | 2020                             | 2021                             | 2022                              | 2023                             | 2024                            | YTD 2025                        |
|--|---------------------------------|---------------------------------|----------------------------------|-----------------------------------|----------------------------------|----------------------------------|----------------------------------|-----------------------------------|----------------------------------|---------------------------------|---------------------------------|
|  | Growth<br>5.67                  | Small-Cap<br>21.31              | Emerging Markets<br>37.28        | Growth<br>-1.51                   | Growth<br>36.39                  | Growth<br>38.49                  | S&P 500<br>28.71                 | Value<br>-7.54                    | Growth<br>42.68                  | Growth<br>33.36                 | International<br>11.76          |
|  | International Small-Cap<br>5.46 | Value<br>17.34                  | International Small-Cap<br>31.04 | S&P 500<br>-4.38                  | S&P 500<br>31.49                 | Small-Cap<br>19.96               | Growth<br>27.60                  | International<br>-14.45           | S&P 500<br>26.29                 | S&P 500<br>25.02                | International Small-Cap<br>9.10 |
|  | S&P 500<br>1.38                 | Mid-Cap<br>13.80                | Growth<br>30.21                  | Value<br>-8.27                    | Mid-Cap<br>30.54                 | S&P 500<br>18.40                 | Value<br>25.16                   | Mid-Cap<br>-17.32                 | Global<br>22.20                  | Global<br>17.49                 | Emerging Markets<br>4.28        |
|  | International<br>-0.81          | S&P 500<br>11.96                | International<br>25.03           | Mid-Cap<br>-9.06                  | Global<br>26.60                  | Emerging Markets<br>18.31        | Mid-Cap<br>22.58                 | S&P 500<br>-18.11                 | International<br>18.24           | Mid-Cap<br>15.34                | Global<br>-0.40                 |
|  | Global<br>-2.36                 | Emerging Markets<br>11.19       | Global<br>23.97                  | Global<br>-9.42                   | Value<br>26.54                   | Mid-Cap<br>17.10                 | Global<br>18.54                  | Global<br>-18.36                  | Mid-Cap<br>17.23                 | Value<br>14.37                  | Value<br>-0.98                  |
|  | Mid-Cap<br>-2.44                | Global<br>7.86                  | S&P 500<br>21.83                 | Small-Cap<br>-11.01               | Small-Cap<br>25.52               | Global<br>16.25                  | Small-Cap<br>14.82               | Emerging Markets<br>-20.09        | Small-Cap<br>16.93               | Small-Cap<br>11.54              | Mid-Cap<br>-4.40                |
|  | Value<br>-3.83                  | Growth<br>7.08                  | Mid-Cap<br>18.52                 | International<br>-13.79           | International Small-Cap<br>25.41 | International Small-Cap<br>12.78 | International<br>11.26           | Small-Cap<br>-20.44               | International Small-Cap<br>12.62 | Emerging Markets<br>7.50        | S&P 500<br>-4.92                |
|  | Small-Cap<br>-4.41              | International Small-Cap<br>4.32 | Small-Cap<br>14.65               | Emerging Markets<br>-14.58        | International<br>22.01           | International<br>7.82            | International Small-Cap<br>11.14 | International Small-Cap<br>-20.59 | Value<br>11.46                   | International<br>3.82           | Growth<br>-8.37                 |
|  | Emerging Markets<br>-14.92      | International<br>1.00           | Value<br>13.66                   | International Small-Cap<br>-18.07 | Emerging Markets<br>18.42        | Value<br>2.80                    | Emerging Markets<br>-2.54        | Growth<br>-29.14                  | Emerging Markets<br>9.83         | International Small-Cap<br>2.76 | Small-Cap<br>-11.57             |

Lower ↓

**Past performance is no guarantee of future results.**

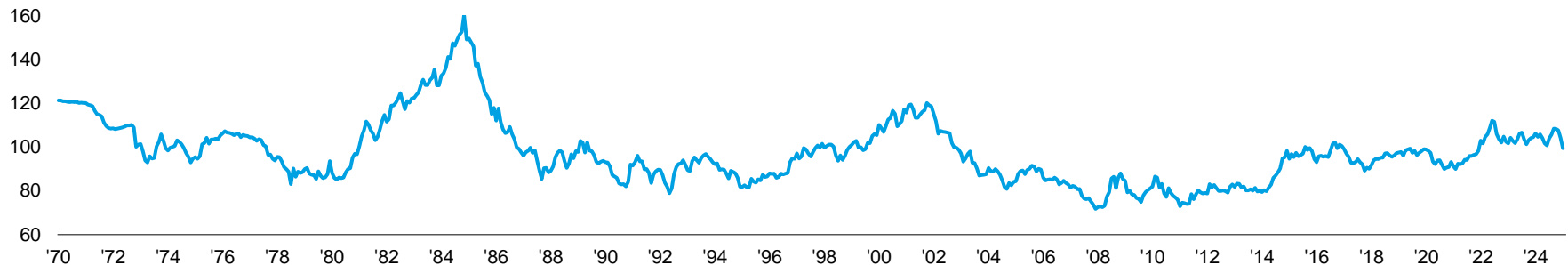
It is not possible to invest directly in an index. In general, Foreign securities are subject to currency, political, economic and market risks. The risks of investing in emerging market countries are greater than investments in foreign developed countries. Investors should carefully review the risks of each asset class prior to investing. Source: Morningstar as of 4/30/25. 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)        | -                        | -     | -     | -     | -     | -4.97                    | -8.91 | -5.94 | -2.46 | -0.74 | 4.00                     |
| Euro (EUR) *             | 5.24                     | 9.78  | 6.31  | 2.52  | 0.75  | -                        | -     | -     | -     | -     | 1.77                     |
| British Pound (GBP)      | 3.48                     | 6.65  | 6.67  | 2.09  | 1.15  | -1.67                    | -2.85 | 0.34  | -0.42 | 0.40  | 3.67                     |
| Japanese Yen (JPY)       | 4.84                     | 10.18 | 10.32 | -3.16 | -5.60 | -0.38                    | 0.37  | 3.77  | -5.54 | -6.30 | 0.59                     |
| Australian Dollar (AUD)  | 2.68                     | 3.34  | -1.46 | -3.44 | -0.46 | -2.43                    | -5.86 | -7.31 | -5.81 | -1.19 | 3.45                     |
| Canadian Dollar (CAD)    | 4.20                     | 4.12  | -0.54 | -2.56 | 0.11  | -0.99                    | -5.15 | -6.45 | -4.95 | -0.63 | 2.56                     |
| New Zealand Dollar (NZD) | 4.79                     | 5.93  | 0.29  | -2.94 | -0.77 | -0.43                    | -3.51 | -5.67 | -5.33 | -1.51 | 3.02                     |
| Norwegian Krone (NOK)    | 1.59                     | 9.52  | 6.79  | -3.51 | -0.29 | -3.47                    | -0.23 | 0.45  | -5.88 | -1.03 | 3.98                     |
| Swedish Krona (SEK)      | 4.15                     | 14.56 | 13.80 | 0.51  | 0.25  | -1.03                    | 4.36  | 7.04  | -1.96 | -0.49 | 1.86                     |
| Danish Krone (DKK)       | 5.20                     | 9.69  | 6.24  | 2.41  | 0.74  | -0.04                    | -0.08 | -0.07 | -0.11 | -0.01 | 1.55                     |
| Swiss Franc (CHF)        | 7.67                     | 10.28 | 11.61 | 5.71  | 3.27  | 2.31                     | 0.46  | 4.98  | 3.11  | 2.50  | -0.16                    |

## U.S. Dollar Index



**Past performance is no guarantee of future results.**

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## 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                       |
| <b>Asia, excluding Japan</b> |                          |       |        |       |       |                          |        |        |       |       |                          |
| Chinese Renminbi (CNY)       | -0.15                    | 0.50  | -0.29  | -3.20 | -0.59 | -5.12                    | -8.45  | -6.21  | -5.58 | -1.32 | 1.44                     |
| Malaysian Ringgit (MYR)      | 2.84                     | 3.63  | 10.60  | 0.30  | -0.07 | -2.28                    | -5.60  | 4.03   | -2.17 | -0.81 | 3.06                     |
| Indian Rupee (INR)           | 1.17                     | 1.34  | -1.24  | -3.28 | -2.33 | -3.86                    | -7.69  | -7.10  | -5.66 | -3.05 | 5.99                     |
| Indonesian Rupiah (IDR)      | -0.24                    | -3.04 | -2.05  | -4.41 | -2.17 | -5.20                    | -11.68 | -7.86  | -6.76 | -2.89 | 6.12                     |
| Philippine Peso (PHP)        | 2.45                     | 3.56  | 3.43   | -2.23 | -2.03 | -2.64                    | -5.66  | -2.72  | -4.63 | -2.76 | 4.17                     |
| Singapore Dollar (SGD)       | 2.94                     | 4.48  | 4.45   | 1.88  | 1.52  | -2.18                    | -4.83  | -1.76  | -0.62 | 0.76  | 2.10                     |
| South Korean Won (KRW)       | 3.59                     | 3.56  | -2.77  | -4.04 | -3.04 | -1.57                    | -5.66  | -8.55  | -6.40 | -3.75 | 2.34                     |
| Taiwanese Dollar (TWD)       | 3.81                     | 2.51  | 1.81   | -2.68 | -1.45 | -1.35                    | -6.62  | -4.24  | -5.08 | -2.18 | 1.33                     |
| Thai Baht (THB)              | 1.56                     | 2.07  | 10.94  | 0.84  | -0.64 | -3.50                    | -7.03  | 4.35   | -1.64 | -1.37 | 1.53                     |
| <b>Latin America</b>         |                          |       |        |       |       |                          |        |        |       |       |                          |
| Brazilian Real (BRL)         | 1.17                     | 9.12  | -8.45  | -4.36 | -0.89 | -3.86                    | -0.60  | -13.88 | -6.71 | -1.63 | 14.50                    |
| Chilean Peso (CLP)           | -0.46                    | 3.99  | -0.03  | -3.74 | -2.66 | -5.42                    | -5.28  | -5.97  | -6.11 | -3.38 | 5.02                     |
| Colombian Peso (COP)         | -0.75                    | 4.30  | -7.86  | -1.98 | -1.48 | -5.68                    | -4.99  | -13.33 | -4.39 | -2.21 | 8.98                     |
| Mexican Peso (MXN)           | 4.51                     | 6.22  | -12.96 | 1.40  | 3.99  | -0.69                    | -3.24  | -18.13 | -1.09 | 3.23  | 8.41                     |
| Peruvian New Sol (PEN)       | -0.33                    | 2.24  | 1.99   | 1.48  | -1.68 | -5.29                    | -6.86  | -4.07  | -1.02 | -2.41 | 4.06                     |

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## 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                       |
| <b>Europe</b>                 |                          |       |        |        |        |                          |        |        |        |        |                          |
| Czech Koruna (CZK)            | 5.43                     | 10.80 | 7.31   | 2.05   | 2.38   | 0.19                     | 0.93   | 0.93   | -0.45  | 1.62   | 3.25                     |
| Hungarian Forint (HUF)        | 4.88                     | 11.66 | 2.75   | 0.26   | -2.04  | -0.34                    | 1.72   | -3.35  | -2.21  | -2.77  | 6.10                     |
| Polish Zloty (PLN)            | 3.06                     | 9.78  | 7.54   | 5.65   | 1.94   | -2.06                    | 0.00   | 1.15   | 3.06   | 1.18   | 4.35                     |
| Romanian Leu (RON)            | 5.23                     | 9.71  | 6.27   | 2.31   | 0.13   | -0.01                    | -0.06  | -0.04  | -0.21  | -0.61  | 6.51                     |
| Russian Ruble (RUB)           | 3.35                     | 33.84 | 13.99  | -4.77  | -2.05  | -1.79                    | 21.92  | 7.22   | -7.11  | -2.77  | --                       |
| Turkish New Lira (TRY)        | -1.30                    | -8.06 | -15.82 | -27.17 | -28.90 | -6.21                    | -16.25 | -20.82 | -28.96 | -29.42 | 44.92                    |
| <b>Middle East and Africa</b> |                          |       |        |        |        |                          |        |        |        |        |                          |
| Ghanaian Cedi (GHS)           | 9.93                     | 4.26  | -3.05  | -18.89 | -16.28 | 4.46                     | -5.03  | -8.81  | -20.88 | -16.90 | 17.90                    |
| Israeli Shekel (ILS)          | 2.42                     | 0.13  | 2.57   | -2.80  | -0.94  | -2.68                    | -8.79  | -3.52  | -5.19  | -1.67  | 4.12                     |
| Kenyan Shilling (KES)         | -0.08                    | -0.04 | 4.33   | -3.63  | -3.69  | -5.05                    | -8.94  | -1.87  | -6.00  | -4.40  | 17.90                    |
| Moroccan Dirham (MAD)         | 4.04                     | 9.46  | 9.18   | 2.56   | 1.26   | -1.14                    | -0.29  | 2.70   | 0.04   | 0.51   | 2.23                     |
| Nigerian Naira (NGN)          | -4.25                    | -3.66 | -14.83 | -36.26 | -24.86 | -9.01                    | -12.24 | -19.89 | -37.83 | -25.41 | 21.57                    |
| South African Rand (ZAR)      | -1.15                    | 1.42  | 1.23   | -5.27  | -0.26  | -6.07                    | -7.62  | -4.78  | -7.60  | -1.00  | 7.99                     |
| Ugandan Shilling (UGX)        | -0.08                    | 1.01  | 3.93   | -0.99  | 0.76   | -5.05                    | -7.99  | -2.24  | -3.43  | 0.01   | 15.25                    |
| Zambian Kwacha (ZMK)          | 1.08                     | 0.38  | -3.60  | -15.04 | -7.69  | -3.95                    | -8.56  | -9.32  | -17.13 | -8.37  | 14.50                    |

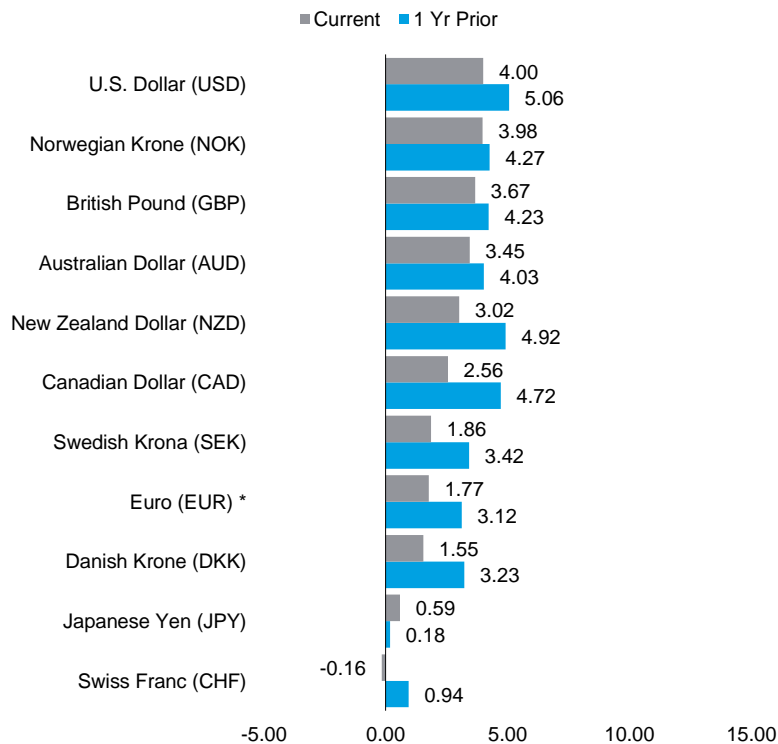
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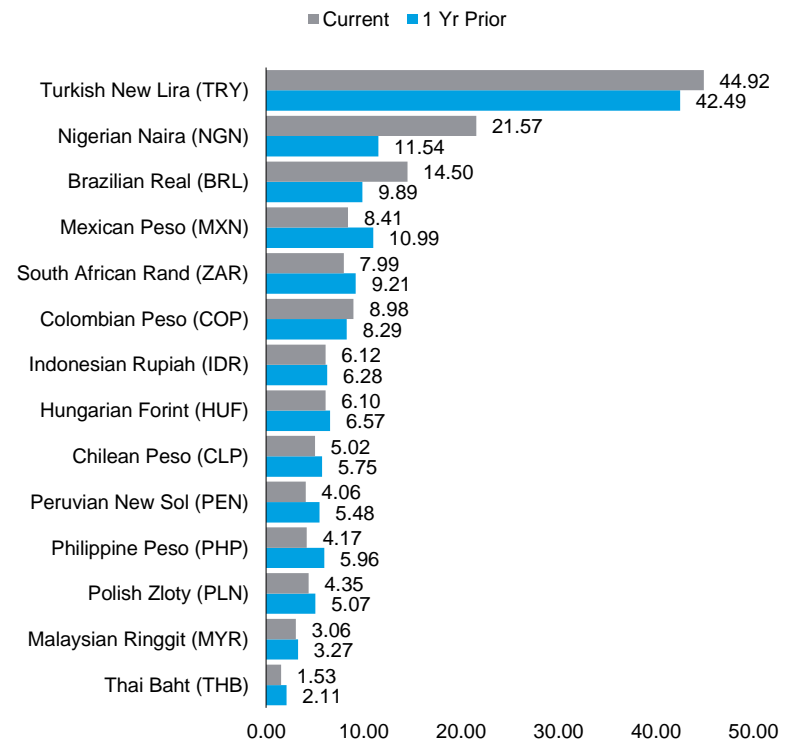
## ALTERNATIVES

# 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.**

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## ALTERNATIVES

## Commodities Return Analysis (%)

| Index                            | 1-Mo.         | 3-Mo.        | YTD          | 1Y            | 3Y            | 5Y           |
|----------------------------------|---------------|--------------|--------------|---------------|---------------|--------------|
| <b>Bloomberg Commodity Index</b> | <b>-4.81</b>  | <b>-0.30</b> | <b>3.64</b>  | <b>4.08</b>   | <b>-3.70</b>  | <b>13.74</b> |
| <b>Bloomberg Sub Agriculture</b> | <b>1.18</b>   | <b>-1.53</b> | <b>3.23</b>  | <b>3.24</b>   | <b>-4.76</b>  | <b>13.70</b> |
| Coffee                           | 6.57          | 10.46        | 31.00        | 103.2         | 34.63         | 34.79        |
| Corn                             | 3.02          | -4.19        | 1.09         | -1.49         | -12.97        | 11.47        |
| Cotton                           | -2.05         | -1.62        | -4.90        | -16.77        | -17.38        | 7.57         |
| Soybean                          | 2.20          | -1.37        | 2.08         | -8.27         | -5.16         | 12.01        |
| Soybean Oil                      | 8.49          | 5.25         | 20.69        | 15.23         | -10.15        | 20.84        |
| Sugar                            | -7.27         | -1.66        | -0.84        | 0.12          | 8.95          | 18.33        |
| Wheat                            | -3.36         | -8.71        | -7.05        | -20.71        | -26.42        | -6.36        |
| <b>Bloomberg Sub Energy</b>      | <b>-16.23</b> | <b>-8.64</b> | <b>-7.03</b> | <b>-10.61</b> | <b>-15.75</b> | <b>13.13</b> |
| Brent Crude                      | -17.16        | -16.50       | -14.08       | -19.24        | -4.12         | 30.83        |
| Heating Oil                      | -10.27        | -10.11       | -5.74        | -14.65        | -0.70         | 33.67        |
| Natural Gas                      | -17.81        | 9.49         | 7.98         | 9.10          | -45.34        | -21.41       |
| Unleaded Gas                     | -11.56        | -10.29       | -8.64        | -17.57        | 1.64          | 37.72        |
| WTI Crude Oil                    | -17.86        | -17.91       | -16.12       | -18.97        | -6.68         | 29.62        |

| Index                                  | 1-Mo.        | 3-Mo.        | YTD          | 1Y           | 3Y           | 5Y           |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| <b>Bloomberg Sub Industrial Metals</b> | <b>-6.94</b> | <b>-0.33</b> | <b>1.04</b>  | <b>-7.49</b> | <b>-6.91</b> | <b>11.02</b> |
| Aluminum                               | -5.63        | -7.72        | -5.50        | -7.96        | -8.37        | 8.40         |
| Copper                                 | -9.15        | 6.59         | 13.69        | 1.60         | 3.30         | 15.34        |
| Nickel                                 | -3.19        | 1.02         | 0.13         | -20.85       | -21.49       | 4.79         |
| Zinc                                   | -9.10        | -5.23        | -13.12       | -11.58       | -11.18       | 7.89         |
| <b>Bloomberg Sub Precious Metals</b>   | <b>3.09</b>  | <b>13.31</b> | <b>21.94</b> | <b>37.69</b> | <b>17.65</b> | <b>13.55</b> |
| Gold                                   | 5.73         | 17.17        | 24.98        | 42.58        | 19.31        | 13.09        |
| Platinum                               | -5.32        | -7.35        | 6.59         | 1.98         | 2.61         | 4.01         |
| Silver                                 | -5.71        | 0.88         | 11.72        | 21.89        | 11.86        | 15.82        |
| <b>Bloomberg Sub Livestock</b>         | <b>2.99</b>  | <b>2.82</b>  | <b>7.87</b>  | <b>17.83</b> | <b>11.49</b> | <b>10.76</b> |
| Lean Hogs                              | 3.51         | -2.59        | 1.18         | 8.75         | 1.66         | 9.19         |
| Live Cattle                            | 2.69         | 5.97         | 11.76        | 25.85        | 17.70        | 11.94        |

**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 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<br>↑<br>Lower | Multi-Strategy<br>3.84            | MLP<br>18.31                      | Long/Short Equity<br>13.41        | Fixed Income<br>Arbitrage<br>1.10 | Long/Short Equity<br>12.17        | Convertible<br>Arbitrage<br>10.25 | MLP<br>40.17                      | MLP<br>30.92                       | MLP<br>26.56                      | MLP<br>24.41                      | MLP<br>12.58                      |
|                      | Long/Short Equity<br>3.55         | Commodity<br>11.77                | Currency<br>11.54                 | Global Macro<br>-0.11             | Global Macro<br>10.38             | Long/Short Equity<br>7.86         | Commodity<br>27.11                | Managed Futures<br>19.12           | Long/Short Equity<br>10.93        | Long/Short Equity<br>14.78        | Commodity<br>8.88                 |
|                      | Equity Market<br>Neutral<br>1.69  | Convertible<br>Arbitrage<br>6.60  | Equity Market<br>Neutral<br>8.45  | Multi-Strategy<br>-1.05           | Managed Futures<br>9.01           | Event Driven<br>6.95              | Event Driven<br>12.92             | Commodity<br>16.09                 | Event Driven<br>9.30              | Event Driven<br>13.03             | Equity Market<br>Neutral<br>4.41  |
|                      | Convertible<br>Arbitrage<br>0.81  | Multi-Strategy<br>4.41            | Multi-Strategy<br>6.83            | Convertible<br>Arbitrage<br>-2.26 | Event Driven<br>8.22              | Global Macro<br>6.53              | Global Macro<br>9.60              | Global Macro<br>15.89              | Currency<br>8.44                  | Multi-Strategy<br>8.66            | Global Macro<br>3.53              |
|                      | Fixed Income<br>Arbitrage<br>0.59 | Fixed Income<br>Arbitrage<br>4.29 | Fixed Income<br>Arbitrage<br>6.52 | Currency<br>-3.33                 | Convertible<br>Arbitrage<br>8.15  | Multi-Strategy<br>5.60            | Long/Short Equity<br>8.35         | Equity Market<br>Neutral<br>1.71   | Multi-Strategy<br>8.04            | Fixed Income<br>Arbitrage<br>8.49 | Multi-Strategy<br>3.44            |
|                      | Global Macro<br>0.18              | Global Macro<br>3.58              | Event Driven<br>6.30              | Event Driven<br>-3.95             | Commodity<br>7.69                 | Fixed Income<br>Arbitrage<br>3.64 | Managed Futures<br>8.19           | Multi-Strategy<br>1.27             | Fixed Income<br>Arbitrage<br>7.71 | Equity Market<br>Neutral<br>8.05  | Currency<br>3.13                  |
|                      | Managed Futures<br>-0.93          | Currency<br>3.54                  | Convertible<br>Arbitrage<br>5.01  | Long/Short Equity<br>-4.62        | Multi-Strategy<br>7.25            | Managed Futures<br>1.86           | Multi-Strategy<br>6.97            | Fixed Income<br>Arbitrage<br>-0.97 | Equity Market<br>Neutral<br>6.73  | Convertible<br>Arbitrage<br>7.35  | Fixed Income<br>Arbitrage<br>2.67 |
|                      | Event Driven<br>-6.29             | Event Driven<br>2.68              | Managed Futures<br>3.29           | Equity Market<br>Neutral<br>-5.00 | MLP<br>6.56                       | Currency<br>1.73                  | Convertible<br>Arbitrage<br>6.33  | Convertible<br>Arbitrage<br>-3.32  | Convertible<br>Arbitrage<br>4.04  | Global Macro<br>5.52              | Convertible<br>Arbitrage<br>2.51  |
|                      | Currency<br>-7.61                 | Long/Short Equity<br>-3.43        | Global Macro<br>2.14              | Managed Futures<br>-6.67          | Fixed Income<br>Arbitrage<br>6.10 | Equity Market<br>Neutral<br>1.69  | Equity Market<br>Neutral<br>6.16  | Long/Short Equity<br>-5.77         | Managed Futures<br>-2.78          | Commodity<br>5.38                 | Event Driven<br>0.73              |
|                      | Commodity<br>-24.66               | Equity Market<br>Neutral<br>-4.58 | Commodity<br>1.70                 | Commodity<br>-11.25               | Currency<br>5.20                  | Commodity<br>-3.12                | Fixed Income<br>Arbitrage<br>5.22 | Event Driven<br>-6.80              | Global Macro<br>-5.19             | Managed Futures<br>2.87           | Long/Short Equity<br>0.66         |
|                      | MLP<br>-32.59                     | Managed Futures<br>-6.84          | MLP<br>-6.52                      | MLP<br>-12.42                     | Equity Market<br>Neutral<br>1.58  | MLP<br>-28.69                     | Currency<br>-3.09                 | Currency<br>-7.14                  | Commodity<br>-7.91                | Currency<br>-1.08                 | Managed Futures<br>-1.72          |

**Past performance is no guarantee of future results.** It is not possible to invest directly in an index. Source: Morningstar as of 3/31/25. \*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 EMLI+ 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          | 0.68             | 0.86      | 0.39           | 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    | 0.74          | 1.00             | 0.61      | 0.40           | 0.44      | 0.70       | 0.56      | 0.48        |
| Small Cap        | 0.83    | 0.74          | 0.55             | 1.00      | 0.29           | 0.34      | 0.77       | 0.64      | 0.37        |
| U.S. Aggregate   | 0.61    | 0.69          | 0.62             | 0.51      | 1.00           | 0.84      | 0.50       | 0.15      | -0.05       |
| Municipal        | 0.66    | 0.68          | 0.66             | 0.56      | 0.88           | 1.00      | 0.57       | 0.29      | 0.04        |
| High Yield       | 0.82    | 0.80          | 0.63             | 0.76      | 0.73           | 0.75      | 1.00       | 0.80      | 0.49        |
| Bank Loan        | 0.56    | 0.56          | 0.51             | 0.58      | 0.34           | 0.42      | 0.70       | 1.00      | 0.49        |
| Commodities      | 0.31    | 0.34          | 0.35             | 0.25      | 0.03           | 0.04      | 0.34       | 0.37      | 1.00        |

5 Years ended April 30, 2025
10 Years ended April 30, 2025

**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. 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. |
|-----------------------------|-------|-------|--------|
| Intermediate Core-Plus Bond | 6,706 | 4,587 | 13,767 |
| Multisector Bond            | 3,258 | 9,551 | 40,686 |
| Ultrashort Bond             | 1,171 | 3,734 | 11,204 |
| Nontraditional Bond         | 988   | 4,674 | 12,117 |
| Equity Market Neutral       | 751   | 1,832 | 3,497  |
| Equity Hedged               | 708   | 856   | 1,143  |
| Europe Stock                | 707   | 1,162 | 1,563  |
| Macro Trading               | 472   | 1,236 | 3,529  |
| Corporate Bond              | 468   | 332   | 3,986  |
| Long Government             | 363   | 2,702 | 5,381  |

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

|                           | 1 Mo.  | 3 Mo.   | 12 Mo.   |
|---------------------------|--------|---------|----------|
| Mid-Cap Value             | -2,737 | -7,200  | -23,593  |
| Mid-Cap Growth            | -2,798 | -8,121  | -32,881  |
| Long-Term Bond            | -3,110 | -4,048  | -5,250   |
| Diversified Emerging Mkts | -3,590 | -7,214  | -18,143  |
| Intermediate Government   | -4,199 | -5,163  | -14,109  |
| Moderate Allocation       | -5,916 | -12,359 | -44,030  |
| Foreign Large Blend       | -7,132 | -13,777 | -5,166   |
| Large Value               | -7,371 | -18,855 | -71,763  |
| Large Blend               | -8,536 | -19,678 | -126,694 |
| Large Growth              | -9,482 | -35,184 | -127,956 |

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

|                           | 1 Mo.  | 3 Mo.  | 12 Mo.  |
|---------------------------|--------|--------|---------|
| Large Blend               | 21,973 | 69,667 | 378,497 |
| Ultrashort Bond           | 14,065 | 40,443 | 87,808  |
| Large Value               | 11,261 | 18,911 | 68,460  |
| Trading--Leveraged Equity | 8,006  | 5,631  | 12,284  |
| Foreign Large Blend       | 7,902  | 17,784 | 65,906  |
| Commodities Focused       | 7,394  | 11,006 | 17,435  |
| Large Growth              | 6,397  | 22,369 | 97,483  |
| Europe Stock              | 5,718  | 7,994  | 1,158   |
| Intermediate Core Bond    | 4,466  | 14,182 | 60,528  |
| Derivative Income         | 3,799  | 15,715 | 43,629  |

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

|                         | 1 Mo.  | 3 Mo.  | 12 Mo.  |
|-------------------------|--------|--------|---------|
| Technology              | -936   | 2,995  | 16,879  |
| Communications          | -1,001 | 331    | -824    |
| Equity Energy           | -1,043 | -3,679 | -10,775 |
| Health                  | -1,132 | -1,888 | -9,455  |
| Digital Assets          | -1,465 | 1,951  | 31,505  |
| Consumer Cyclical       | -2,106 | -1,968 | -3,382  |
| Small Value             | -2,382 | -835   | 8,656   |
| Foreign Large Growth    | -3,020 | -2,896 | 3,853   |
| Bank Loan               | -3,639 | 671    | 8,646   |
| Intermediate Government | -4,588 | -511   | 25,460  |

Source: Morningstar as of 3/31/25. 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 (%)

Higher ↑

|  | 2015                       | 2016                      | 2017                      | 2018                       | 2019                      | 2020                      | 2021                      | 2022                       | 2023                      | 2024                     | YTD 2025                 |
|--|----------------------------|---------------------------|---------------------------|----------------------------|---------------------------|---------------------------|---------------------------|----------------------------|---------------------------|--------------------------|--------------------------|
|  | Municipal<br>3.30          | Small-Cap<br>21.31        | Emerging Markets<br>37.28 | Municipal<br>1.28          | S&P 500<br>31.49          | Small-Cap<br>19.96        | S&P 500<br>28.71          | Commodities<br>16.09       | S&P 500<br>26.29          | S&P 500<br>25.02         | International<br>11.76   |
|  | S&P 500<br>1.38            | High Yield<br>17.49       | International<br>25.03    | Bank Loan<br>0.44          | Small-Cap<br>25.52        | S&P 500<br>18.40          | Commodities<br>27.11      | Bank Loan<br>-0.77         | International<br>18.24    | Small-Cap<br>11.54       | Emerging Markets<br>4.28 |
|  | US Agg<br>0.55             | S&P 500<br>11.96          | S&P 500<br>21.83          | US Agg<br>0.01             | International<br>22.01    | Emerging Markets<br>18.31 | Small-Cap<br>14.82        | Municipal<br>-8.53         | Small-Cap<br>16.93        | Asset Allocation<br>9.79 | Commodities<br>3.64      |
|  | Bank Loan<br>-0.69         | Commodities<br>11.77      | Small-Cap<br>14.65        | High Yield<br>-2.26        | Asset Allocation<br>18.70 | Asset Allocation<br>11.95 | Asset Allocation<br>11.43 | High Yield<br>-11.22       | Asset Allocation<br>14.09 | Bank Loan<br>8.95        | US Agg<br>3.18           |
|  | International<br>-0.81     | Emerging Markets<br>11.19 | Asset Allocation<br>14.02 | S&P 500<br>-4.38           | Emerging Markets<br>18.42 | International<br>7.82     | International<br>11.26    | US Agg<br>-13.01           | High Yield<br>13.46       | High Yield<br>8.20       | High Yield<br>0.95       |
|  | Asset Allocation<br>-2.03  | Bank Loan<br>10.16        | High Yield<br>7.48        | Asset Allocation<br>-5.40  | High Yield<br>14.41       | US Agg<br>7.51            | High Yield<br>5.36        | Asset Allocation<br>-13.04 | Bank Loan<br>13.32        | Emerging Markets<br>7.50 | Asset Allocation<br>0.48 |
|  | Small-Cap<br>-4.41         | Asset Allocation<br>8.61  | Municipal<br>5.45         | Small-Cap<br>-11.01        | US Agg<br>8.72            | High Yield<br>6.17        | Bank Loan<br>5.20         | International<br>-14.45    | Emerging Markets<br>9.83  | Commodities<br>5.38      | Bank Loan<br>0.43        |
|  | High Yield<br>-4.64        | US Agg<br>2.65            | Bank Loan<br>4.12         | Commodities<br>-11.25      | Bank Loan<br>8.64         | Municipal<br>5.21         | Municipal<br>1.52         | S&P 500<br>-18.11          | Municipal<br>6.40         | International<br>3.82    | Municipal<br>-1.03       |
|  | Emerging Markets<br>-14.92 | International<br>1.00     | US Agg<br>3.54            | International<br>-13.79    | Commodities<br>7.69       | Bank Loan<br>3.12         | US Agg<br>-1.54           | Emerging Markets<br>-20.09 | US Agg<br>5.53            | US Agg<br>1.25           | S&P 500<br>-4.92         |
|  | Commodities<br>-24.66      | Municipal<br>0.25         | Commodities<br>1.70       | Emerging Markets<br>-14.57 | Municipal<br>7.54         | Commodities<br>-3.12      | Emerging Markets<br>-2.54 | Small-Cap<br>-20.44        | Commodities<br>-7.91      | Municipal<br>1.05        | Small-Cap<br>-11.57      |

Lower ↓

**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 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  
SEMELROTH**  
*Executive Director*



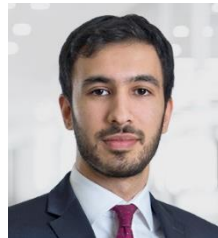
**ERIC ZHANG**  
*Executive Director*



**SCHUYLER  
HOOPER**  
*Executive Director*



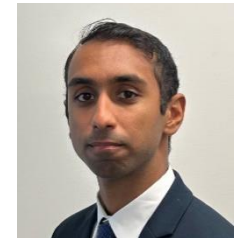
**GREG  
WATERMAN**  
*Executive Director*



**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**

*Senior Portfolio Manager, Global Multi-Asset Team*

**JUSTIN BOURGETTE, CFA**

*Portfolio Manager*

*Head of Investment Strategy for the High Yield Team*

**CRAIG BRANDON, CFA**

*Portfolio Manager*

*Co-Head of the Municipals Team*

**JIM CARON**

*Chief Investment Officer, Portfolio Solutions Group*

**AARON DUNN, CFA**

*Portfolio Manager*

*Co-Head of the Value Equity Team*

**GREG FINCK**

*Portfolio Manager*

*Co-Head of the Mortgage and Securitized Team*

**BRAD GODFREY, CFA**

*Co-Head of the Emerging Markets Team*

**KATIE HERR**

*Head of Fixed Income Product Strategy*

**LAUREN HOCHFELDER**

*Co-Chief Executive Officer of MSREI*

*Head of MSREI Americas*

**JITANIA KANDHARI**

*Deputy CIO, Solutions & Multi Asset Group;*

*Head of Macro & Thematic Research,*

*Emerging Markets; Portfolio Manager*

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*Co-Head of the Broad Markets Fixed Income Team*

**KYLE LEE, CFA**

*Portfolio Manager*

*Co-Head of the Emerging Markets Team*

**SCOTT R. NORBY**

*Private Credit and Equity*

**NISHA PATEL, CFA**

*Senior Portfolio Manager*

*Head of Fixed Income SMA Management, Parametric*

**CHRISTOPHER REMINGTON**

*Institutional Portfolio Manager*

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**ANDREW SLIMMON**

*Senior Portfolio Manager*

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**STEVEN TURNER, CFA**

*Head of Investment Selection,*

*Portfolio Solutions Group*

**MARK VAN DER ZWAN, CFA**

*Chief Investment Officer and Head of the AIP Hedge*

*Fund Team*



# 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.

**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.

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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.**

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