

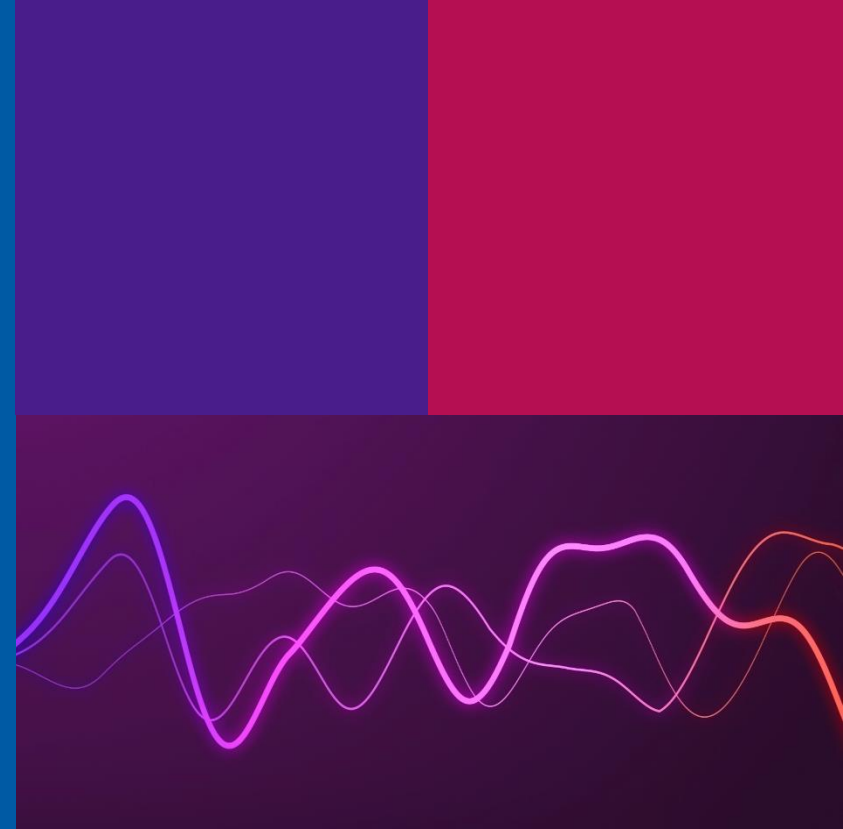
Morgan Stanley

INVESTMENT MANAGEMENT

# The BEAT

BONDS | EQUITIES | ALTERNATIVES | TRANSITION

January 2025



Previously known as the Monthly Market Monitor.

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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 January 2025



### Political Risks Still Exist

**U.S. inauguration and Europe.** A lot of focus will be placed on Day 1 of Trump 2.0, not just the first 100 days. Markets will focus on potential tariffs, deregulation and anything else at the top of the list that can be accomplished via executive order. However, the risk cuts both ways; any policies could lead to a positive surprise, and it may come down to how these actions are communicated to markets. Across the pond, political risks in Europe are still skewed to the downside, with a new potential French PM, Francois Bayrou, and German elections in February. In all, we have low expectations for fiscally driven positive news from Europe.



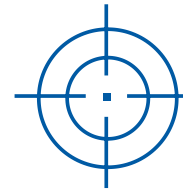
### The Power of the Pen: Tariffs and Deregulation

**For better or worse.** The markets will be wed to these two broad fiscal policies in 2025. The question for tariffs is whether they will be targeted (better) or broad-based (worse). Our assessment is for the better, not the worse. Tariffs can be thought of not just as trade policy but also as a more efficient economic-sanctions tool to motivate behavior across non-trade policies, such as border control, drug enforcement and reciprocal free trade agreements. As for deregulation, this will accrue benefits mainly to the small- and mid-cap sectors, more so than large caps. This is already evidenced in recent market performance and record leaps in SMID business confidence metrics. As a result, we have positioned exposure in this sector.



### Optimism, Yes. Euphoria, No.

**What a difference a year makes.** At this time last year, the consensus view was the economy was heading into a recession, and equities would undergo a sizeable correction. Today, the market is optimistic with a recession no longer the consensus, and estimates pointing to roughly 10% gains in the S&P 500. We think there could be better gains in the broader and mid-cap sectors of the market. Our focus is on earnings growth factors such as free cash flow, profitability, margin expansion and pricing power. This can be found across styles, not just large vs. small, or tech vs. non-tech. In other words, a less bifurcated market spurred on by deregulation and a smaller government with smaller outlays that spur economic productivity more evenly. The market is not euphoric yet, which is a warning sign of the end of a cycle.



### Bonds Are Priced to Perfection

**Are bonds more overvalued than equities?** We do not think the Fed will cut rates much below 4%, where this duration risk is largely already priced in. Credit spreads are historically tight and offer little excess return to compensate investors for the risk. Yes, yields are not exceptionally low, but they may not be high enough either. Many investors look to seek refuge in the bond market. But based on the tight level of spreads, these investors may be opting to hedge what they think are expensive equities with even more expensive bonds. Our choice is to barbell the risk and own high-quality duration against riskier assets.

## TOP IDEAS

# The Portfolio Solutions Group – Our Top 6 Ideas

## U.S. Mid-Caps: Broadening Equity Exposure

**Don't forget the middleman.** With our base case soft landing view intact, we continue to believe that the rally in U.S. equity markets will eventually broaden beyond a narrow set of names, as the non-mega cap segments have greater scope for earnings growth and an expansion in valuations.

## Materials: Leveraged to a Manufacturing Recovery

**A potential manufacturing inflection.** GDP growth was solid in 2024, but there has been a persistent divergence between a weak goods sector and a strong services sector. A convergence should be expected at some point and the rate cutting cycle is a relevant catalyst. The Materials sector has a strong historical relationship with manufacturing PMIs, suggesting a positive manufacturing PMI inflection could lift the sector after an extended period of underperformance.

## Healthcare: After Recent Underperformance, Time to Buy?

**Potential overshoot.** Healthcare relative performance in 2024 was amongst its worst in 30 years, nearly all realized since early September. Policy concerns emanating from the election are primary drivers, magnified by a broader rotation away from defensive sectors. These concerns are not new to Healthcare, and there has been a tendency to overshoot.

## India: Robust Growth with Scale

**Structural growth theme.** We hold a favorable view on Indian equities given the strong economic growth trajectory and healthy prospects for corporate earnings. Unlike some of its emerging market (EM) peers, India is a much more domestically oriented growth story, especially given low goods exports to the U.S., lower oil prices and capital controls that should keep household savings flowing to domestic assets.

## Gold: Support From Structural and Cyclical Factors

**Asymmetric upside potential.** Concerns over higher geopolitical volatility, China's slowdown, surging debt levels and inflationary risks are likely to translate into structurally higher demand for gold from less price-sensitive investors. On top of these structural trends, the ongoing rate cutting cycle lends cyclical support to the asset.

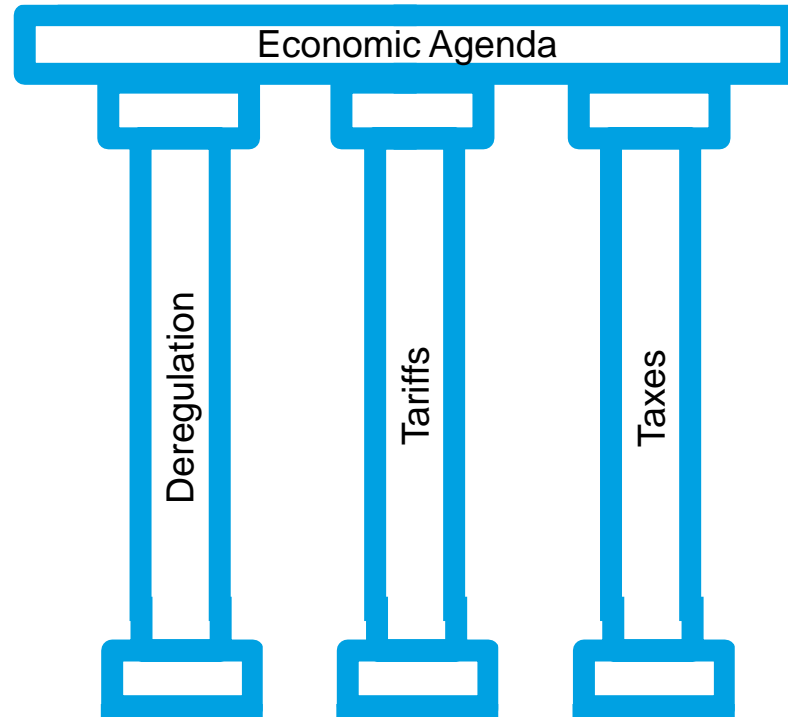
## Asset-Backed Securities: Our Top Bond Pick

**Mortgage Securities.** We mentioned that bond valuations are expensive, but one specific area that stands out as attractive is U.S. Mortgage-Backed Securities (MBS). Spreads in MBS and housing related non-agency MBS and ABS are still at attractive levels. Yield per unit of credit rating is also attractive especially on relative value vs. Investment Grade credit.

TOP IDEAS

# Trump Trifecta: A Policy Driven Economic Agenda

Trump's economic agenda rests on three main pillars: **Deregulation, Tariffs and Taxes**. It's important to see this as a process, not as independent items. Deregulation, tariffs and taxes are all parts of a policy tool aimed at increasing growth, reducing the deficit and generating reciprocal trade agreements.



Source: U.S. Treasury, MSIM. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

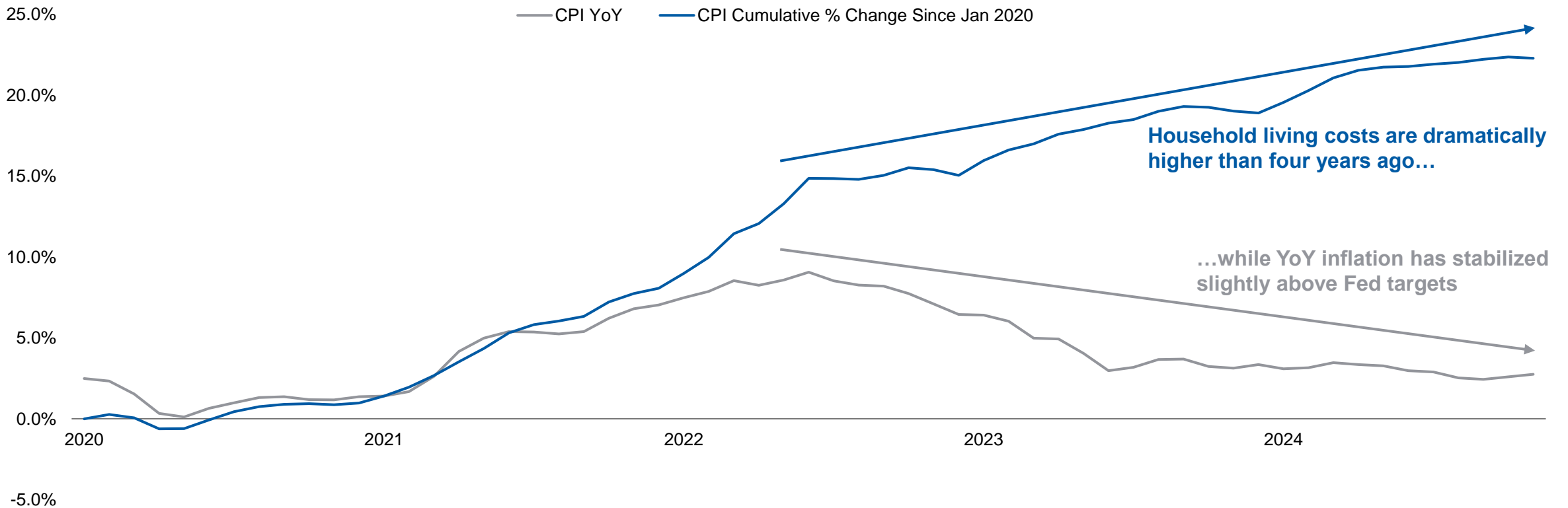
TOP IDEAS

# Inflation May Be Stabilizing, but Price Levels Are Much Higher Than 2020

While inflation metrics continue to show signs of stabilization near Fed targets, the absolute level of prices is much higher now than in early 2020, with the Consumer Price Index (CPI) up roughly 22% over that period. We continue to believe that inflation is the “wild card” as we enter 2025.

## While YoY (year-over-year) Inflation Closes in on 2%, Price Levels Remain Significantly Elevated From Four Years Ago

*CPI YoY, Cumulative % Change in CPI since January 2020*



Source: Bloomberg, MSIM. As of December 16, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

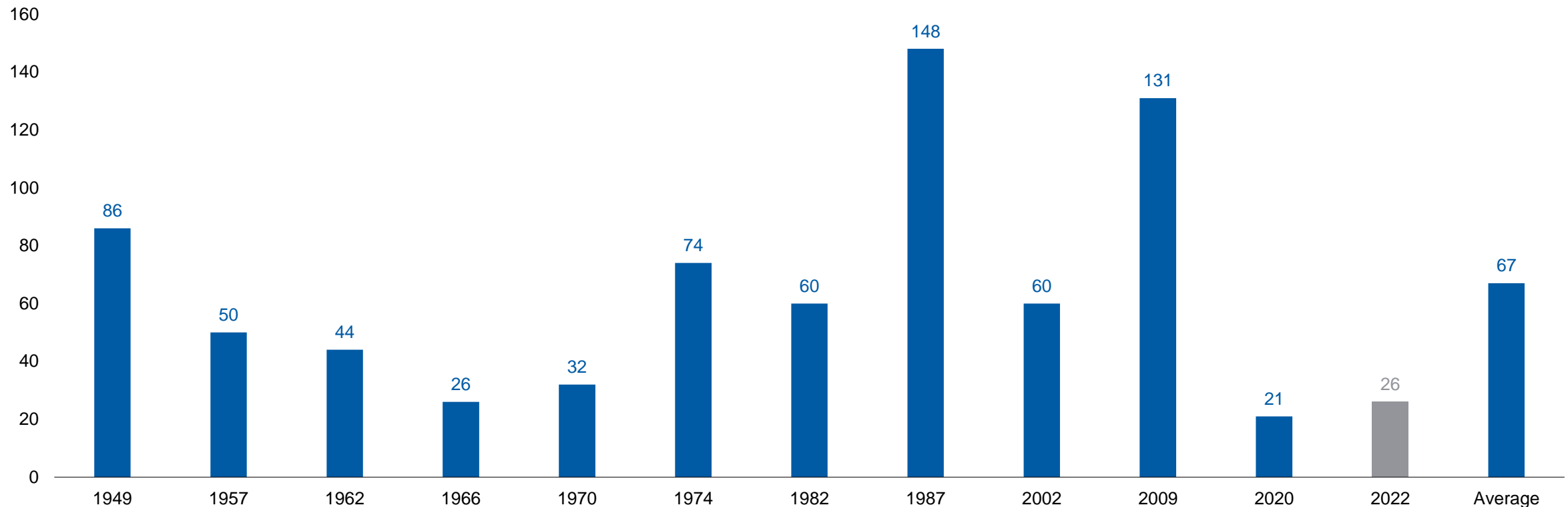
TOP IDEAS

# The Current Bull Market Is Still Young Relative to Previous Cycles

With our base case soft landing view still intact, we continue to hold a constructive view on U.S. equities and on the cycle more broadly. The current bull market is still young relative to historical cycles and is still below the average age of previous bull market cycles by approximately 40 months.

## The Current Bull Market is Still Relatively Young By Historical Standards

*Length of the current and previous bull markets (in months)*



Source: Carson, MSIM. As of December 12, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. **Past performance is no guarantee of future results.**

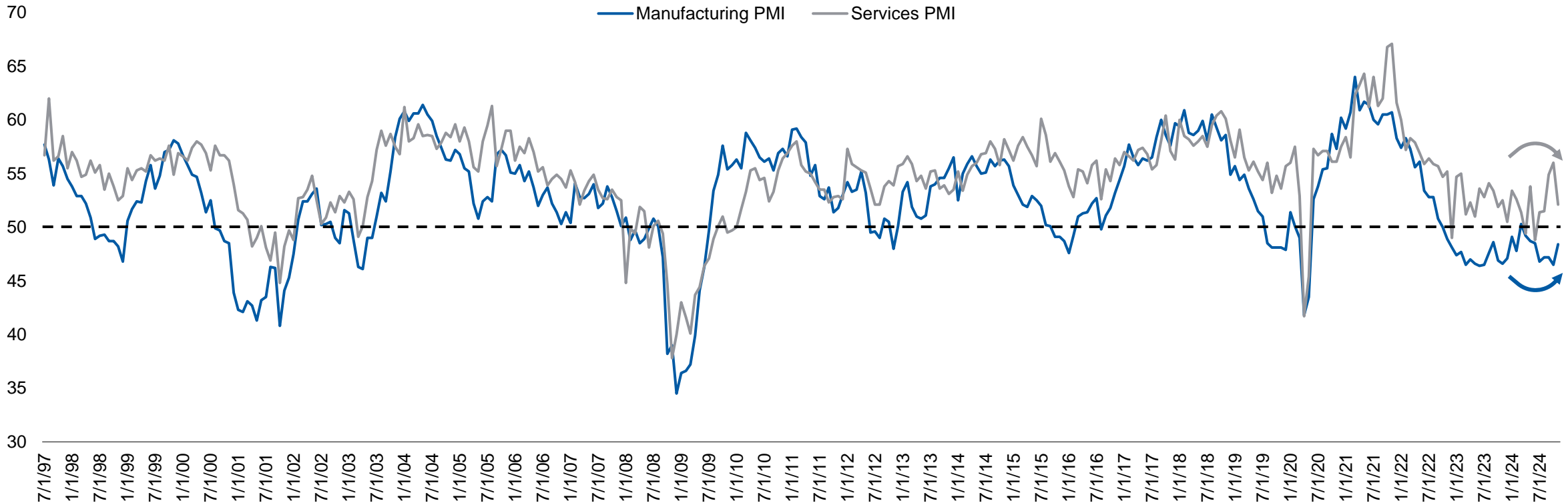
TOP IDEAS

# The Divergence Between Manufacturing and Services May Be Closing

The manufacturing sector has been in a protracted period of weakness despite an economy that has otherwise tended to surprise to the upside. Rate cuts, a positive trend in consumer goods spending, the resolution of post-pandemic inventory overhangs and a potential pre-tariff “pull forward” speak to a possible positive inflection.

## Manufacturing Has Been in Contraction Since Late 2022, While Services Remains Strong

*Institute for Supply Management (ISM) manufacturing Purchasing Managers' Index (PMI) and services PMI*



Source: Bloomberg, MSIM. As of November 30, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. **Past performance is no guarantee of future results.**



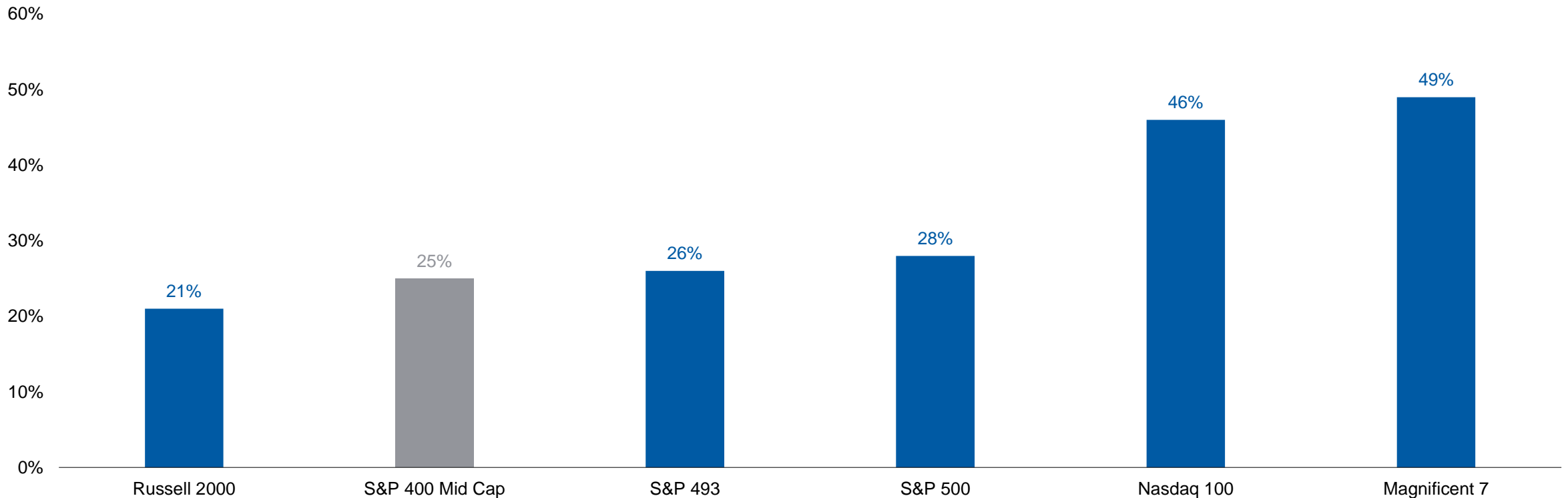
TOP IDEAS

## U.S. Mid-Caps: Less Exposure to Global Growth Risks

In addition to having greater scope for earnings reacceleration and more favorable valuations, mid-caps have much less exposure to global growth risks than mega-caps. Roughly 25% of revenues for the S&P 400 Mid Cap index are derived from foreign sources, while that figure is nearly 50% for mega-cap stocks and indices.

### Mid-Caps Have Much Less Exposure to Global Growth Risks Than Mega-Caps

*% share of sales from outside the United States*



Source: NAR, MSIM. As of December 16, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. **Past performance is no guarantee of future results.** The Magnificent seven are Alphabet, Amazon, Apple, Meta, Microsoft, NVIDIA and Tesla,

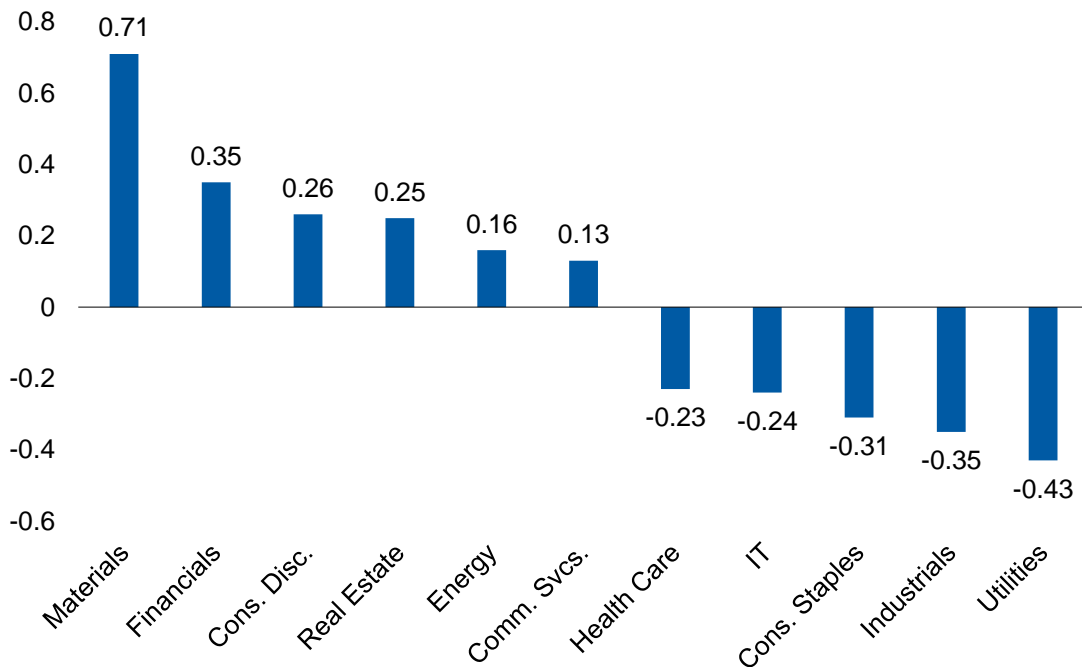
TOP IDEAS

# Materials: Leveraged to a Potential Manufacturing Recovery

While GDP growth has been solid in 2024, there has been a persistent divergence between a weak goods sector and a strong services sector. Should the business cycle extend, a convergence should be expected at some point, with the rate cutting cycle a relevant catalyst. The Materials sector has a strong historical relationship with manufacturing PMIs, suggesting a positive manufacturing PMI inflection could lift the sector after an extended period of underperformance.

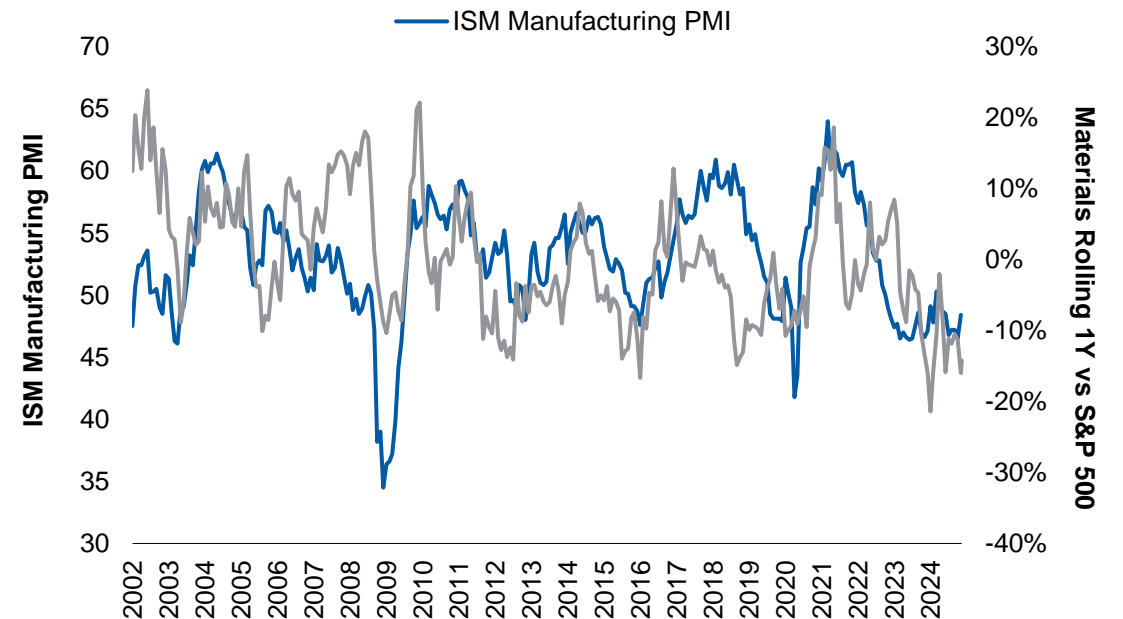
## Materials Have the Strongest Correlation with PMI

U.S. sector correlations with U.S. manufacturing PMI, past 5-year period



## A Turn in PMIs Seems Likely to Drive a Turn in Materials

Rolling 1-year relative performance vs. S&P 500 (RH), ISM manufacturing (LH)



Source: Bloomberg, MSIM. As of December 16, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. **Past performance is no guarantee of future results.**

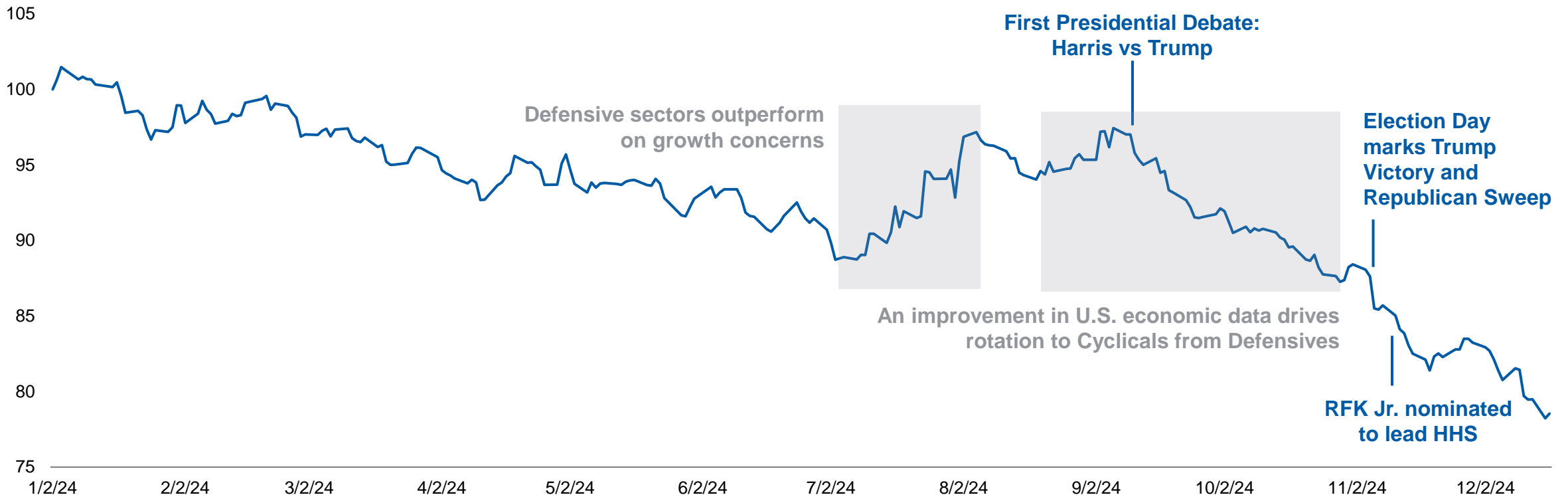
TOP IDEAS

# Healthcare: Substantial Underperformance.... Is it Time to Buy?

Policy concerns emanating from Trump 2.0 have driven the Healthcare sector's underperformance, magnified by rotation away from defensives as economic data has improved. It will be a while before markets know which policy concerns are realized, but depressed valuation now suggests a considerable amount of risk may already be in the price.

## The U.S. Healthcare Sector Has Underperformed by >25% YTD, Mostly Realized Since September

*MSCI U.S. Healthcare total return relative to the MSCI USA*



Source: Bloomberg, MSIM. As of December 18, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. **Past performance is no guarantee of future results.**

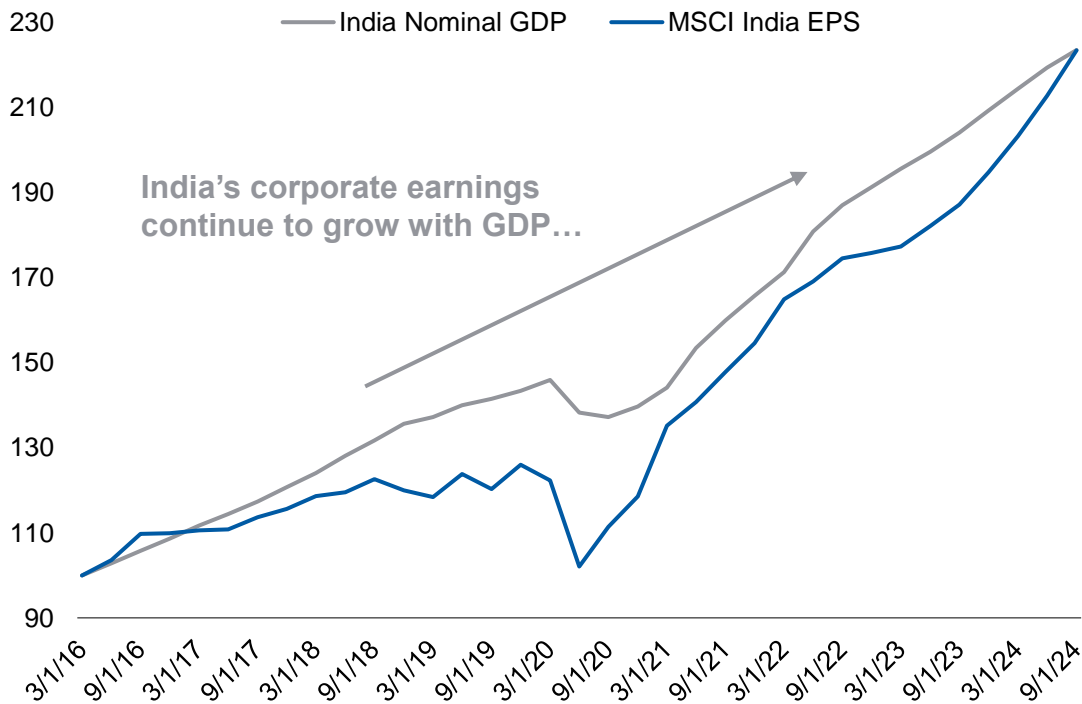
TOP IDEAS

# India: A Rapidly Growing Economy With Scale

We hold a positive view on the fundamental dynamics in India, where we believe robust, domestically driven growth should transmit to strong structural earnings growth. Over the past five years, earnings growth in India has kept pace with nominal GDP growth. This is in strong contrast to China, where this transmission mechanism has failed thus far.

## India's Corporate Earnings Are Growing Along with Nominal GDP...

Index: 2016=100



## ...While in China, GDP Growth Has Yet to Translate into Earnings Growth

Index: 2016=100



Source: MSIM, Bloomberg. As of December 16, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. **Past performance is no guarantee of future results.**

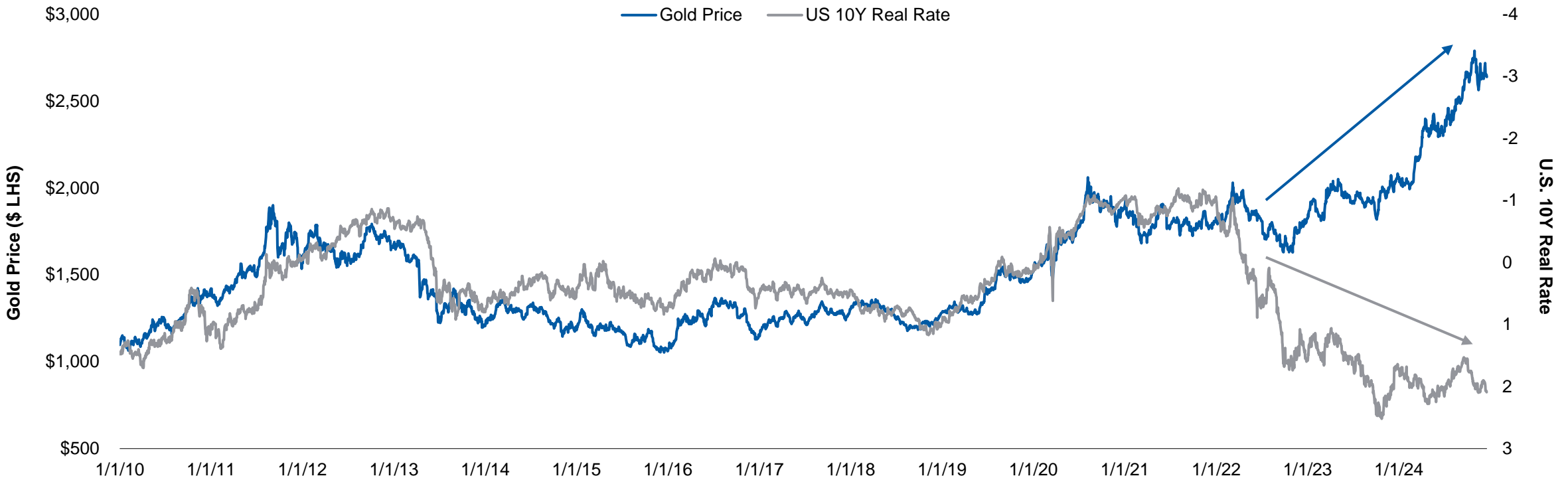
TOP IDEAS

# Gold: The Skew of Outcomes Is Still Positive Due to Structural and Cyclical Factors

Concerns over higher geopolitical volatility, U.S. sanctions, China’s slowdown, surging debt levels and inflationary risks are likely to translate into structurally higher demand for gold from less price sensitive investors. On top of these structural trends, the ongoing rate-cutting cycle lends cyclical support to the asset.

## The Continued Rally in Gold Prices, Despite Rate Headwinds, Suggests the Investment Case For Gold Is Not Merely a “Simple” Rates Play

Gold price in \$ (LHS) vs U.S. 10-year real rate (RHS, Inverse)



Source: Bloomberg, Macrobond, MSIM. As of December 18, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. **Past performance is no guarantee of future results.**

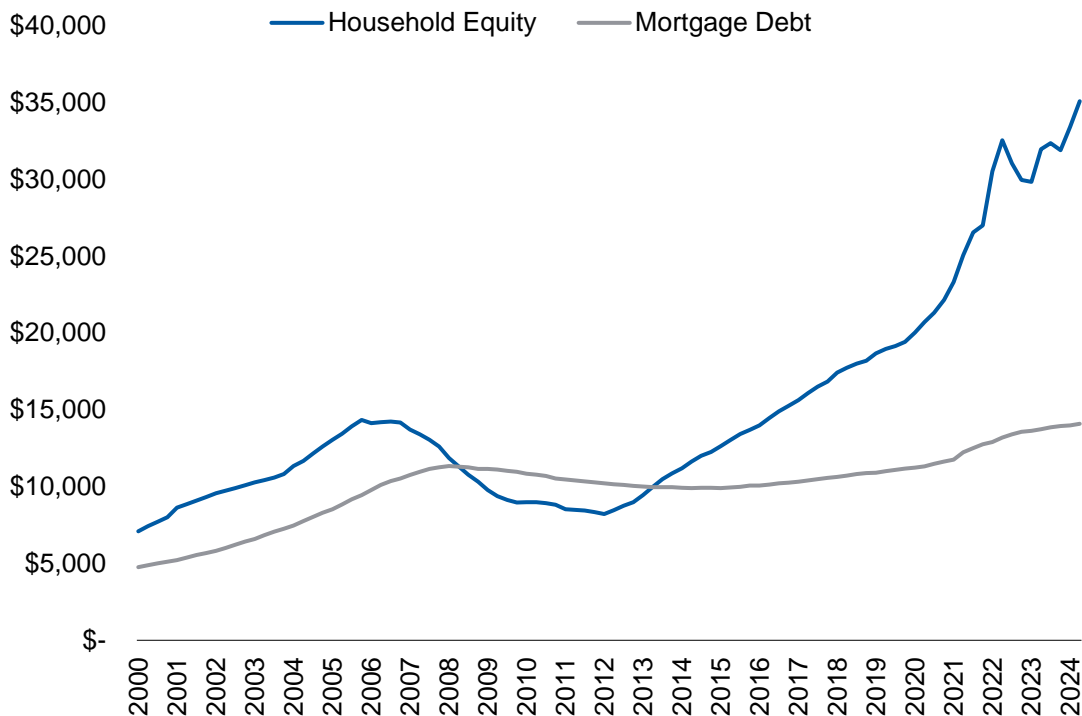
TOP IDEAS

# ABS/MBS: Our Top Pick in Fixed Income

MBS spreads continue to look attractive relative to historically tight corporate credit spreads. This ties to market structure inefficiencies born out of the Global Financial Crisis, with housing market fundamentals still strong. The housing shortage has been a structural support and elevated inflation has tended to lift home equity relative to debt.

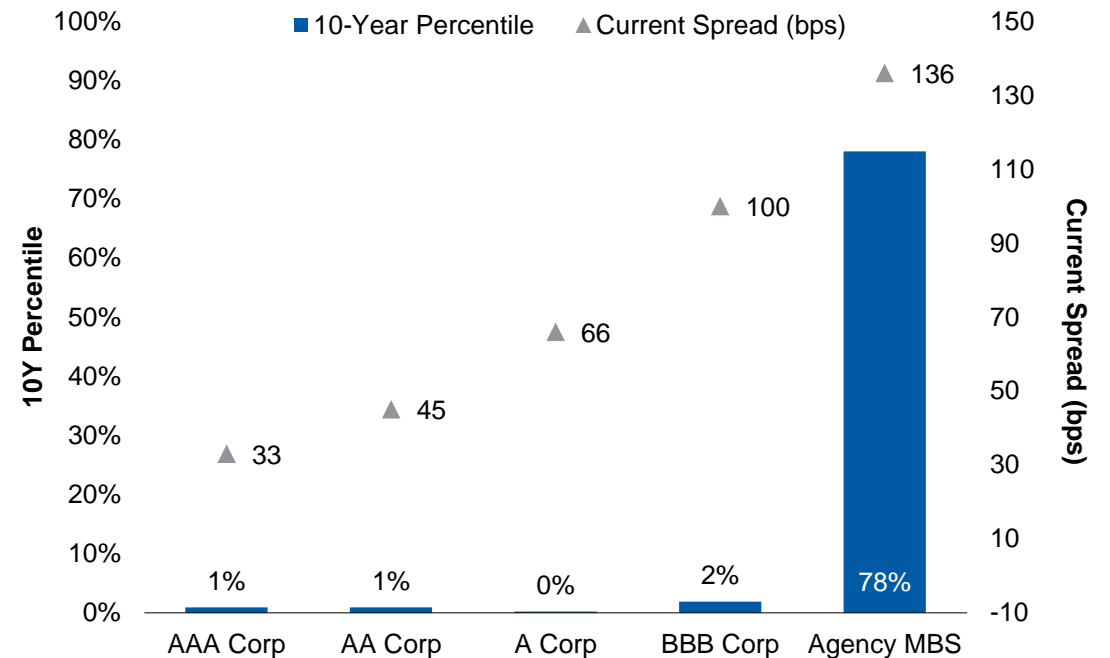
## Housing Market Fundamentals Remain Robust

*Household equity has been on the rise while total mortgage debt remains stable (in \$ billions)*



## Agency MBS Spreads Are Attractive on both an Absolute and Relative Basis

*Current spread to worst (LH, in bps) and 10-year Spread Percentile (RH)*



Source: NAR, MSIM. As of December 16, 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. **Past performance is no guarantee of future results.**

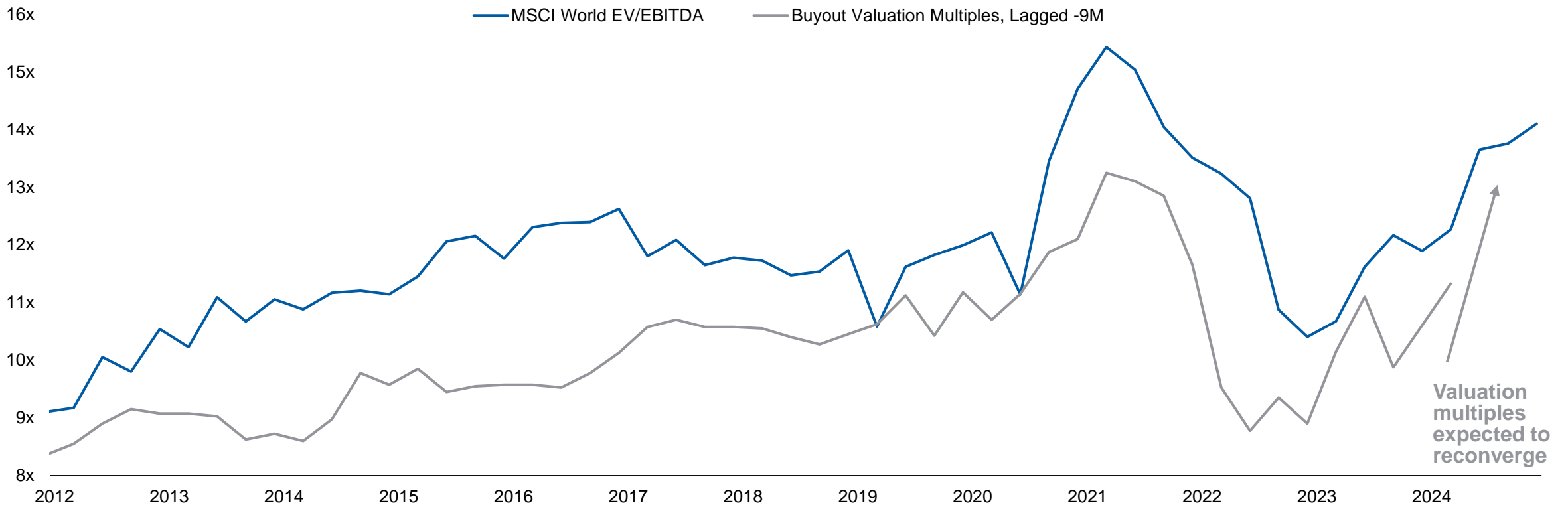
TOP IDEAS

# Private Equity Remains Attractive Relative to Public Equity

Private equity market performance has historically lagged public equities by several quarters to a full year. Public equity valuation multiples continue to rally, with private equity following closely. We expect this trend to continue.

## Private Equity Performance Has Lagged Public Equities by About One Year; We Expect the Rebound to Continue

*MSCI World EV/EBITDA multiple and private equity buyout multiple (lagged by 9 months)*



Sources: Bloomberg, Preqin. As of November 30, 2024. This information reflects the views of the Portfolio Solutions Group as of the date hereof and not of any future date and are subject to change without notice in response to changing circumstances and market conditions. Senior Debt are loans secured by collateral that must be paid off before other debts when a company goes into default. Subordinated Debt are loans which rank after other debts (e.g. Senior Debt) if a company falls into default and therefore carries more risk for the lender. EBITDA stands for Earnings Before Interest, Taxes, Depreciation and Amortization, a reflection a firm's short-term operational efficiency. A lower debt/EBITDA ratio generally reflects a healthier company from a financial standpoint, representing a higher level of cash from earnings to cover debt payments, viewed as less risky for an investor. **Past performance is no guarantee of future results.**

TOP IDEAS

# Capital Markets Investment Framework

## Representative Allocations from the Portfolio Solutions Group

■ Current allocation  
◀ Change from previous

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

Asset Allocation	Our View					Commentary
	--	-	=	+	++	
<b>Bonds</b>						
Duration				+		We are still constructive on rates post-FOMC, however we have moved up our threshold of where we would likely reduce duration again. Meanwhile, we continue to prefer structured credit vs. corporate credit, with many segments of the corporate markets near all-time tight spread levels.
Credit			+			
<b>Equities</b>						
Risk Level			+			Our base case soft landing view remains intact, broadly supporting equity fundamentals. Our view remains nuanced by region, as we continue to view post-election dynamics as positive for the U.S. while Europe remains prone to policy-related risks.
<b>Alternatives</b>						
Private Markets				+		The outcome of the U.S. election is expected to expand deal-making activity but is likely to have an uneven impact on the growth opportunities and risks within each sector. Distributions are expected to grow from their low base, at a time when asset pricing offers a potentially attractive entry point. In private credit, we think the best relative value is shifting from core to niche/specialists.
Hedge Funds				+		
Commodities			+			Hedge funds are benefiting from a constructive market environment for skill-based managers. We have upgraded our conviction in quantitative equity strategies as market dispersion remains supportive while correlations have decreased at the micro level.
<b>Transition</b>						
Cash/Short Duration		-				We remain neutral on key commodity markets as geopolitical upside risks are balanced by high spare capacity in markets such as crude, which limit upside absent physical disruptions.
						In moving back to neutral on equities and adding duration back to portfolios, we reduced our position in cash and short duration instruments.

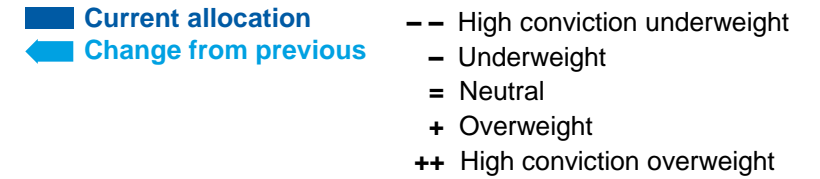
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TOP IDEAS

# Global Fixed Income

## Representative Positioning from Portfolio Solutions Group



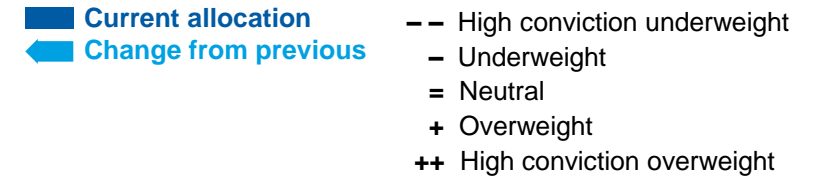
Fixed Income	Our View					Commentary
	--	-	=	+	++	
<b>Bonds</b>						
U.S. Treasuries (USTs)						We are slightly overweight duration in portfolios: after a recent rise, yields are at levels that should allow them to act as more effective hedges against our exposure to risky assets.
Inflation Linked Bonds						Breakevens have risen recently and while we see prospects for them to rise higher, they are closer to fair value today than they were a month ago.
Eurozone Govt. Bonds						Eurozone rates have diverged from U.S. rates somewhat substantially, yet we believe growth and political risks in the Eurozone remain to the downside and keep our overweight to duration.
EM Hard Currency Govt. Bonds						EMD looks somewhat expensive on a standalone basis yet looks much more attractive relative to other segments of the market, such as corporate credit. Thus, we still think it makes sense to have allocation to hard currency, EM Debt.
EM Local Currency Govt. Bonds						The U.S. dollar (USD) appears very expensive from a Real Effective Exchange Rate perspective, which could manifest in attractive EM Local returns. Near term though, we would like to get more clarity on Trump trade policy tactics before committing to an overweight.
<b>Public Credit</b>						
Municipal Bonds						Muni ratios versus Treasuries have tightened and now look closer to “fair value” than cheap. We still like the asset class for taxable investors but are not forecasting large excess returns.
Investment Grade						Spreads are at all-time tights, excess return over USTs should be minimal and IG remains sensitive to left-tail outcomes. Our positive economic outlook keeps this from being a high-conviction underweight.
MBS/ABS						High conviction in ABS and yield per unit of credit quality remains attractive. U.S. 30-year fixed mortgage rates are higher than BB-rated corporate yields, a rare occurrence in the past 25 years.
High Yield						With spreads at historical lows across credit ratings, we see little upside left for the asset class. We prefer to allocate to areas of fixed income with less stretched valuations.
Bank Loans						Bank Loans have lagged other risky segments of the market, partly due to defaults (including distressed exchanges) rising to all-time highs relative to high yield. This has left Bank Loans looking cheap relative to other asset classes and one of our favorites in fixed income.

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TOP IDEAS

# Global Equity

## Representative Positioning from Portfolio Solutions Group



Equity	Our View					Commentary
	--	-	=	+	++	
<b>Regional</b>						
<i>Developed Markets</i>						
U.S.						U.S. growth exceptionalism has been persistent, and the outcome of the U.S. election has tended to reinforce this divergence with the benefits domestic (deregulation, fiscal) while areas of risk are shared meaningfully outside the U.S. (tariffs). We manage elevated valuation in mid-cap expression.
Eurozone						We remain underweight European equities: uncertainty related to tariffs and political developments in France and Germany hinders the case for a cyclical uptick. In Europe we continue to favor banks, as capital returns remain attractive with current terminal rate expectations and valuations cheap.
Japan						The risk of sharp yen appreciation and the resulting headwind to Japanese equities are insulated by a renewed USD strength, driven by superior U.S. growth and interest rate differentials vs the rest of the world. Japan's structural domestic improvements remain intact, while valuations remain relatively undemanding.
<i>Emerging Markets</i>						We see regional dispersion in EM, focusing on structural headwinds for China, tailwinds for India.
<b>Style</b>						
Growth vs. Value						Growth style indexes remain disproportionately exposed to big tech, where we seek to keep our risk exposure close to neutral.
Quality						With little excess risk premium in equities and a limit to economic growth acceleration due to inflation risk, we continue to prefer a tilt toward quality. We balance this with selective cyclical exposure.
Large Cap vs. Small Cap						Mid-caps represent the sweet spot between elevated large-cap valuation, and small-cap quality risk.
Cyclical vs Defensive Sectors						We continue to favor selective cyclical exposure consistent with late cycle expansion.

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## TOP IDEAS

# Alternatives

## Representative Positioning from Portfolio Solutions Group

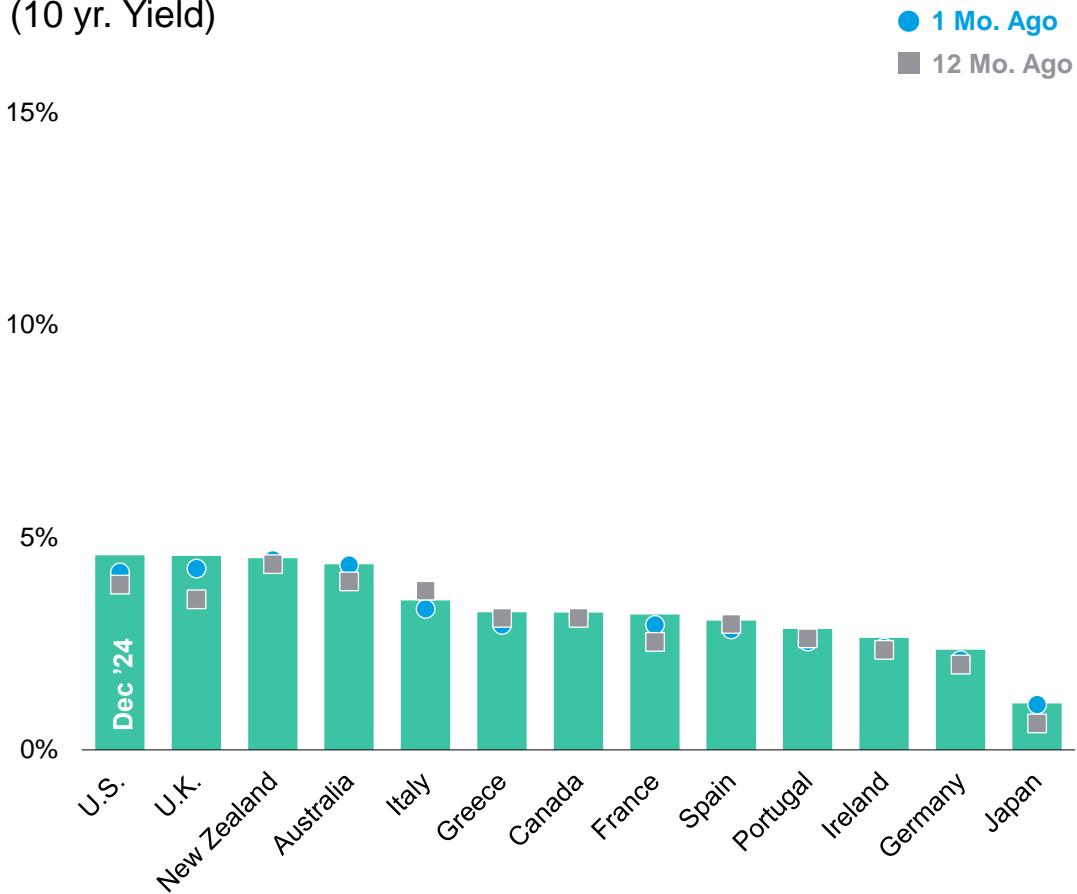
Alternative Assets	Commentary
<b>Private Markets</b>	
Private Equity	<p>We expect investor cash flows to recover due to increasing market activity, and asset pricing to offer an attractive entry point. While a key discipline in private equity investing is to limit exposure to exogenous risks, the outcome of the U.S. election is expected to expand deal-making activity but is likely to have an uneven impact on the growth opportunities and risks within each sector. The prospect of deregulation will potentially lead to increased opportunities in Financials and Healthcare and reduced anti-trust intervention could spark additional M&amp;A more broadly. However, with growth policies also expected to add to inflation, we continue to focus on middle-market strategies that rely less on leverage and are well-placed to deliver asset management initiatives to drive margin expansion and real earnings growth.</p>
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. Infrastructure deal volume is also expanding across sectors, with transportation becoming more active as the utilization track records of airports and toll roads recover after the mobility shock caused by COVID-19. In the U.S., investors must be selective to ensure investment activity is aligned with forward-looking policy adjustments. While we believe cost competitive onshore wind and solar investment has irreversible momentum, support for earlier stage and subsidized initiatives such as offshore wind and hydrogen is potentially at risk in favor of expanding conventional oil and gas production. To date we have observed bipartisan support for nuclear power generation and expansion in access to broadband, but policy will need to be considered carefully as details emerge.</p>
Private Credit	<p>Within corporate lending, the opportunity continues to skew further out the risk spectrum to special situation lenders, who are able to capitalize on many of the challenges facing direct lenders. Stress is not yet at a level that causes us to turn bullish on the cyclically sensitive prospects for distressed debt. More broadly, niche/specialist strategies, which sit further from corporate lending, are showing some attractive signals and are becoming more attractive on a relative basis. As a result, over the course of 2024 our deployment shifted away from core strategies into niche / specialist market segments.</p>
<b>Liquid Alternatives</b>	
Hedge Funds	<p>Given the current market drivers, we prefer hedge fund specialist portfolio managers who are best positioned to analyze policy impacts on security prices and capture the potential opportunity in increased capital markets activity. We stress the need to incorporate highly liquid, responsive, macro convexity strategies within portfolios to capitalize on price volatility should consensus views prove incorrect, stoking periods of broader market volatility. In addition, our highest conviction sub-strategies are fixed income relative value and quantitative long / short equity to take advantage of decreasing correlations at the micro level.</p>
Commodities	<p>We remain neutral on key commodity markets as geopolitical upside risks are balanced by high spare capacity in markets such as crude, limiting upside absent physical disruptions.</p>

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.

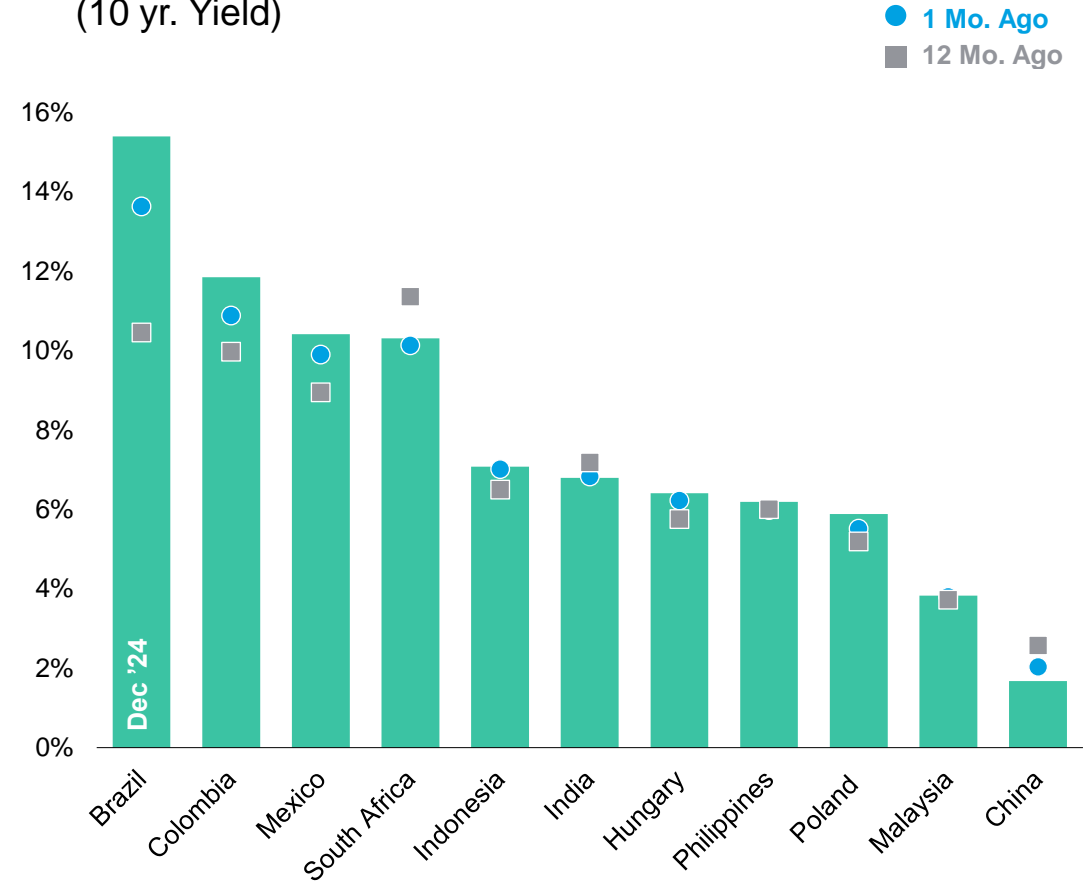
BONDS

# 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 12/31/24. 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	2.72	3.08	3.37	1.90	4.55
Secured Overnight Financing Rate	4.49	5.38	5.15	4.30	5.40
1-Mo SOFR	4.33	5.35	5.12	4.33	5.35
3-Mo SOFR	4.31	5.33	5.06	4.31	5.35
2-Yr Treasury	4.24	4.25	4.38	3.54	5.03
5-Yr Treasury	4.38	3.85	4.13	3.41	4.71
10-Yr Treasury	4.57	3.88	4.21	3.62	4.70
30-Yr Treasury	4.78	4.03	4.41	3.93	4.81
2-Yr Japan	0.60	0.04	0.32	0.01	0.62
10-Yr Japan	1.09	0.61	0.89	0.58	1.10
2-Yr German Bund	2.08	2.39	2.56	1.91	3.11
10-Yr German Bund	2.35	2.00	2.34	2.03	2.67
2-Yr UK Gilt	4.37	3.96	4.20	3.53	4.63
10-Yr UK Gilt	4.56	3.53	4.12	3.63	4.61
Bloomberg US Agg	4.91	4.53	4.76	4.10	5.31
Bloomberg Global Agg	3.68	3.51	3.69	3.26	4.06
Bloomberg US Corporate	5.33	5.06	5.23	4.64	5.75
Bloomberg US Long Corporate	5.80	5.22	5.51	5.07	5.93
Bloomberg US Municipal	3.74	3.22	3.53	3.23	3.93
Bloomberg US Long Municipal	4.32	4.01	4.17	3.94	4.41
US High Yield	7.47	7.65	7.62	6.98	8.32
US Loans	8.55	10.13	9.57	8.55	10.10

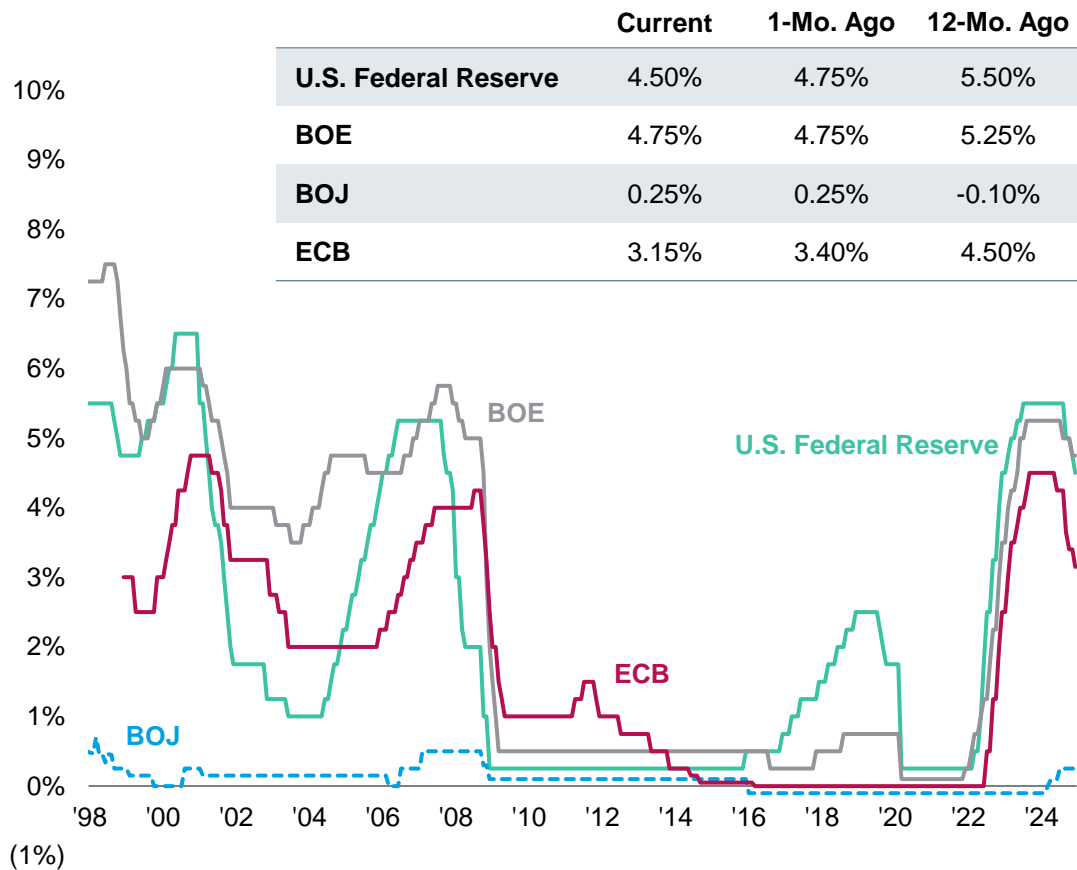
Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Bloomberg, Leveraged Commentary & Data (LCD), and Factset as of 12/31/24. 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.

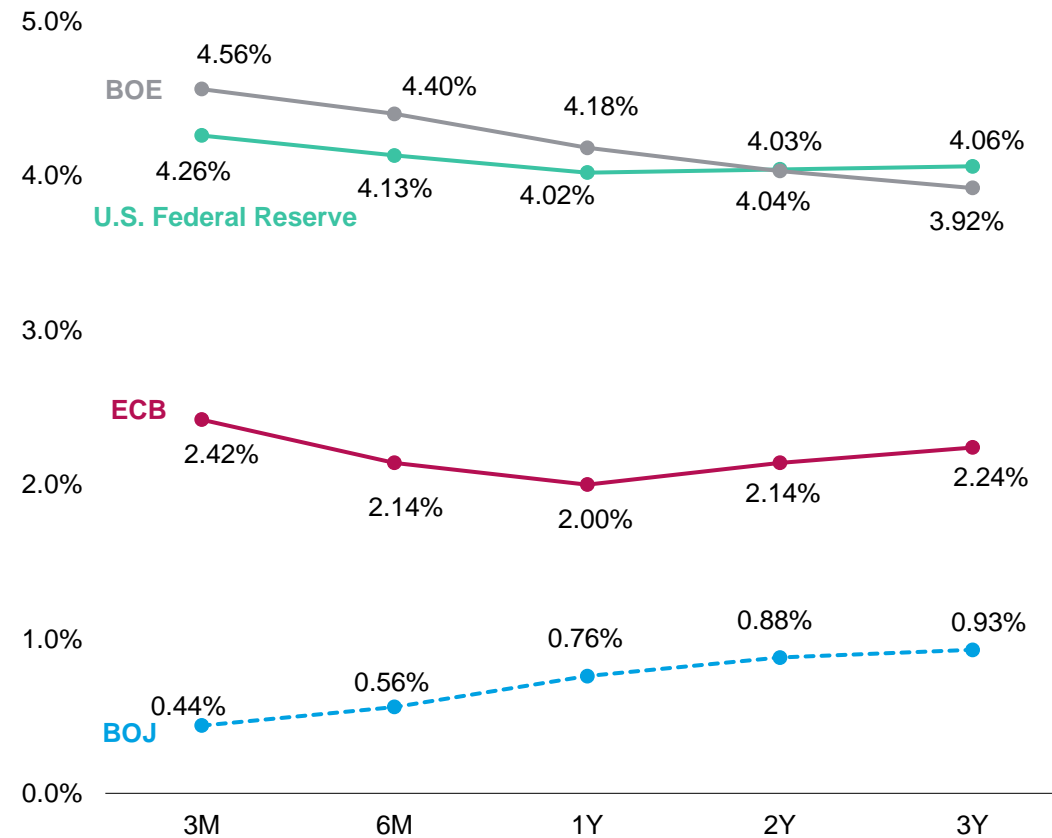
BONDS

# Monetary Policy

## Central Bank Policy Rates



## Market Expectations for Future Central Bank Rates

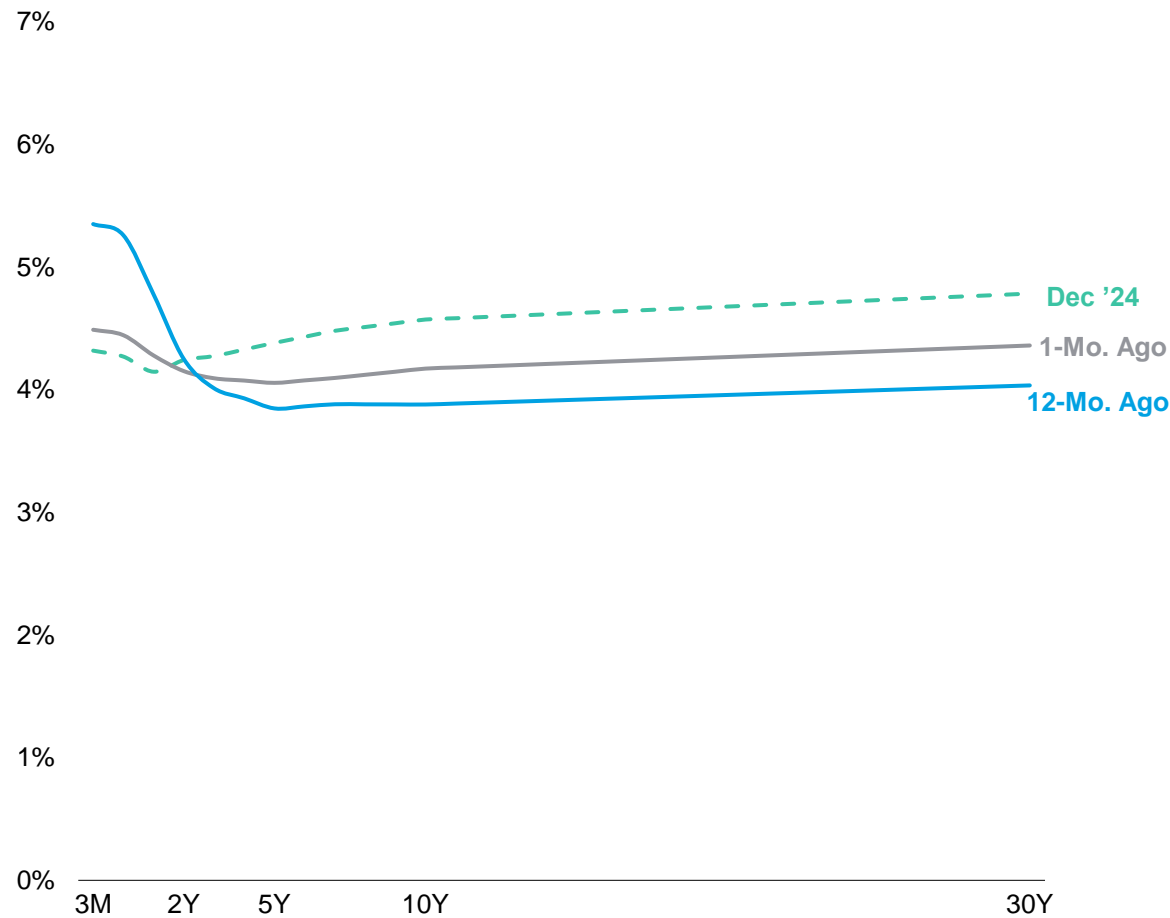


Source: Bloomberg, Factset as of 12/31/24. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

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	4.32	4.49	5.35	0.40	5.25
6-mo. Treasury	4.27	4.44	5.26	0.44	5.35
2-yr. Treasury	4.24	4.15	4.25	0.19	3.74
3-yr. Treasury	4.27	4.09	4.01	-0.13	2.99
5-yr. Treasury	4.38	4.06	3.85	-1.01	1.23
10-yr. Treasury	4.57	4.17	3.88	-2.69	-1.69
30-yr. Treasury	4.78	4.36	4.03	-6.24	-8.03

Source: Factset, Morningstar as of 12/31/24. 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

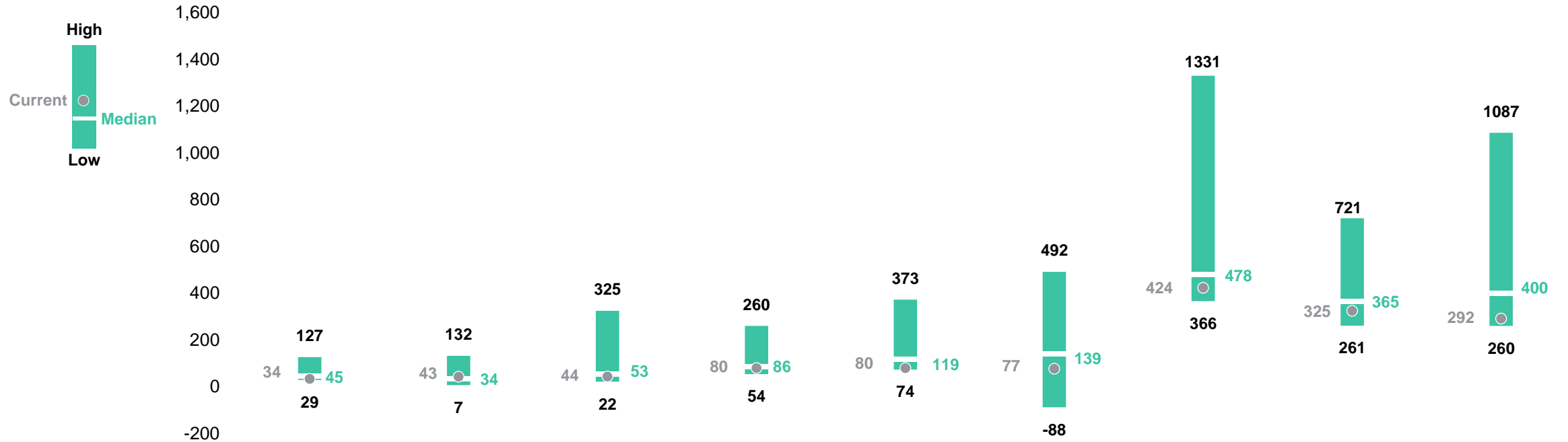
Index	Averages						Total Returns (%)						
	Coupon (%)	Price (\$)	Yield to Worst (%)	Spread (bps)	Maturity (yrs.)	Duration (yrs.)	1-Mo.	3-Mo.	YTD	1Y	3Y	5Y	10Y
<b>U.S. High Grade</b>													
<b>Bloomberg U.S. Aggregate Index</b>	3.42	90.4	4.91	34	8.4	6.1	-1.64	-3.06	1.25	1.25	-2.41	-0.33	1.35
U.S. Treasury	2.99	90.6	4.45	-	7.6	5.8	-1.54	-3.14	0.58	0.58	-2.88	-0.68	0.83
U.S. Mortgage Backed Securities	3.32	88.0	5.27	43	7.8	6.2	-1.65	-3.16	1.20	1.20	-2.13	-0.74	0.91
U.S. Asset Backed Securities	4.79	99.5	4.73	44	3.7	2.7	-0.05	-0.05	5.02	5.02	1.98	2.01	2.12
U.S. Commercial Mortgage Backed Securities	3.32	92.6	5.19	80	4.7	4.1	-0.55	-1.48	4.68	4.68	-0.57	0.99	2.14
U.S. Corp. Investment Grade	4.27	91.9	5.33	80	10.5	6.8	-1.94	-3.04	2.13	2.13	-2.27	0.30	2.43
<b>Bloomberg Municipal Bond Index</b>	4.59	101.5	3.74	-	13.6	6.2	-1.46	-1.22	1.05	1.05	-0.55	0.99	2.25
<b>Bloomberg Taxable Municipal Bond Index</b>	4.36	91.2	5.21	-	14.2	7.7	-2.46	-3.57	1.57	1.57	-3.26	0.20	2.58
<b>ICE BofA US Inflation-Linked Treasury Index</b>	1.03	91.7	2.10	-	7.3	4.8	-1.66	-2.98	1.98	1.98	-2.63	1.77	2.22
<b>ICE BofA Preferred Index (Fixed Rate)</b>	5.31	91.0	5.82	77	-	5.8	-1.81	-3.01	7.05	7.05	0.25	1.95	4.21
<b>U.S. High Yield</b>													
<b>ICE BofA US High Yield Index</b>	6.40	95.5	7.47	292	4.7	3.2	-0.43	0.16	8.20	8.20	2.91	4.04	5.08
<b>Morningstar LSTA U.S. Leveraged Loan Index</b>	S+3.41	97.3	8.55	424	4.5	-	0.57	2.27	8.95	8.95	7.00	5.86	5.15
<b>Emerging Markets</b>													
<b>J.P. Morgan EM Bond Index (EMBI) Global Diversified</b>	5.39	85.9	7.86	325	-	6.5	-1.40	-1.94	6.54	6.54	-0.91	0.12	3.13
<b>J.P. Morgan Corp. EM Bond Index (CEMBI) Broad Diversified</b>	5.22	94.4	6.56	206	-	4.3	-0.54	-0.80	7.63	7.63	0.99	2.18	4.03
<b>J.P. Morgan Govt. Bond Index-EM (GBI-EM) Global Diversified</b>	5.58	-	6.39	-	-	5.3	-1.93	-6.98	-2.38	-2.38	-0.96	-1.86	0.43
<b>Global Developed Markets</b>													
<b>Bloomberg Global Aggregate Ex-U.S. Index</b>	2.28	96.5	2.60	32	8.6	7.0	-2.61	-6.84	-4.22	-4.22	-6.28	-3.37	-0.90
<b>FTSE World Government Bond Index</b>	2.50	-	3.22	-	-	7.1	-2.29	-5.44	-2.87	-2.87	-5.83	-3.08	-0.55
<b>ICE BofA European Union Government Bond Index</b>	2.11	94.5	2.73	48	8.9	7.3	-3.42	-7.41	-4.62	-4.62	-6.85	-3.64	-1.38
<b>ICE BofA Developed Mkts HY Ex-Sub Fincl Index (USD Hedged)</b>	6.16	95.9	7.09	317	3.7	3.1	-0.16	0.59	8.59	8.59	3.37	4.15	5.21
<b>Bloomberg Euro-Aggregate Corporates (EUR)</b>	2.46	97.1	3.18	102	5.0	4.4	-0.38	0.87	4.74	4.74	-0.72	-0.08	1.09
<b>Bloomberg Pan-European High Yield Euro (EUR)</b>	4.72	97.9	5.70	309	3.7	3.1	0.65	1.84	8.22	8.22	2.73	2.78	3.77

**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 12/31/24. 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
<b>Max Spread Date</b>	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
<b>Min Spread Date</b>	4/14/2021	4/14/2021	6/21/2021	6/21/2021	11/08/2024	12/6/2017	4/20/2018	2/1/2018	11/14/2024
<b>Spread on 12/31/24</b>	34	43	44	80	80	77	424	325	292
<b>Spread on 12/31/23</b>	42	47	68	126	99	148	490	384	339
<b>Spread on 12/31/22</b>	51	51	76	120	130	227	645	452	479

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## 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
<b>U.S. High Grade</b>													
<b>Bloomberg U.S. Corp. Investment Grade Index</b>	<b>4.27</b>	<b>91.9</b>	<b>5.33</b>	<b>80</b>	<b>10.5</b>	<b>6.8</b>	<b>-1.94</b>	<b>-3.04</b>	<b>2.13</b>	<b>2.13</b>	<b>-2.27</b>	<b>0.30</b>	<b>2.43</b>
AAA Index	3.31	81.3	4.98	33	17.6	10.3	-3.31	-5.88	-2.35	-2.35	-5.94	-1.79	1.42
AA Index	3.66	88.3	5.01	45	12.5	7.7	-2.23	-3.94	0.24	0.24	-3.91	-0.96	1.38
A Index	4.14	92.0	5.21	68	10.3	6.8	-1.98	-3.31	1.63	1.63	-2.42	0.06	2.13
BBB Index	4.51	92.6	5.51	97	10.3	6.6	-1.82	-2.58	2.97	2.97	-1.76	0.78	2.88
<b>U.S. High Yield</b>													
<b>ICE BofA U.S. High Yield Index</b>	<b>6.40</b>	<b>95.5</b>	<b>7.47</b>	<b>292</b>	<b>4.7</b>	<b>3.2</b>	<b>-0.43</b>	<b>0.16</b>	<b>8.20</b>	<b>8.20</b>	<b>2.91</b>	<b>4.04</b>	<b>5.08</b>
BB Index	5.79	97.0	6.43	186	5.0	3.5	-0.65	-0.50	6.28	6.28	1.94	3.76	5.01
B Index	7.05	97.7	7.54	296	4.5	3.0	-0.32	0.34	7.55	7.55	3.10	3.57	4.75
CCC Index	7.13	84.3	11.87	746	4.2	2.9	0.19	2.45	18.18	18.18	5.98	6.21	6.13
<b>Morningstar LSTA U.S. Leveraged Loan Index</b>	<b>S+3.41</b>	<b>97.3</b>	<b>8.55</b>	<b>424</b>	<b>4.5</b>	<b>-</b>	<b>0.57</b>	<b>2.27</b>	<b>8.95</b>	<b>8.95</b>	<b>7.00</b>	<b>5.86</b>	<b>5.15</b>
BBB Index	S+1.92	100.2	6.35	187	5.1	-	0.45	1.82	7.55	7.55	6.41	4.60	4.36
BB Index	S+2.58	100.1	7.02	254	5.0	-	0.54	2.21	8.15	8.15	7.00	4.94	4.63
B Index	S+3.71	98.5	8.63	426	4.5	-	0.54	2.51	9.55	9.55	7.50	6.29	5.50
CCC Index	S+4.64	80.6	18.25	1379	3.5	-	0.60	0.17	8.87	8.87	3.94	5.67	6.20
D Index	-	30.9	-	-	-	-	4.51	3.26	-17.71	-17.71	-29.09	-23.53	-18.09

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

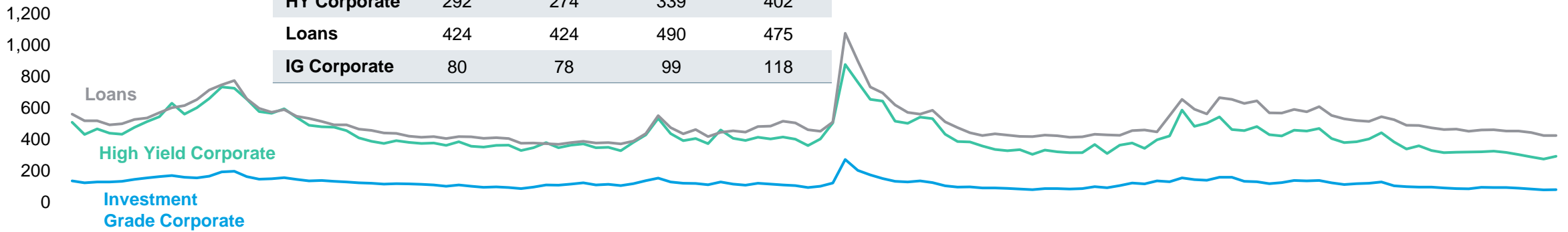
It is not possible to invest directly in an index. Source: Bloomberg, J.P. Morgan, ICE BofA Data Indices, LLC, Factset, and Leveraged Commentary & Data (LCD), as of 12/31/24. Data provided is for informational use only. See end of report for important additional information. Yield to maturity is shown 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

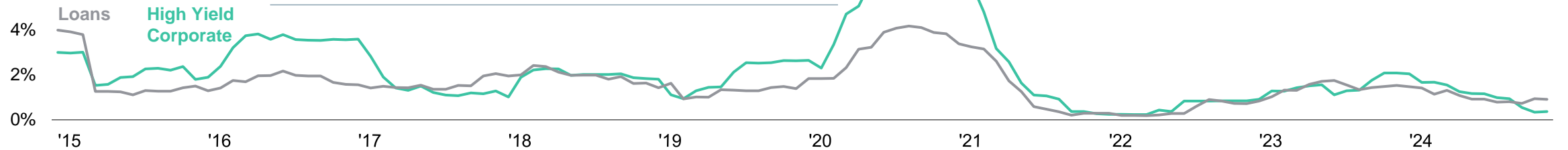
## Average Spread (bps)

	Current	1-Mo. Ago	12-Mo. Ago	Median
<b>HY Corporate</b>	292	274	339	402
<b>Loans</b>	424	424	490	475
<b>IG Corporate</b>	80	78	99	118



## Annual Default Rate

	Current	1-Mo. Ago	12-Mo. Ago	Median
<b>HY Corporate</b>	0.36	0.34	2.08	1.85
<b>Loans</b>	0.91	0.94	1.53	1.43



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It is not possible to invest directly in an index. Source: J.P. Morgan and Leveraged Commentary & Data (LCD), as of 12/31/24. 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>4.59</b>	<b>101.5</b>	<b>3.74</b>	<b>13.6</b>	<b>6.2</b>	<b>-1.46</b>	<b>-1.22</b>	<b>1.05</b>	<b>1.05</b>	<b>-0.55</b>	<b>0.99</b>	<b>2.25</b>
AAA Index	4.51	102.3	3.60	13.1	6.4	-1.57	-1.32	0.33	0.33	-0.76	0.71	1.82
AA Index	4.61	102.5	3.61	13.1	6.1	-1.36	-1.18	0.79	0.79	-0.59	0.85	2.05
A Index	4.58	99.9	3.99	13.9	6.2	-1.47	-1.19	1.78	1.78	-0.22	1.35	2.66
BBB Index	4.61	96.6	4.49	17.6	7.2	-1.94	-1.32	2.87	2.87	-0.32	1.65	3.30
5-Year Index	4.72	105.0	3.29	5.0	3.7	-0.74	-1.04	1.17	1.17	-0.01	0.91	1.67
10-Year Index	4.57	104.4	3.53	10.0	5.8	-1.17	-1.34	-0.33	-0.33	-0.50	0.99	2.32
22+ Year Index	4.61	97.6	4.32	26.6	9.7	-2.49	-1.65	1.40	1.40	-2.18	0.52	2.62
<b>Bloomberg High Yield Municipal Bond Index</b>	<b>4.68</b>	<b>65.3</b>	<b>5.52</b>	<b>19.6</b>	<b>6.7</b>	<b>-1.66</b>	<b>-1.08</b>	<b>6.32</b>	<b>6.32</b>	<b>0.30</b>	<b>2.66</b>	<b>4.28</b>
Hospital	5.30	76.1	5.89	20.4	6.0	-1.51	-0.20	11.49	11.49	0.14	1.61	3.72
IDR/PCR	4.10	36.6	5.85	20.0	6.7	-1.26	-1.28	3.98	3.98	-0.55	2.57	5.36
Tobacco	2.28	18.8	6.34	27.9	9.9	-1.23	-1.65	0.08	0.08	-2.23	2.85	6.91
Puerto Rico	3.57	55.4	4.75	19.1	7.0	-1.79	-1.14	3.95	3.95	0.63	4.02	4.54

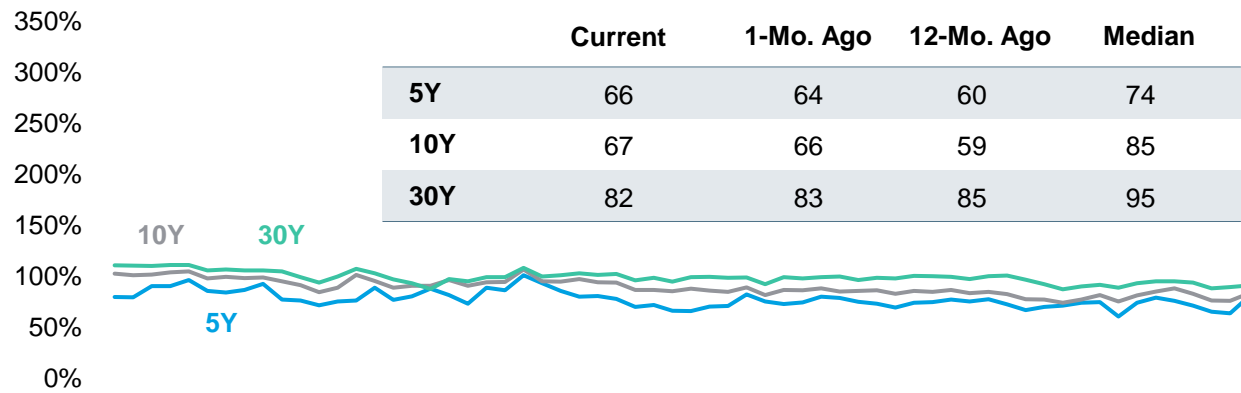
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It is not possible to invest directly in an index. Source: Bloomberg, Morningstar as of 12/31/24. Coupon and Yield To Worst figures are based on average market prices while Price is based on an average of par value. Data provided is for informational use only. See end of report for important additional information.

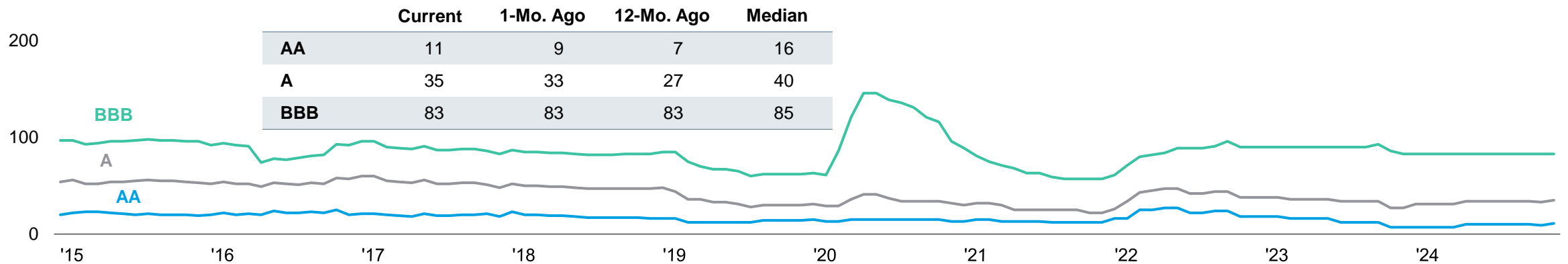
BONDS

# Municipal Bond Market Update

## AAA Muni-to-Treasury Yield Ratios



## Credit Quality Spreads vs. AAA (bps)



Past performance is no guarantee of future results.

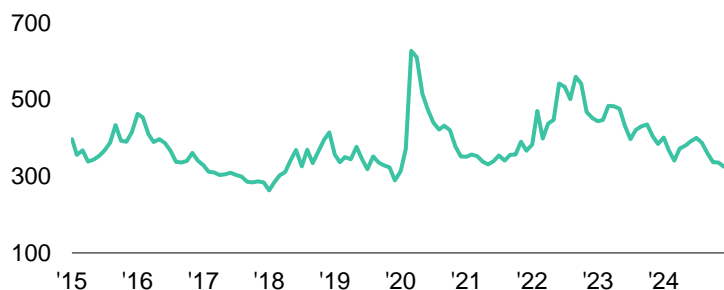
It is not possible to invest directly in an index. Source: Bloomberg as of 12/31/24. Data provided is for informational use only. See end of report for important additional information. All spreads are in basis points and measure option-adjusted yield spread relative to comparable maturity U.S. Treasuries.

BONDS

# Emerging Markets Bond Market Update

## Sovereign EMD Spreads (USD)

bps



	Avg. Spread (bps)
<b>Current</b>	325
<b>1-Mo. Ago</b>	336
<b>12-Mo. Ago</b>	384
<b>Median</b>	368

## Corporate EMD Spreads (USD)

bps



	Avg. Spread (bps)
<b>Current</b>	206
<b>1-Mo. Ago</b>	210
<b>12-Mo. Ago</b>	281
<b>Median</b>	299

## Local EMD Yields (%)

bps



	Avg. Yield (%)
<b>Current</b>	6.39
<b>1-Mo. Ago</b>	6.30
<b>12-Mo. Ago</b>	6.19
<b>Median</b>	6.28

	Averages				Total Returns (%)						
	Coupon (%)	Price (\$)	Yield (%)	Duration	1-Mo.	3-Mo.	YTD	1Y	3Y	5Y	10Y
<b>JPMorgan Emerging Markets Bond Index (EMBI) Global Diversified</b>	5.39	85.9	7.86	6.5	-1.40	-1.94	6.54	6.54	-0.91	0.12	3.13
<b>JPMorgan Corporate Emerging Markets Bond Index (CEMBI) Broad Diversified</b>	5.22	94.4	6.56	4.3	-0.54	-0.80	7.63	7.63	0.99	2.18	4.03
<b>JPMorgan Government Bond Index-Emerging Markets (GBI-EM) Global Diversified</b>	5.58	-	6.39	5.3	-1.93	-6.98	-2.38	-2.38	-0.96	-1.86	0.43

Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: J.P. Morgan, Morningstar as of 12/31/24. Data provided is for informational use only. See end of report for important additional information. All spreads are in basis points and measure option-adjusted yield spread relative to comparable maturity U.S. Treasuries.

BONDS

# Asset Class Return Analysis (%)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Higher	Municipal 9.05	Municipal 3.30	High Yield 17.49	EMD (Local Currency) 15.21	Municipal 1.28	Investment Grade 14.54	Global Agg Ex-U.S. 10.11	High Yield 5.36	Bank Loan -0.77	High Yield 13.46	Bank Loan 8.95
	Investment Grade 7.46	MBS 1.51	EMD (Hard Currency) 10.19	Global Agg Ex-U.S. 10.51	MBS 0.99	EMD (Hard Currency) 14.42	Investment Grade 9.89	Bank Loan 5.20	Municipal -8.53	Bank Loan 13.32	High Yield 8.20
	MBS 6.08	EMD (Corp. Bonds) 1.30	Bank Loan 10.16	EMD (Hard Currency) 9.32	Treasury 0.86	High Yield 14.41	Treasury 8.00	Municipal 1.52	High Yield -11.22	EMD (Local Currency) 12.70	EMD (Corp. Bonds) 7.63
	EMD (Hard Currency) 5.53	EMD (Hard Currency) 1.23	EMD (Local Currency) 9.94	EMD (Corp. Bonds) 7.96	Bank Loan 0.44	EMD (Local Currency) 13.47	EMD (Corp. Bonds) 7.13	EMD (Corp. Bonds) 0.91	EMD (Local Currency) -11.69	EMD (Hard Currency) 11.09	EMD (Hard Currency) 6.54
	Treasury 5.05	Treasury 0.84	EMD (Corp. Bonds) 9.65	High Yield 7.48	EMD (Corp. Bonds) -1.65	EMD (Corp. Bonds) 13.09	High Yield 6.17	Investment Grade -1.04	MBS -11.81	EMD (Corp. Bonds) 9.08	Investment Grade 2.13
	EMD (Corp. Bonds) 4.96	Investment Grade -0.68	Investment Grade 6.11	Investment Grade 6.42	Global Agg Ex-U.S. -2.15	Bank Loan 8.64	EMD (Hard Currency) 5.88	MBS -1.04	EMD (Corp. Bonds) -12.26	Investment Grade 8.52	MBS 1.20
	High Yield 2.50	Bank Loan -0.69	MBS 1.67	Municipal 5.45	High Yield -2.26	Municipal 7.54	Municipal 5.21	EMD (Hard Currency) -1.51	Treasury -12.46	Municipal 6.40	Municipal 1.05
	Bank Loan 1.60	High Yield -4.64	Global Agg Ex-U.S. 1.49	Bank Loan 4.12	Investment Grade -2.51	Treasury 6.86	MBS 3.87	Treasury -2.32	Investment Grade -15.76	Global Agg Ex-U.S. 5.72	Treasury 0.58
	Global Agg Ex-U.S. -3.08	Global Agg Ex-U.S. -6.02	Treasury 1.04	MBS 2.47	EMD (Hard Currency) -4.61	MBS 6.35	Bank Loan 3.12	Global Agg Ex-U.S. -7.05	EMD (Hard Currency) -16.45	MBS 5.05	EMD (Local Currency) -2.38
Lower	EMD (Local Currency) -5.72	EMD (Local Currency) -14.92	Municipal 0.25	Treasury 2.31	EMD (Local Currency) -6.21	Global Agg Ex-U.S. 5.09	EMD (Local Currency) 2.69	EMD (Local Currency) -8.75	Global Agg Ex-U.S. -18.70	Treasury 4.05	Global Agg Ex-U.S. -4.22

**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 12/31/24. 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 (%)

## 1-Month Returns

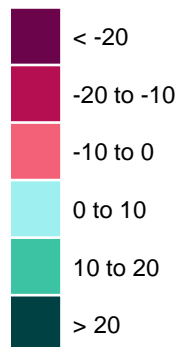
	Value	Core	Growth
Large Cap	-6.84	-2.79	0.88
Mid Cap	-7.32	-7.04	-6.22
Small Cap	-8.33	-8.26	-8.19

## 1-Year Returns

	Value	Core	Growth
Large Cap	14.37	24.51	33.36
Mid Cap	13.07	15.34	22.10
Small Cap	8.05	11.54	15.15

## 3-Year Returns

	Value	Core	Growth
Large Cap	5.63	8.41	10.47
Mid Cap	3.88	3.79	4.04
Small Cap	1.94	1.24	0.21



<b>Global</b>	<b>U.S.</b>
-2.37	-2.38
<b>International</b>	<b>Emerging Markets</b>
-2.27	-0.14

<b>Global</b>	<b>U.S.</b>
17.49	25.02
<b>International</b>	<b>Emerging Markets</b>
3.82	7.50

<b>Global</b>	<b>U.S.</b>
5.44	8.94
<b>International</b>	<b>Emerging Markets</b>
1.65	-1.92

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

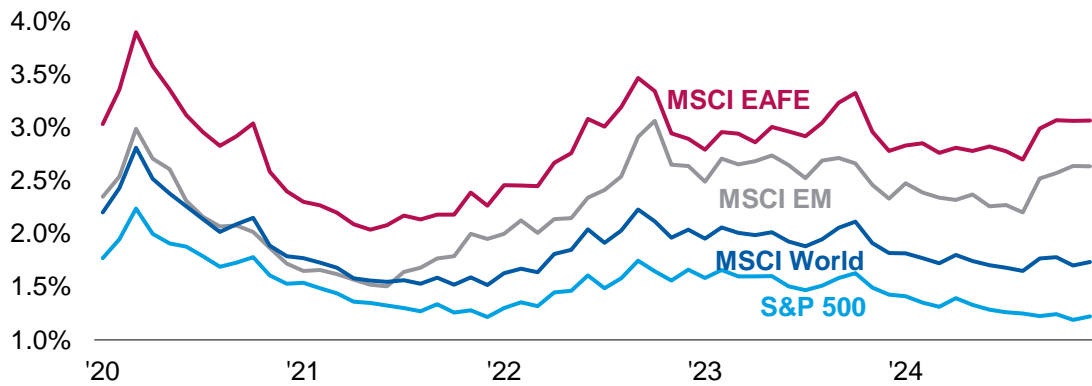
It is not possible to invest directly in an index. Source: Morningstar as of 12/31/24. Data provided is for informational use only. See end of report for important additional information. Returns over 1 year are annualized. Large Cap Value represented by Russell 1000 Value Index. Large Cap Core represented by Russell 1000 Index. Large Cap Growth represented by Russell 1000 Growth Index. Mid Cap Value represented by Russell Mid Cap Value Index. Mid Cap Core represented by Russell Mid Cap Index. Mid Cap Growth represented by Russell Mid Cap Growth Index. Small Cap Value represented by Russell 2000 Value Index. Small Cap Core represented by Russell 2000 Index. Small Cap Growth represented by Russell 2000 Growth Index. Global represented by MSCI ACWI Index. US represented by S&P 500 Index. International represented by MSCI EAFE Index. Emerging Markets represented by MSCI Emerging Markets Index.



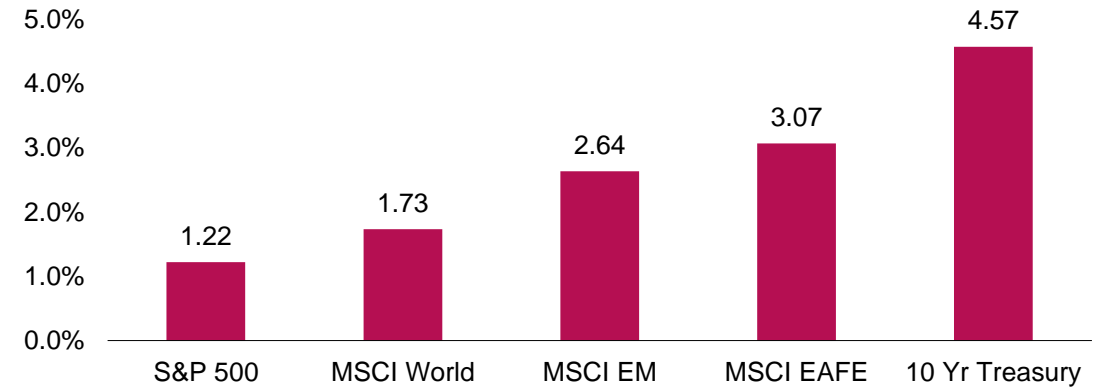
**EQUITIES**

# Dividend Yields and Volatility Analysis

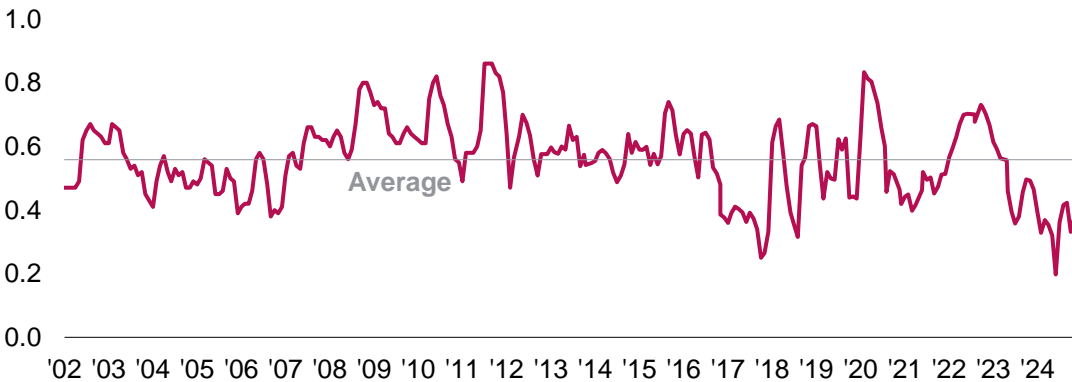
## Historical Yields



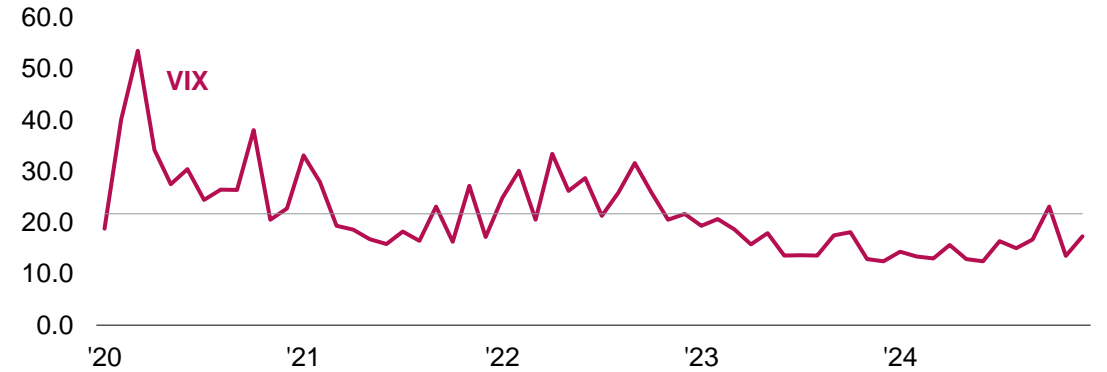
## Current Yields



## Correlation of S&P 500 Stocks



## CBOE Market Volatility Index (VIX)



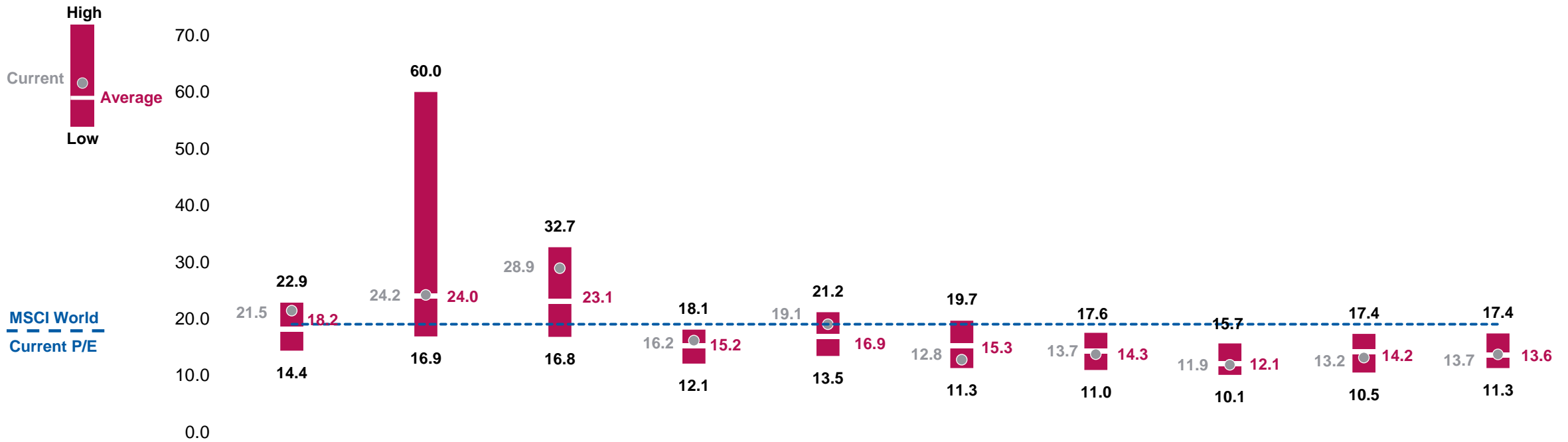
**Past performance is no guarantee of future results.**

It is not possible to invest directly in an index. Source: FactSet and Ned Davis Research as of 12/31/24. 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



	S&P 500	Russell 2000	Russell 1000 Growth	Russell 1000 Value	MSCI World	MSCI World ex USA Small Cap	MSCI EAFE	MSCI EM	MSCI Europe	MSCI AC Asia Pac
<b>High Date</b>	8/20	6/20	8/20	3/21	8/20	8/20	8/20	1/21	6/20	1/21
<b>Low Date</b>	12/18	9/22	2/16	9/22	12/18	9/22	9/22	10/18	9/22	12/18

Source: FactSet as of 12/31/24. NTM P/E is market price per share divided by expected earnings per share over the next twelve months. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

EQUITIES

# Valuation Analysis

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

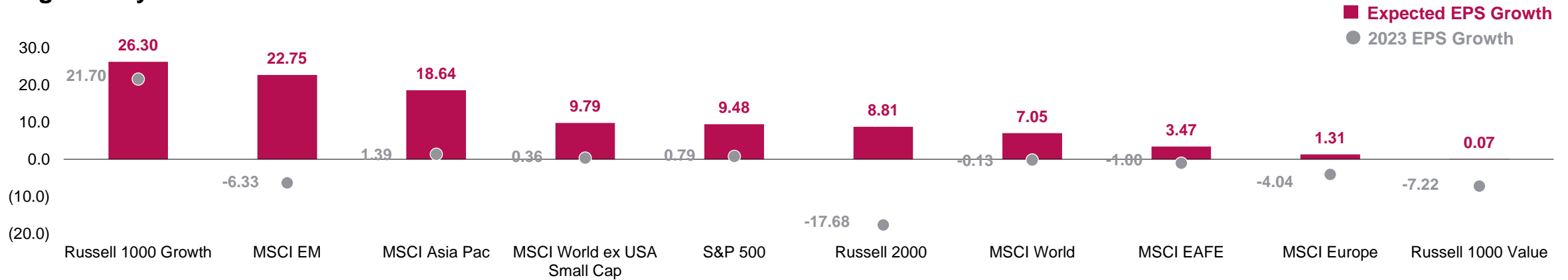


Source: FactSet as of 12/31/24. NTM P/E is market price per share divided by expected earnings per share over the next twelve months. The Real Estate sector is excluded from this 10-year chart since the sector was created on August 31, 2016. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

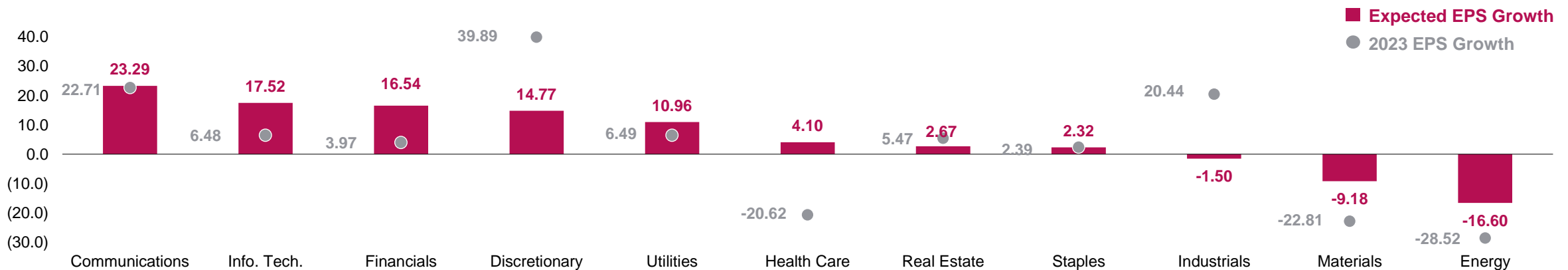
EQUITIES

# Corporate Earnings Growth

## Regions/Styles



## S&P 500 Sectors

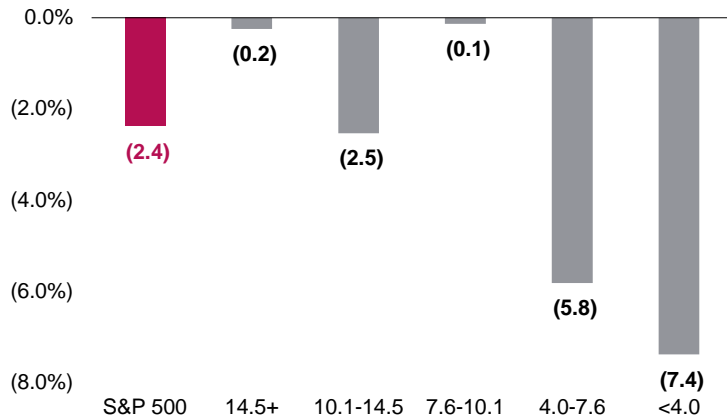


Source: FactSet as of 12/31/24. Expected EPS Growth is defined as the expected % change in the EPS growth from the beginning of the current calendar year through the end of the calendar year. 2023 EPS Growth is defined as the % change in EPS from the beginning of the year through the end of the year. 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.

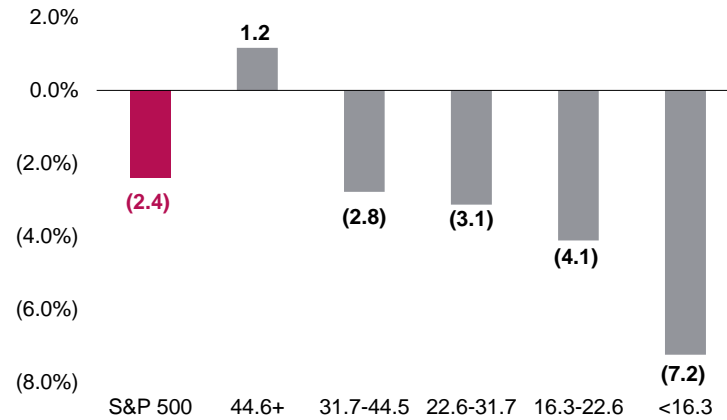
EQUITIES

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

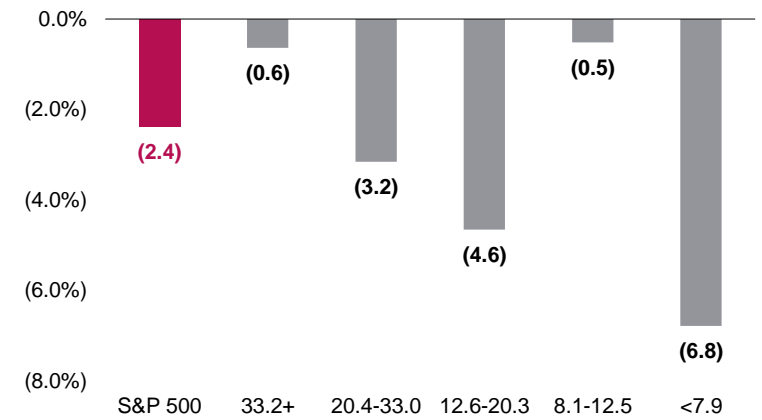
3-5 Year Earnings Growth



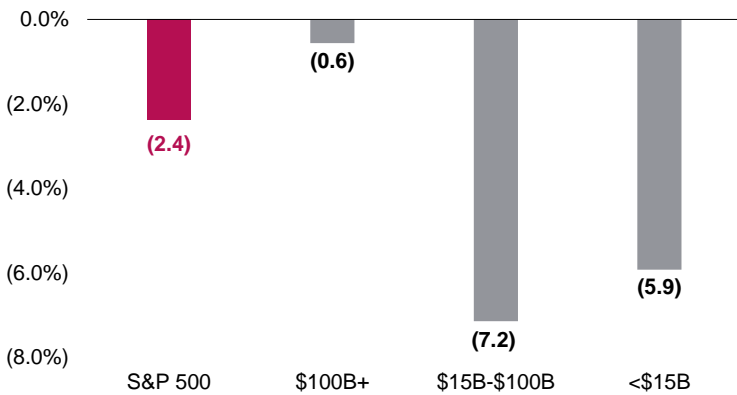
Trailing 12 Month P/E



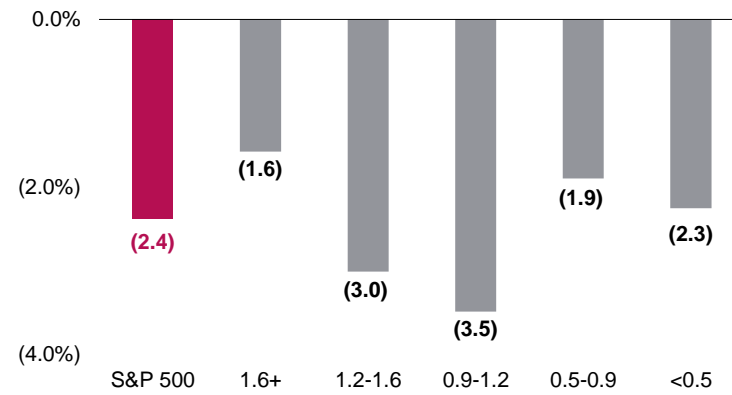
Return On Equity



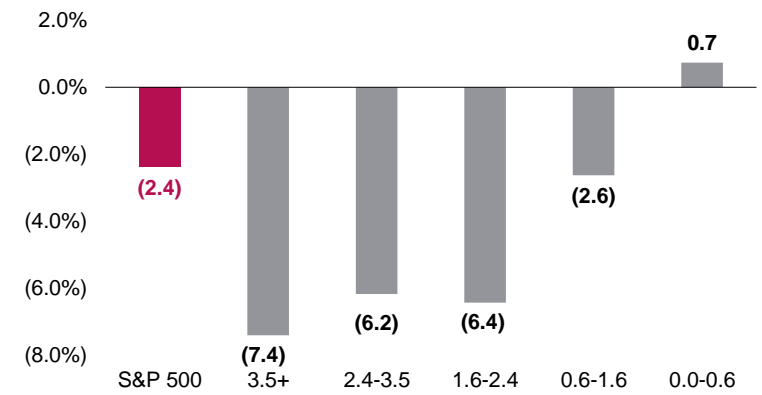
Market Cap



Beta



Dividend Yield



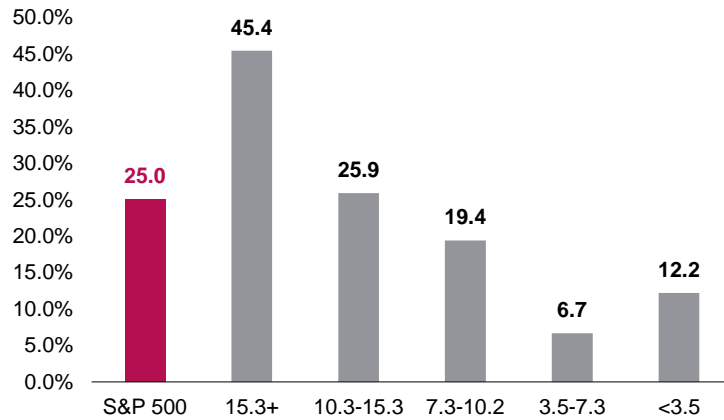
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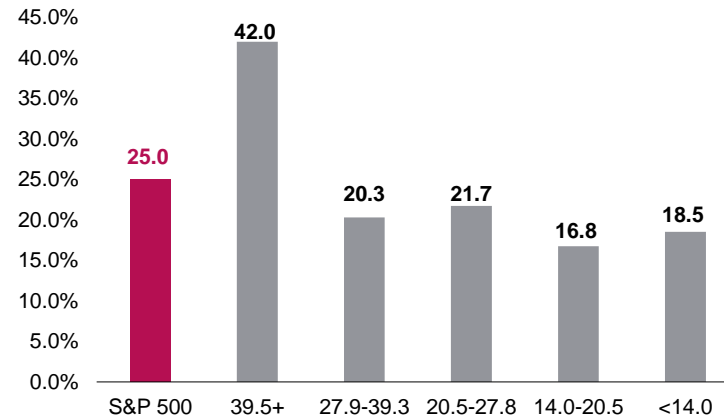
**EQUITIES**

# S&P 500 Index: YTD Analysis

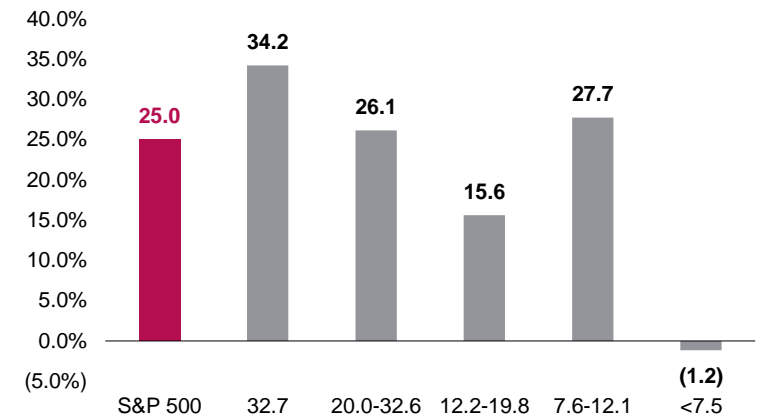
## 3-5 Year Earnings Growth



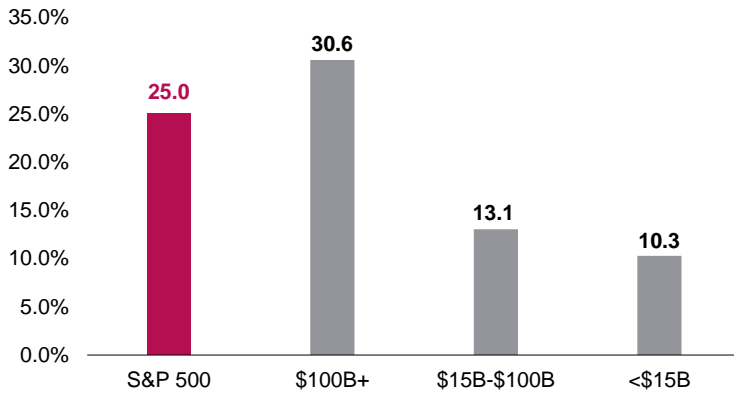
## Trailing 12 Month P/E



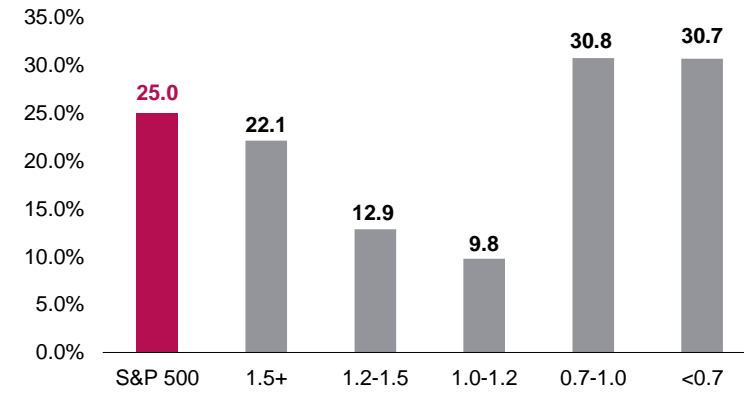
## Return On Equity



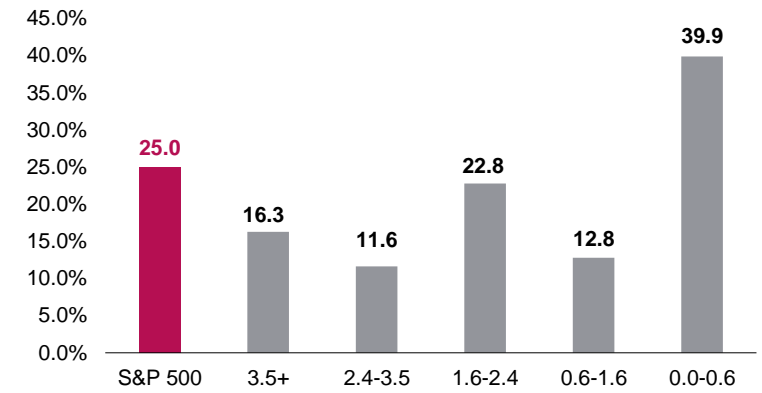
## Market Cap



## Beta



## Dividend Yield



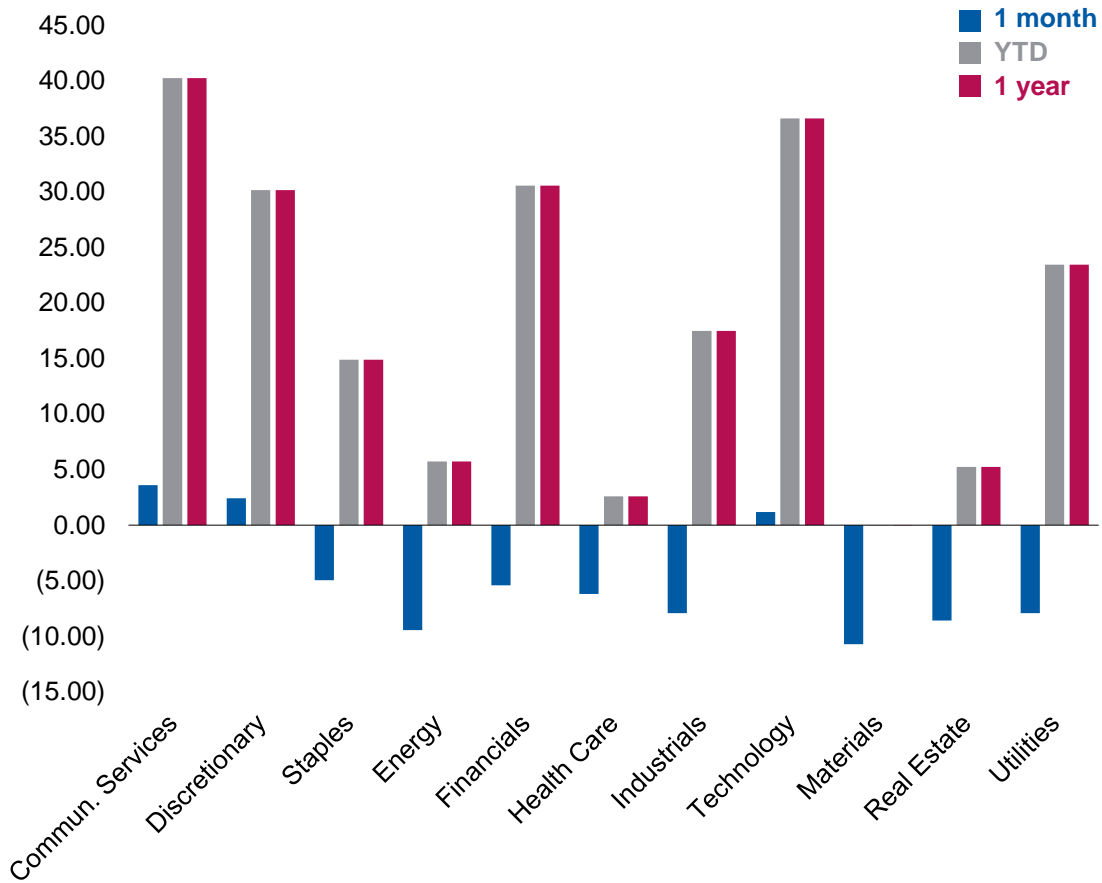
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It is not possible to invest directly in an index. Source: FactSet as of 12/31/24. Data provided is for informational use only. See end of report for important additional information.

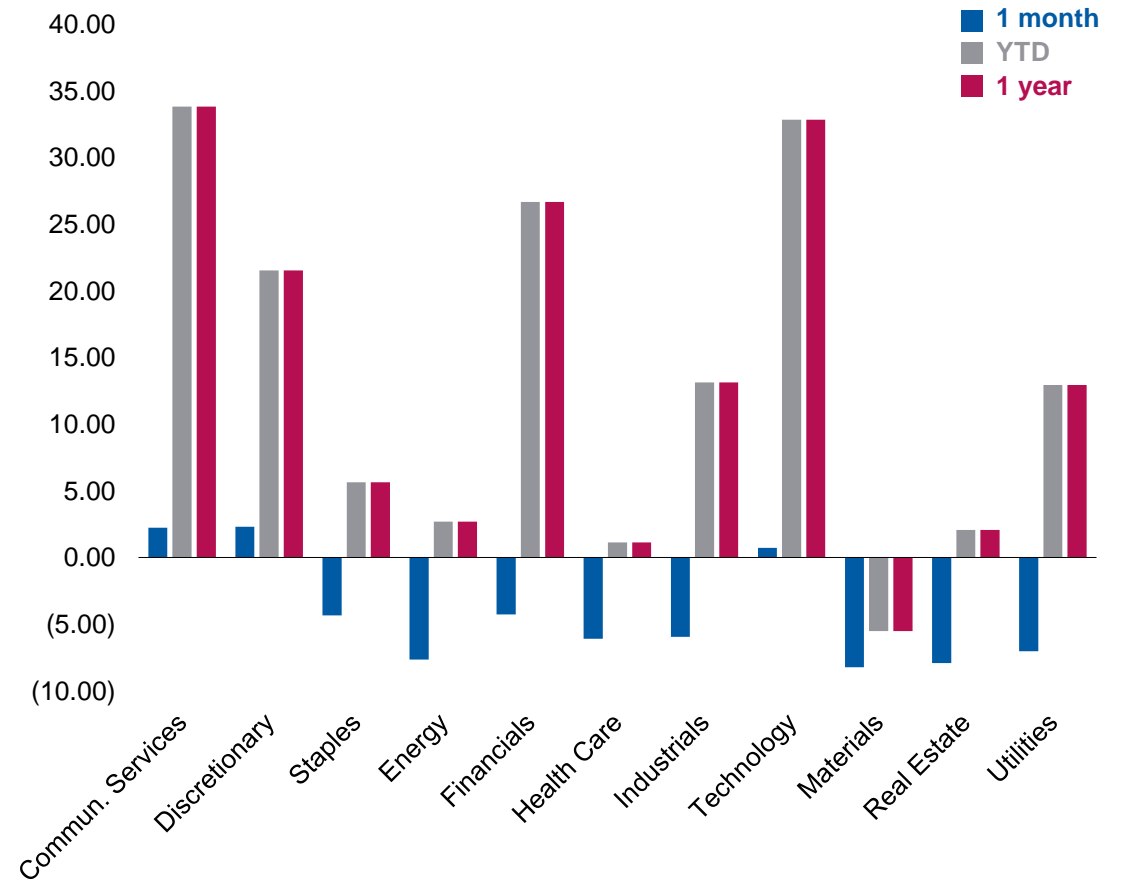
**EQUITIES**

# Index Sectors: Return Analysis

**S&P 500**  
Return %



**MSCI World**  
Return %



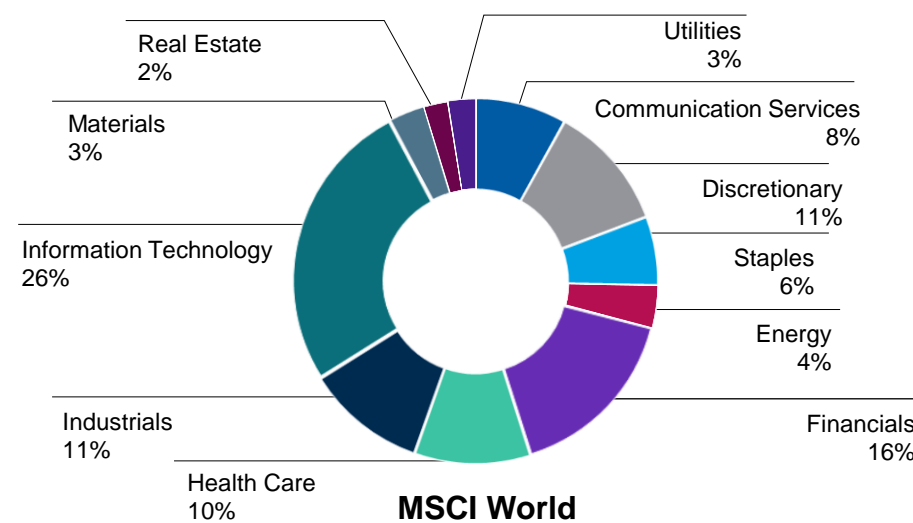
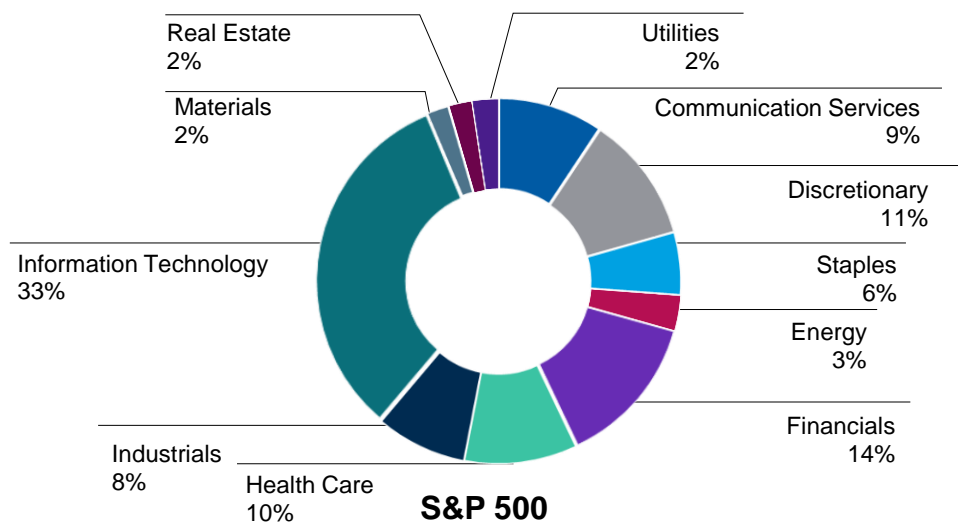
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It is not possible to invest directly in an index. Source: Morningstar as of 12/31/24. Data provided is for informational use only. See end of report for important additional information.

**EQUITIES**

# Current Characteristics and Sector Weights

	S&P 500	R2000	R1000G	R1000V	MSCI World	MSCI World ex USA Small Cap	MSCI EAFE	MSCI EM	MSCI Europe	MSCI Asia Pac
<b>Number of Holdings</b>	503	1966	396	869	1395	2249	722	1252	414	1304
<b>Maximum Market Cap</b>	\$3,785.30B	\$14.77B	\$3,785.30B	\$978.01B	\$3,834.48B	\$10.90B	\$279.79B	\$820.06B	\$279.79B	\$820.06B
<b>Minimum Market Cap</b>	\$6.07B	\$0.01B	\$0.93B	\$0.36B	\$1.64B	\$0.11B	\$1.90B	\$0.13B	\$1.90B	\$0.13B
<b>Dividend Yield</b>	1.22	1.27	0.52	2.04	1.73	3.07	3.07	2.64	3.26	2.43
<b>NTM PE</b>	21.46	24.24	28.94	16.17	19.06	12.78	13.75	11.91	13.17	13.74
<b>Price to Book</b>	5.01	2.07	13.61	2.67	3.50	1.33	1.84	1.80	1.99	1.73
<b>Price to Cash Flow</b>	17.87	15.71	27.57	12.11	14.29	8.12	8.81	8.05	7.67	10.12
<b>Price to Sales</b>	3.04	1.30	5.93	1.78	2.29	0.83	1.30	1.41	1.29	1.39
<b>Est 3-5 Yr EPS Growth</b>	12.94	11.85	15.95	9.42	12.26	10.97	9.33	15.85	9.71	12.99
<b>5Yr. Div Growth Rate</b>	5.16	7.93	4.82	3.55	4.47	5.45	3.81	1.43	4.49	0.45



Source: FactSet as of 12/31/24. 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	
<b>U.S. Equities</b>	S&P 500	-2.38	2.41	25.02	25.02	8.94	14.53	13.10	25.02	26.29	-18.11	28.71	18.40
	Russell 1000 Defensive	-2.64	0.12	18.55	18.55	6.00	11.49	11.83	18.55	20.23	-16.43	26.93	13.93
	Russell 1000 Dynamic	-2.93	5.39	30.63	30.63	10.78	16.87	13.73	30.63	33.34	-21.94	25.57	27.69
	Russell 2500	-7.54	0.62	12.00	12.00	2.39	8.77	8.85	12.00	17.42	-18.37	18.18	19.99
	Russell 1000 Growth	0.88	7.07	33.36	33.36	10.47	18.96	16.78	33.36	42.68	-29.14	27.60	38.49
	Russell 1000 Value	-6.84	-1.98	14.37	14.37	5.63	8.68	8.49	14.37	11.46	-7.54	25.16	2.80
	Russell Mid Cap	-7.04	0.62	15.34	15.34	3.79	9.92	9.63	15.34	17.23	-17.32	22.58	17.10
	Russell 2000	-8.26	0.33	11.54	11.54	1.24	7.40	7.82	11.54	16.93	-20.44	14.82	19.96
	CBOE S&P 500 Buywrite BXM	2.22	5.78	20.12	20.12	5.99	6.88	6.94	20.12	11.82	-11.37	20.47	-2.75
<b>Global Equities</b>	MSCI World	-2.61	-0.16	18.67	18.67	6.34	11.17	9.95	18.67	23.79	-18.14	21.82	15.90
	MSCI EAFE	-2.27	-8.11	3.82	3.82	1.65	4.73	5.20	3.82	18.24	-14.45	11.26	7.82
	MSCI EM	-0.14	-8.01	7.50	7.50	-1.92	1.70	3.64	7.50	9.83	-20.09	-2.54	18.31
	MSCI AC Asia Pac	-0.90	-6.75	9.56	9.56	0.36	3.58	5.24	9.56	11.45	-17.22	-1.46	19.71
	MSCI ACWI	-2.37	-0.99	17.49	17.49	5.44	10.06	9.23	17.49	22.20	-18.36	18.54	16.25
	MSCI Europe	-2.44	-9.74	1.79	1.79	1.20	4.90	4.98	1.79	19.89	-15.06	16.30	5.38
	MSCI World Small Cap	-5.97	-2.58	8.15	8.15	0.57	6.43	7.42	8.15	15.76	-18.76	15.75	15.96
	MSCI World Ex USA Small Cap	-2.62	-7.86	2.76	2.76	-2.77	2.87	5.49	2.76	12.62	-20.59	11.14	12.78
	FTSE 100	-2.73	-6.80	7.73	7.73	4.64	4.18	3.92	7.73	14.38	-7.01	17.36	-8.73
	FTSE All Small	-0.91	-7.05	8.62	8.62	-2.01	4.95	5.55	8.62	12.57	-23.06	22.15	10.77
	STOXX Europe 600	-2.41	-9.65	1.97	1.97	0.83	4.92	5.11	1.97	19.87	-16.14	16.09	6.83
	Nikkei 225 Average	-0.13	-4.14	8.45	8.45	2.14	4.72	7.36	8.45	22.05	-19.49	-4.69	23.99
<b>Sectors</b>	S&P 500 Comm. Services	3.58	8.87	40.23	40.23	9.51	14.57	11.19	40.23	55.80	-39.89	21.57	23.61
	S&P 500 Cons Disc	2.39	14.25	30.14	30.14	5.28	14.12	13.62	30.14	42.41	-37.03	24.43	33.30
	S&P 500 Cons Staples	-4.97	-3.26	14.87	14.87	4.69	8.56	8.43	14.87	0.52	-0.62	18.63	10.75
	S&P 500 Energy	-9.47	-2.44	5.72	5.72	20.02	12.14	4.91	5.72	-1.33	65.72	54.64	-33.68
	S&P 500 Financials	-5.43	7.09	30.56	30.56	9.42	11.70	11.43	30.56	12.15	-10.53	35.04	-1.69
	S&P 500 Health Care	-6.21	-10.30	2.58	2.58	0.87	7.99	9.14	2.58	2.06	-1.95	26.13	13.45
	S&P 500 Industrials	-7.95	-2.27	17.47	17.47	9.47	12.03	10.75	17.47	18.13	-5.48	21.12	11.06
	S&P 500 Info Tech	1.16	4.84	36.61	36.61	15.69	24.55	22.35	36.61	57.84	-28.19	34.53	43.89
	S&P 500 Materials	-10.72	-12.42	-0.04	-0.04	-0.43	8.69	7.87	-0.04	12.55	-12.27	27.28	20.73
	S&P 500 Real Estate	-8.59	-7.94	5.23	5.23	-4.41	4.55	6.58	5.23	12.36	-26.13	46.19	-2.17
	S&P 500 Utilities	-7.94	-5.51	23.43	23.43	5.22	6.61	8.43	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 12/31/24. Data provided is for informational use only. Results in US Dollar. See end of report for additional information.

EQUITIES

# Asset Class Return Analysis (%)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Higher	S&P 500 13.69	Growth 5.67	Small-Cap 21.31	Emerging Markets 37.28	Growth -1.51	Growth 36.39	Growth 38.49	S&P 500 28.71	Value -7.54	Growth 42.68	Growth 33.36
	Value 13.45	International Small-Cap 5.46	Value 17.34	International Small-Cap 31.04	S&P 500 -4.38	S&P 500 31.49	Small-Cap 19.96	Growth 27.60	International -14.45	S&P 500 26.29	S&P 500 25.02
	Mid-Cap 13.22	S&P 500 1.38	Mid-Cap 13.80	Growth 30.21	Value -8.27	Mid-Cap 30.54	S&P 500 18.40	Value 25.16	Mid-Cap -17.32	Global 22.20	Global 17.49
	Growth 13.05	International -0.81	S&P 500 11.96	International 25.03	Mid-Cap -9.06	Global 26.60	Emerging Markets 18.31	Mid-Cap 22.58	S&P 500 -18.11	International 18.24	Mid-Cap 15.34
	Small-Cap 4.89	Global -2.36	Emerging Markets 11.19	Global 23.97	Global -9.42	Value 26.54	Mid-Cap 17.10	Global 18.54	Global -18.36	Mid-Cap 17.23	Value 14.37
	Global 4.16	Mid-Cap -2.44	Global 7.86	S&P 500 21.83	Small-Cap -11.01	Small-Cap 25.52	Global 16.25	Small-Cap 14.82	Emerging Markets -20.09	Small-Cap 16.93	Small-Cap 11.54
	Emerging Markets -2.19	Value -3.83	Growth 7.08	Mid-Cap 18.52	International -13.79	International Small-Cap 25.41	International Small-Cap 12.78	International 11.26	Small-Cap -20.44	International Small-Cap 12.62	Emerging Markets 7.50
	International -4.90	Small-Cap -4.41	International Small-Cap 4.32	Small-Cap 14.65	Emerging Markets -14.58	International 22.01	International 7.82	International Small-Cap 11.14	International Small-Cap -20.59	Value 11.46	International 3.82
Lower	International Small-Cap -5.34	Emerging Markets -14.92	International 1.00	Value 13.66	International Small-Cap -18.07	Emerging Markets 18.42	Value 2.80	Emerging Markets -2.54	Growth -29.14	Emerging Markets 9.83	International Small-Cap 2.76

Past performance is no guarantee of future results.

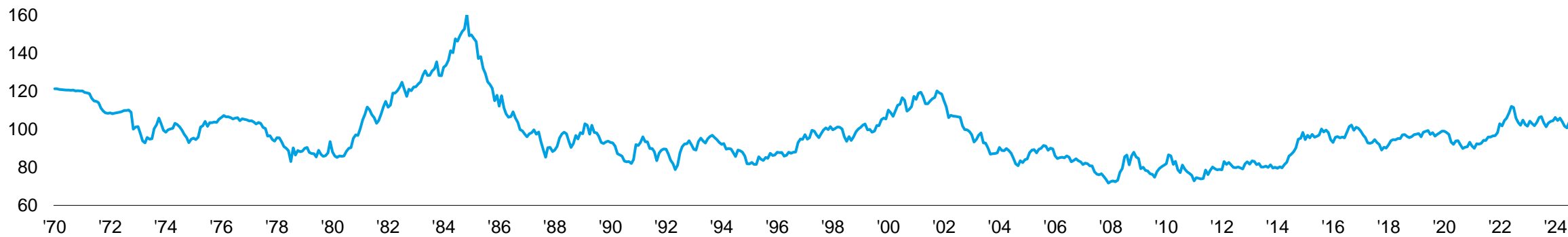
It is not possible to invest directly in an index. In general, Foreign securities are subject to currency, political, economic and market risks. The risks of investing in emerging market countries are greater than investments in foreign developed countries. Investors should carefully review the risks of each asset class prior to investing. Source: Morningstar as of 12/31/24. 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)	-	-	-	-	-	2.00	6.68	6.68	3.17	1.63	4.15
Euro (EUR) *	-1.96	-6.26	-6.26	-3.07	-1.60	-	-	-	-	-	2.39
British Pound (GBP)	-1.47	-1.76	-1.76	-2.58	-1.12	0.50	4.80	4.80	0.51	0.49	3.63
Japanese Yen (JPY)	-4.44	-10.30	-10.30	-9.85	-7.11	-2.53	-4.30	-4.30	-6.99	-5.60	0.61
Australian Dollar (AUD)	-4.96	-9.26	-9.26	-5.21	-2.51	-3.06	-3.20	-3.20	-2.21	-0.92	3.98
Canadian Dollar (CAD)	-2.65	-8.32	-8.32	-4.23	-2.05	-0.70	-2.19	-2.19	-1.20	-0.46	2.98
New Zealand Dollar (NZD)	-5.29	-11.51	-11.51	-6.47	-3.65	-3.40	-5.60	-5.60	-3.50	-2.08	3.58
Norwegian Krone (NOK)	-2.66	-10.58	-10.58	-8.09	-5.00	-0.72	-4.61	-4.61	-5.17	-3.46	4.18
Swedish Krona (SEK)	-1.18	-8.79	-8.79	-6.42	-3.26	0.80	-2.70	-2.70	-3.46	-1.69	2.05
Danish Krone (DKK)	-1.95	-6.29	-6.29	-3.16	-1.56	0.01	-0.04	-0.04	-0.09	0.04	1.98
Swiss Franc (CHF)	-2.79	-7.13	-7.13	0.18	1.33	-0.84	-0.93	-0.93	3.36	2.98	0.06

## U.S. Dollar Index



Past performance is no guarantee of future results.

It is not possible to invest directly in an index. \*German Rate. Source: Factset, Bloomberg as of 12/31/24. Dollar is represented by the US Trade Weighted Dollar Index (DXY). Data provided is for informational use only. See end of report for important additional information.

## ALTERNATIVES

## Emerging Market Currency Performance and Yields

Currency	Spot Returns vs. USD (%)					Spot Returns vs. EUR (%)					Local Interest Rates (%)
	1-Mo.	YTD	1Y	3Y	5Y	1-Mo.	YTD	1Y	3Y	5Y	1Y
<b>Asia, excluding Japan</b>											
Chinese Renminbi (CNY)	-0.91	-2.84	-2.84	-4.42	-0.93	1.07	3.65	3.65	-1.39	0.68	1.04
Malaysian Ringgit (MYR)	-0.59	2.76	2.76	-2.33	-1.77	1.39	9.62	9.62	0.77	-0.17	3.21
Indian Rupee (INR)	-1.31	-2.80	-2.80	-4.60	-3.57	0.67	3.69	3.69	-1.57	-2.00	6.69
Indonesian Rupiah (IDR)	-1.55	-4.34	-4.34	-3.97	-2.91	0.41	2.05	2.05	-0.93	-1.34	6.87
Philippine Peso (PHP)	1.37	-4.27	-4.27	-4.12	-2.62	3.39	2.12	2.12	-1.07	-1.04	5.74
Singapore Dollar (SGD)	-1.73	-3.31	-3.31	-0.39	-0.29	0.24	3.15	3.15	2.77	1.33	2.72
South Korean Won (KRW)	-5.24	-12.52	-12.52	-6.88	-4.71	-3.34	-6.67	-6.67	-3.93	-3.16	2.65
Taiwanese Dollar (TWD)	-0.92	-6.39	-6.39	-5.50	-1.77	1.06	-0.14	-0.14	-2.50	-0.18	1.14
Thai Baht (THB)	0.59	0.11	0.11	-0.68	-2.56	2.60	6.80	6.80	2.47	-0.97	1.99
<b>Latin America</b>											
Brazilian Real (BRL)	-3.35	-21.37	-21.37	-3.39	-8.22	-1.42	-16.12	-16.12	-0.33	-6.73	14.58
Chilean Peso (CLP)	-1.84	-12.19	-12.19	-5.03	-5.44	0.12	-6.33	-6.33	-2.01	-3.90	4.90
Colombian Peso (COP)	0.07	-12.07	-12.07	-2.61	-5.72	2.07	-6.19	-6.19	0.48	-4.19	8.45
Mexican Peso (MXN)	-2.57	-18.56	-18.56	-0.53	-1.91	-0.62	-13.12	-13.12	2.63	-0.31	10.04
Peruvian New Sol (PEN)	-0.64	-1.45	-1.45	2.03	-2.49	1.35	5.14	5.14	5.27	-0.91	4.40

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## ALTERNATIVES

## Emerging Market Currency Performance and Yields

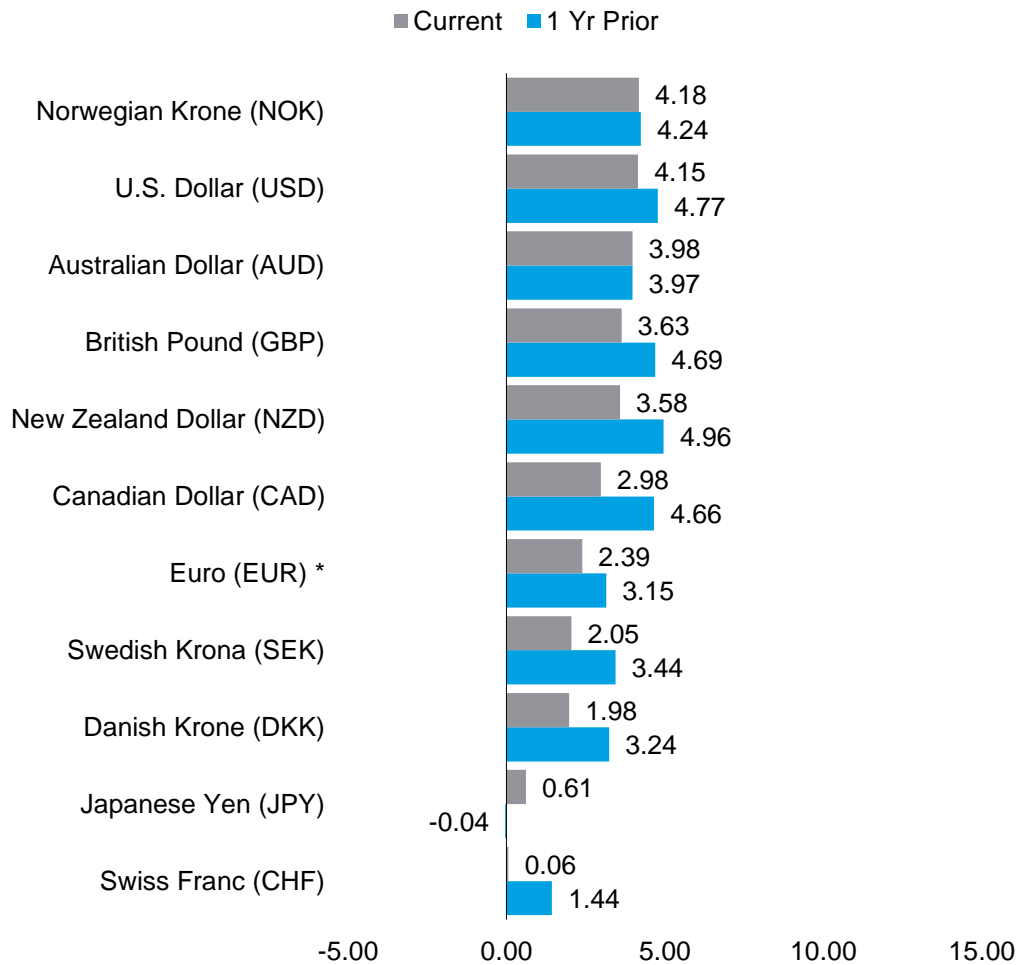
Currency	Spot Returns vs. USD (%)					Spot Returns vs. EUR (%)					Local Interest Rates (%)
	1-Mo.	YTD	1Y	3Y	5Y	1-Mo.	YTD	1Y	3Y	5Y	1Y
<b>Europe</b>											
Czech Koruna (CZK)	-1.62	-8.07	-8.07	-3.49	-1.41	0.34	-1.93	-1.93	-0.43	0.19	3.26
Hungarian Forint (HUF)	-1.34	-12.90	-12.90	-6.56	-5.80	0.63	-7.09	-7.09	-3.60	-4.27	5.15
Polish Zloty (PLN)	-1.60	-4.80	-4.80	-0.82	-1.72	0.36	1.56	1.56	2.33	-0.12	4.96
Romanian Leu (RON)	-1.94	-6.27	-6.27	-3.25	-2.36	0.02	-0.01	-0.01	-0.18	-0.77	6.25
Russian Ruble (RUB)	-3.42	-18.54	-18.54	-11.92	-10.76	-1.49	-13.10	-13.10	-9.12	-9.31	--
Turkish New Lira (TRY)	-1.87	-16.48	-16.48	-27.85	-29.98	0.09	-10.90	-10.90	-25.56	-28.84	38.69
<b>Middle East and Africa</b>											
Ghanaian Cedi (GHS)	4.42	-18.95	-18.95	-25.11	-17.26	6.51	-13.53	-13.53	-22.73	-15.91	17.90
Israeli Shekel (ILS)	-0.22	-1.17	-1.17	-5.12	-1.06	1.78	5.43	5.43	-2.11	0.55	4.29
Kenyan Shilling (KES)	0.31	21.38	21.38	-4.36	-4.76	2.31	29.48	29.48	-1.33	-3.21	11.37
Moroccan Dirham (MAD)	-1.35	-2.60	-2.60	-2.98	-1.16	0.62	3.91	3.91	0.10	0.45	2.44
Nigerian Naira (NGN)	9.00	-41.87	-41.87	-35.53	-25.14	11.17	-37.99	-37.99	-33.48	-23.93	29.03
South African Rand (ZAR)	-4.27	-3.09	-3.09	-5.43	-5.82	-2.36	3.38	3.38	-2.43	-4.29	8.23
Ugandan Shilling (UGX)	-0.27	2.16	2.16	-1.42	-0.16	1.72	8.98	8.98	1.71	1.46	15.24
Zambian Kwacha (ZMK)	-3.61	-7.78	-7.78	-15.76	-12.77	-1.68	-1.63	-1.63	-13.09	-11.35	15.50

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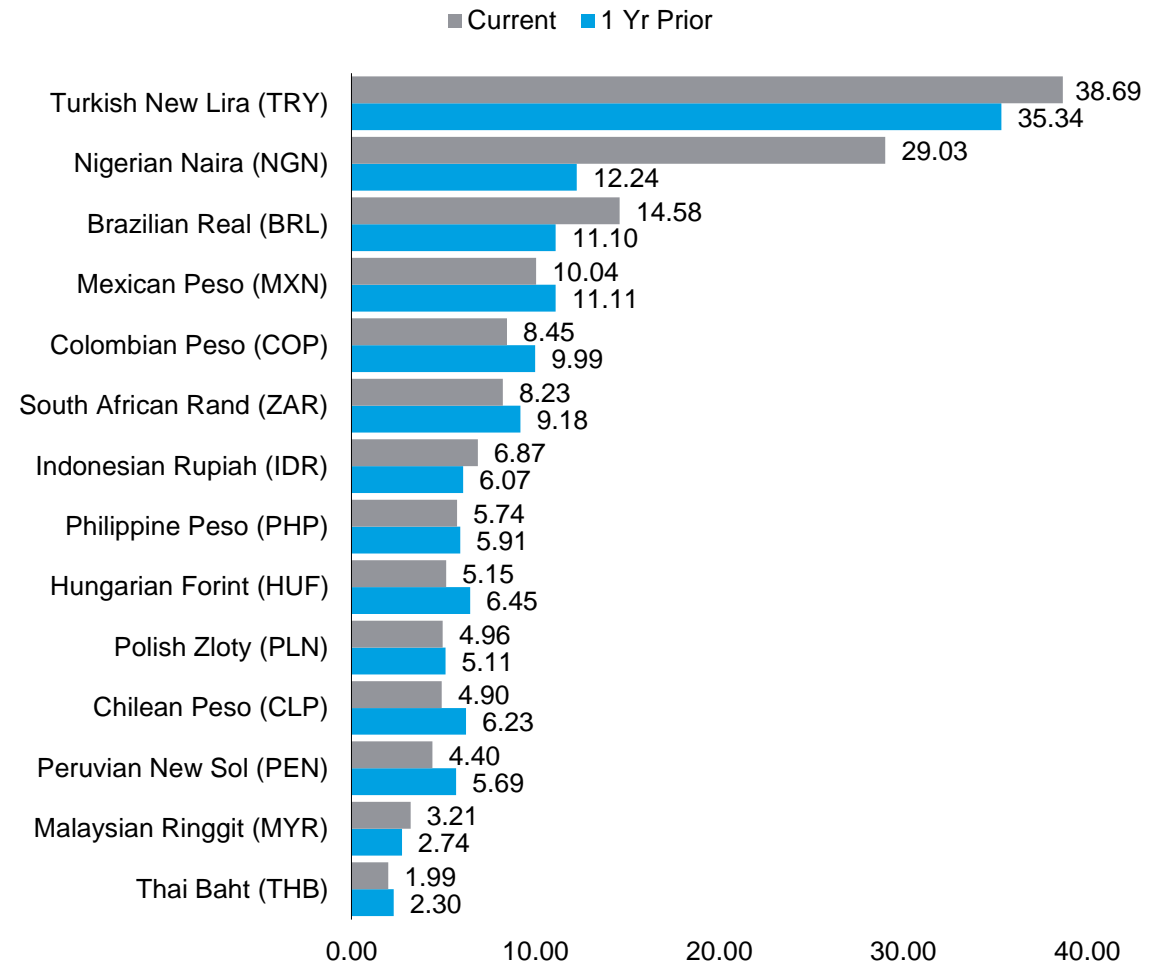
ALTERNATIVES

# 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.

It is not possible to invest directly in an index. \*German Rate. Source: Bloomberg as 12/31/24. Data provided is for informational use only. See end of report for important additional information.

## ALTERNATIVES

## Commodities Return Analysis (%)

Index	1-Mo.	3-Mo.	YTD	1Y	3Y	5Y
<b>Bloomberg Commodity Index</b>	<b>1.02</b>	<b>-0.45</b>	<b>5.38</b>	<b>5.38</b>	<b>4.05</b>	<b>6.77</b>
<b>Bloomberg Sub Agriculture</b>	<b>1.18</b>	<b>-1.17</b>	<b>-3.92</b>	<b>-3.92</b>	<b>1.99</b>	<b>9.37</b>
Coffee	0.92	19.86	87.22	87.22	22.32	22.08
Corn	6.30	6.12	-10.97	-10.97	-3.38	6.49
Cotton	-4.54	-9.05	-16.04	-16.04	-7.44	4.46
Soybean	1.88	-5.50	-19.33	-19.33	1.98	8.70
Soybean Oil	-3.52	-6.42	-14.99	-14.99	-2.91	9.82
Sugar	-8.28	-13.30	1.63	1.63	10.83	13.06
Wheat	1.03	-7.06	-19.10	-19.10	-16.65	-6.14
<b>Bloomberg Sub Energy</b>	<b>6.49</b>	<b>5.50</b>	<b>1.18</b>	<b>1.18</b>	<b>2.60</b>	<b>-1.21</b>
Brent Crude	4.79	6.36	9.45	9.45	15.42	11.75
Heating Oil	5.20	6.96	-0.15	-0.15	23.63	13.05
Natural Gas	10.28	1.18	-26.23	-26.23	-32.64	-25.65
Unleaded Gas	5.89	6.70	7.36	7.36	19.76	15.02
WTI Crude Oil	6.05	8.32	13.75	13.75	11.69	2.11

Index	1-Mo.	3-Mo.	YTD	1Y	3Y	5Y
<b>Bloomberg Sub Industrial Metals</b>	<b>-3.02</b>	<b>-7.73</b>	<b>3.54</b>	<b>3.54</b>	<b>-2.81</b>	<b>6.84</b>
Aluminum	-2.06	-2.59	5.44	5.44	-3.99	5.03
Copper	-2.37	-11.60	5.52	5.52	-1.51	8.40
Nickel	-3.74	-12.82	-8.37	-8.37	-9.26	1.75
Zinc	-4.22	-3.09	12.23	12.23	-1.93	7.43
<b>Bloomberg Sub Precious Metals</b>	<b>-2.20</b>	<b>-2.14</b>	<b>25.26</b>	<b>25.26</b>	<b>11.20</b>	<b>10.15</b>
Gold	-1.11	-0.47	26.62	26.62	12.35	10.42
Platinum	-5.43	-8.27	-9.38	-9.38	-0.38	-1.03
Silver	-5.64	-7.27	20.57	20.57	7.25	9.05
<b>Bloomberg Sub Livestock</b>	<b>-0.74</b>	<b>4.77</b>	<b>20.23</b>	<b>20.23</b>	<b>8.20</b>	<b>1.05</b>
Lean Hogs	-5.46	6.77	25.42	25.42	3.43	-1.06
Live Cattle	1.97	3.89	19.77	19.77	11.47	2.59

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ALTERNATIVES

# Asset Class Return Analysis (%)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD 2024
Higher	Managed Futures 18.37	Multi-Strategy 3.84	MLP 18.31	Long/Short Equity 13.41	Fixed Income Arbitrage 1.10	Long/Short Equity 12.17	Convertible Arbitrage 10.25	MLP 40.17	MLP 30.92	MLP 26.56	MLP 34.05
	Multi-Strategy 6.09	Long/Short Equity 3.55	Commodity 11.77	Currency 11.54	Global Macro -0.11	Global Macro 10.38	Long/Short Equity 7.86	Commodity 27.11	Managed Futures 19.12	Long/Short Equity 10.93	Long/Short Equity 16.27
	Long/Short Equity 5.55	Equity Market Neutral 1.69	Convertible Arbitrage 6.60	Equity Market Neutral 8.45	Multi-Strategy -1.05	Managed Futures 9.01	Event Driven 6.95	Event Driven 12.92	Commodity 16.09	Event Driven 9.30	Event Driven 13.05
	MLP 4.80	Convertible Arbitrage 0.81	Multi-Strategy 4.41	Multi-Strategy 6.83	Convertible Arbitrage -2.26	Event Driven 8.22	Global Macro 6.53	Global Macro 9.60	Global Macro 15.89	Currency 8.44	Fixed Income Arbitrage 8.47
	Fixed Income Arbitrage 4.37	Fixed Income Arbitrage 0.59	Fixed Income Arbitrage 4.29	Fixed Income Arbitrage 6.52	Currency -3.33	Convertible Arbitrage 8.15	Multi-Strategy 5.60	Long/Short Equity 8.35	Equity Market Neutral 1.71	Multi-Strategy 8.04	Equity Market Neutral 8.12
	Global Macro 3.11	Global Macro 0.18	Global Macro 3.58	Event Driven 6.30	Event Driven -3.95	Commodity 7.69	Fixed Income Arbitrage 3.64	Managed Futures 8.19	Multi-Strategy 1.27	Fixed Income Arbitrage 7.71	Convertible Arbitrage 7.31
	Event Driven 1.57	Managed Futures -0.93	Currency 3.54	Convertible Arbitrage 5.01	Long/Short Equity -4.62	Multi-Strategy 7.25	Managed Futures 1.86	Multi-Strategy 6.97	Fixed Income Arbitrage -0.97	Equity Market Neutral 6.73	Multi-Strategy 7.31
	Equity Market Neutral -1.19	Event Driven -6.29	Event Driven 2.68	Managed Futures 3.29	Equity Market Neutral -5.00	MLP 6.56	Currency 1.73	Convertible Arbitrage 6.33	Convertible Arbitrage -3.32	Convertible Arbitrage 4.04	Global Macro 5.99
	Convertible Arbitrage -1.68	Currency -7.61	Long/Short Equity -3.43	Global Macro 2.14	Managed Futures -6.67	Fixed Income Arbitrage 6.10	Equity Market Neutral 1.69	Equity Market Neutral 6.16	Long/Short Equity -5.77	Managed Futures -2.78	Commodity 4.32
	Currency -7.03	Commodity -24.66	Equity Market Neutral -4.58	Commodity 1.70	Commodity -11.25	Currency 5.20	Commodity -3.12	Fixed Income Arbitrage 5.22	Event Driven -6.80	Global Macro -5.19	Managed Futures 1.50
Lower	Commodity -17.01	MLP -32.59	Managed Futures -6.84	MLP -6.52	MLP -12.42	Equity Market Neutral 1.58	MLP -28.69	Currency -3.09	Currency -7.14	Commodity -7.91	Currency 0.36

**Past performance is no guarantee of future results.** It is not possible to invest directly in an index. Source: Morningstar as of 11/30/24. \*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	0.86	0.68	0.86	0.37	0.39	0.80	0.60	0.41
International	0.88	1.00	0.80	0.77	0.41	0.46	0.81	0.60	0.44
Emerging Markets	0.69	0.79	1.00	0.61	0.39	0.43	0.70	0.56	0.49
Small Cap	0.86	0.82	0.67	1.00	0.29	0.32	0.76	0.63	0.38
U.S. Aggregate	0.56	0.59	0.54	0.48	1.00	0.85	0.49	0.15	-0.07
Municipal	0.58	0.64	0.61	0.52	0.85	1.00	0.55	0.28	0.02
High Yield	0.83	0.82	0.71	0.82	0.60	0.69	1.00	0.80	0.49
Bank Loan	0.61	0.61	0.61	0.66	0.22	0.37	0.81	1.00	0.49
Commodities	0.41	0.47	0.47	0.38	-0.02	0.10	0.48	0.49	1.00

5 Years ended December 31, 2024
  10 Years ended December 31, 2024

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

It is not possible to invest directly in an index. Source: Morningstar as of 12/31/24. 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.
Foreign Large Blend	7,832	6,874	3,596
Intermediate Core Bond	6,042	20,658	78,873
Multisector Bond	4,810	14,130	43,225
Global Bond-USD Hedged	1,559	3,558	18,773
Muni National Interm	1,551	5,988	15,569
High Yield Muni	1,392	3,742	12,842
Nontraditional Bond	1,007	2,987	9,242
Bank Loan	719	-856	-2,459
Long-Short Equity	629	275	736
Utilities	587	790	-681

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

	1 Mo.	3 Mo.	12 Mo.
Mid-Cap Value	-1,977	-5,466	-22,795
Short-Term Bond	-2,154	-711	-7,237
Health	-2,158	-4,043	-14,539
Moderate Allocation	-2,233	-9,761	-35,720
Global Allocation	-2,880	-5,352	-23,973
Foreign Large Growth	-2,915	-9,444	-23,151
Mid-Cap Growth	-2,932	-8,175	-31,898
Large Value	-6,465	-19,972	-68,451
Large Growth	-12,916	-36,522	-123,707
Large Blend	-22,212	-55,918	-117,504

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

	1 Mo.	3 Mo.	12 Mo.
Large Blend	54,001	133,569	354,837
Large Growth	16,628	23,816	90,735
Large Value	9,096	18,176	43,345
Small Blend	9,071	9,639	34,527
Digital Assets	8,125	15,024	35,875
Financial	7,562	5,173	11,894
Ultrashort Bond	7,220	14,324	35,787
Mid-Cap Blend	7,111	10,412	26,931
Intermediate Core Bond	5,895	20,135	57,168
Technology	4,158	2,994	25,313

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

	1 Mo.	3 Mo.	12 Mo.
Utilities	-540	154	1,753
Japan Stock	-559	-1,901	1,142
Consumer Defensive	-574	-385	-2,467
Trading--Inverse Equity	-676	608	1,295
Health	-917	-2,362	-7,951
Real Estate	-1,187	1,251	5,891
Inflation-Protected Bond	-1,808	-2,785	-5,199
Europe Stock	-2,035	-2,666	-1,168
Long Government	-4,441	-1,274	23,796
China Region	-4,848	7,353	2,934

Source: Morningstar as of 11/30/24. 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 (%)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Higher	S&P 500 13.69	Municipal 3.30	Small-Cap 21.31	Emerging Markets 37.28	Municipal 1.28	S&P 500 31.49	Small-Cap 19.96	S&P 500 28.71	Commodities 16.09	S&P 500 26.29	S&P 500 25.02
	Municipal 9.05	S&P 500 1.38	High Yield 17.49	International 25.03	Bank Loan 0.44	Small-Cap 25.52	S&P 500 18.40	Commodities 27.11	Bank Loan -0.77	International 18.24	Small-Cap 11.54
	US Agg 5.97	US Agg 0.55	S&P 500 11.96	S&P 500 21.83	US Agg 0.01	International 22.01	Emerging Markets 18.31	Small-Cap 14.82	Municipal -8.53	Small-Cap 16.93	Asset Allocation 9.79
	Small-Cap 4.89	Bank Loan -0.69	Commodities 11.77	Small-Cap 14.65	High Yield -2.26	Asset Allocation 18.70	Asset Allocation 11.95	Asset Allocation 11.43	High Yield -11.22	Asset Allocation 14.09	Bank Loan 8.95
	Asset Allocation 4.28	International -0.81	Emerging Markets 11.19	Asset Allocation 14.02	S&P 500 -4.38	Emerging Markets 18.42	International 7.82	International 11.26	US Agg -13.01	High Yield 13.46	High Yield 8.20
	High Yield 2.50	Asset Allocation -2.03	Bank Loan 10.16	High Yield 7.48	Asset Allocation -5.40	High Yield 14.41	US Agg 7.51	High Yield 5.36	Asset Allocation -13.04	Bank Loan 13.32	Emerging Markets 7.50
	Bank Loan 1.60	Small-Cap -4.41	Asset Allocation 8.61	Municipal 5.45	Small-Cap -11.01	US Agg 8.72	High Yield 6.17	Bank Loan 5.20	International -14.45	Emerging Markets 9.83	Commodities 5.38
	Emerging Markets -2.19	High Yield -4.64	US Agg 2.65	Bank Loan 4.12	Commodities -11.25	Bank Loan 8.64	Municipal 5.21	Municipal 1.52	S&P 500 -18.11	Municipal 6.40	International 3.82
	International -4.90	Emerging Markets -14.92	International 1.00	US Agg 3.54	International -13.79	Commodities 7.69	Bank Loan 3.12	US Agg -1.54	Emerging Markets -20.09	US Agg 5.53	US Agg 1.25
Lower	Commodities -17.01	Commodities -24.66	Municipal 0.25	Commodities 1.70	Emerging Markets -14.57	Municipal 7.54	Commodities -3.12	Emerging Markets -2.54	Small-Cap -20.44	Commodities -7.91	Municipal 1.05

**Past performance is no guarantee of future results.** It is not possible to invest directly in an index. Source: Morningstar as of 12/31/24. 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 provides top-down, macro analysis of equity, fixed income and alternative assets, designed to help clients capitalize on evolving economic dynamics and market dislocations globally. The team builds custom multi-asset investment solutions across a range of broadly-diversified to hyper-focused portfolios.



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*Chief Investment  
Officer  
Managing Director*



**EWA TUREK  
SEMMELOTH**  
*Executive Director*



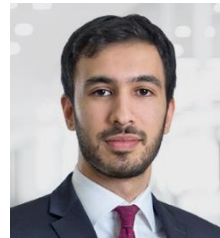
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**UMAR MALIK**  
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**SACHIN  
RAGHAVAN**  
*Associate*

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**JUSTIN BOURGETTE**

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*Head of Macro & Thematic Research, Emerging Markets*

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**VISHAL KHANDUJA**

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**STEVEN TURNER**

*Head of Investment Selection, Portfolio Solutions Group*

**MARK VAN DER ZWAN**

*Chief Investment Officer and Head of the AIP Hedge*

*Fund Team*

## ADDITIONAL INFORMATION

## Index Definitions

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

**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 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.

**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.

**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.

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.

## ADDITIONAL INFORMATION

# Index Definitions, Terms and About Risk

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 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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**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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