

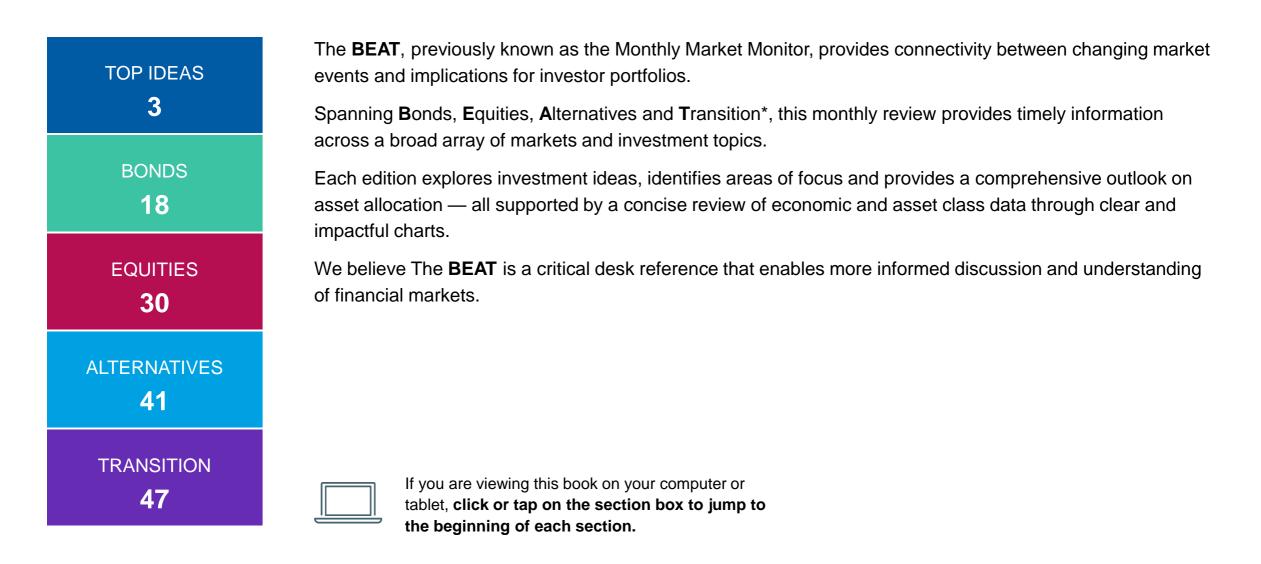
INVESTMENT MANAGEMENT





September 2024

Previously known as the Monthly Market Monitor.



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.

Key Themes for September



FEAR Framework: Speed Matters

FEAR is a framework we use to understand the interplay between <u>F</u>ed policy, <u>E</u>mployment, <u>A</u>sset prices and <u>R</u>ates. A 5.5% Fed policy was designed to weaken employment and wage inflation in order to lower and anchor CPI. This is happening, but the market is fearful that the speed of job losses may trigger a recession. However, the increase of entrants into the labor market may be the reason the unemployment rate rose, not because people are quitting their jobs or getting laid off.

Volatility vs. Market Fundamentals

The volatility in markets may be telling us more about excesses in crowded market positions than economic fundamentals. The economy is certainly slowing, but we see this as a normalization of economic activity and the employment situation, more so than a collapse. However, this catalyzed a sudden exit from crowded positions in a very narrow market and caused volatility to spike. We do believe volatility should be elevated, but we do not believe its signal is particularly strong in calling for a hard landing due to the related technicals.



Equities: Trading the Range . . . for Now

We believe we are still in a secular bull market and our bias is to maintain positive tilts in our asset allocation. Our base case for a soft landing, which includes the possibility of a mild and short-lived recession, remains intact. Again, we see the cooling of the economy as a normalization of economic activity that brings with it a reset in market prices. This ultimately reduces the extreme narrowness of the S&P 500 and creates opportunities for broadening that includes large-cap value sectors. Inherent in this view is an expectation for overshoots both to the upside and the downside. This creates an opportunity for us to trade the range.



Bond Yields Are Well-Priced for Rate Cuts

Once again, **we believe bond yields are priced to perfection**. Bonds are priced for the Fed to cut interest rates by over 200 basis points (bps) by the end of 2025. While there may be some room for yields to move lower, we think it will take a hard landing or a deeper recession to see a material drop. We still believe that we are in a structurally higher inflation regime for years to come. Of course, inflation can fall from here, but we do not think it can fall below 2% for a material period of time. Instead, we think it bounces off that level. As a result, bond yields should trade with a spread above a terminal Fed Funds level of, say around 3.50%. This is why we think declines in bond yields are limited.

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The Portfolio Solutions Group – Our Top 4 Ideas for September

Downgrading Loans to Neutral, Keeping HY Overweight

Moving loans to Neutral from OW. The market is pricing 200 bps of rate cuts over the next year and possibly further cuts by the end of 2025. The yield in loans floats with short-term rates and will fall as the Fed cuts. This decline in yield, relative to the credit quality associated with loans, makes this asset class less attractive. By comparison, HY is a higher quality asset, mainly BB rated, and has higher interest coverage ratios and EBITDA margins. With these other factors in mind, we think it's worthwhile to rebalance loans to Neutral from OW.

Equities: The Worst of Times, The Best of Times

Taking advantage of volatility. We believe the equity market is in a secular bull market and see corrections as an opportunity to buy. As a result, we added to equity exposure in August during weakness. But at the same time, we still believe the economy is cooling into a soft landing. As such, we believe the market can overshoot to the upside as well and is the reason we sold equity exposure and returned to Neutral later in August. We do not believe the economy is set to accelerate over the next few months, which makes the S&P 500 around 5650 our near-term upper bound. At the same time, the economy is not collapsing, which makes 5200 attractive and 5350 seem fair. We plan to trade around the ranges.

Japanese Equities: Maintain Overweight

Japanese equities are in a correction, not the start of a bear market. Japan remains a structural overweight in terms of equity exposure. Many of the factors that brought us to this conclusion are still intact. Namely, we see Japan in a structural recovery that will be supported by policy and favorable corporate governance. Japan will certainly go through corrections as we've seen, but we do not yet have a full position on and will use those corrections to increase exposure. Policy makers seem supportive of growth and will risk modestly higher inflation to achieve it. Tailwind from JPY (yen) weakness is likely past the cycle peak, but we expect a manageable pace of currency appreciation.

Moving Duration to Underweight

Bond yields are well-priced for rate cuts. Market expectations are priced for Fed rate cuts of over 200 bps by the end of 2025, which may represent the full rate cutting cycle. If we assume that policy rates fall to 3.5%, U.S. Treasuries (USTs) trade with a spread over Fed funds and the curve steepens – as is common after a rate cutting cycle – then bond yields around 4% and below seem fully priced especially in our base case for a soft landing. As a result, we believe that bond returns from duration are limited, thus our move to shorten duration. One should expect returns to reflect the coupon level of bonds, which keeps us interested in spread products.

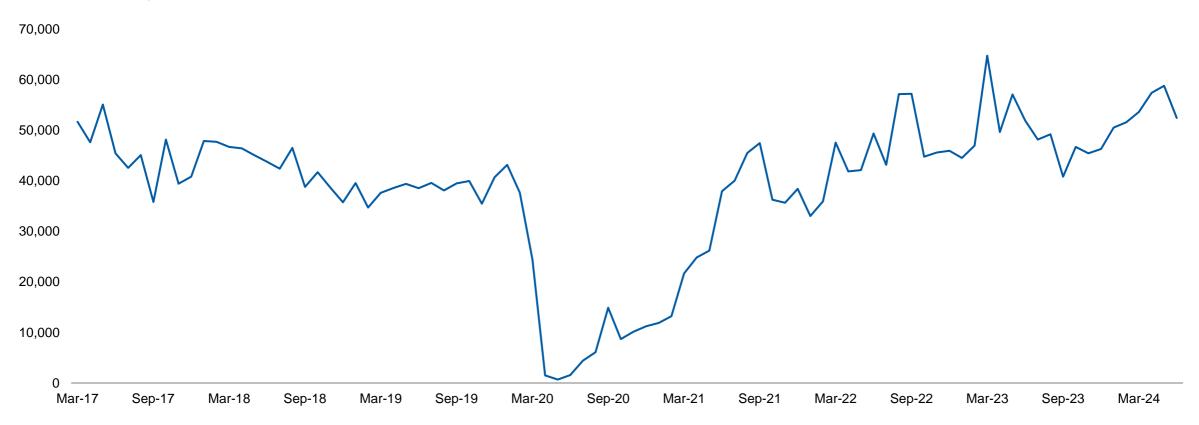
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Not All Increases in the Unemployment Rate Are Created Equal

Higher immigration levels may be supporting a higher labor force participation rate, which in turn would contribute to a higher reported unemployment rate. From this perspective, a higher unemployment rate is not signalling weakness but rather an increase in the labor supply that would help bring inflation down without affecting growth.

Immigrant Visas Remain Near Record-high Levels

Total U.S. immigrant visas issued each month

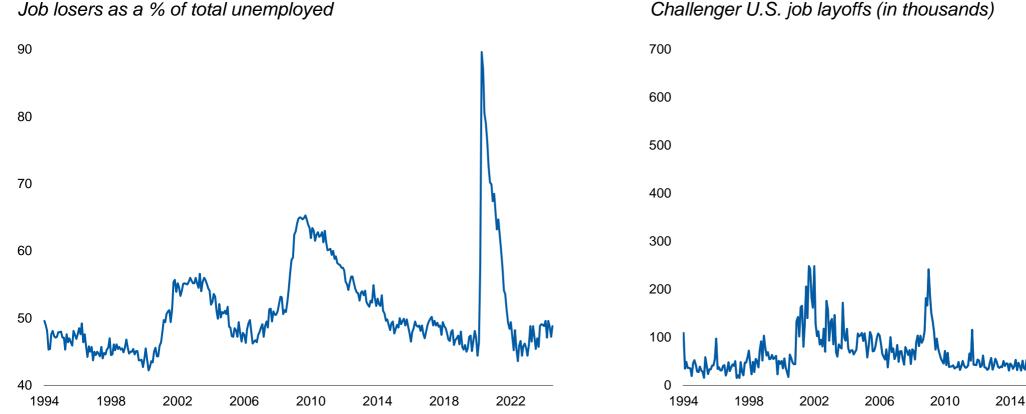


Source: Macrobond, Apollo Global Management, MSIM. Data as of 12 August 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

Unemployment Is Still Far from Distressed Levels

Labor market measures that focus on job losses are starting to pick up but are still far from levels that signal distress. As shown, Job Losers (LHS) and Layoffs metrics (RHS) are still low. Given the distortions of this cycle, these measures might be a more accurate tool to measure recession risks compared to a top-line unemployment rate.

The Numbers of Individuals Being Made Redundant in the U.S. Remains Low



Challenger U.S. job layoffs (in thousands)

Source: Macrobond, Alpine Macro, MSIM. Data as of 14 August 2024. LHS Chart axis truncated at 70%. RHS chart axis truncated at 300 thousand. 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.

2022

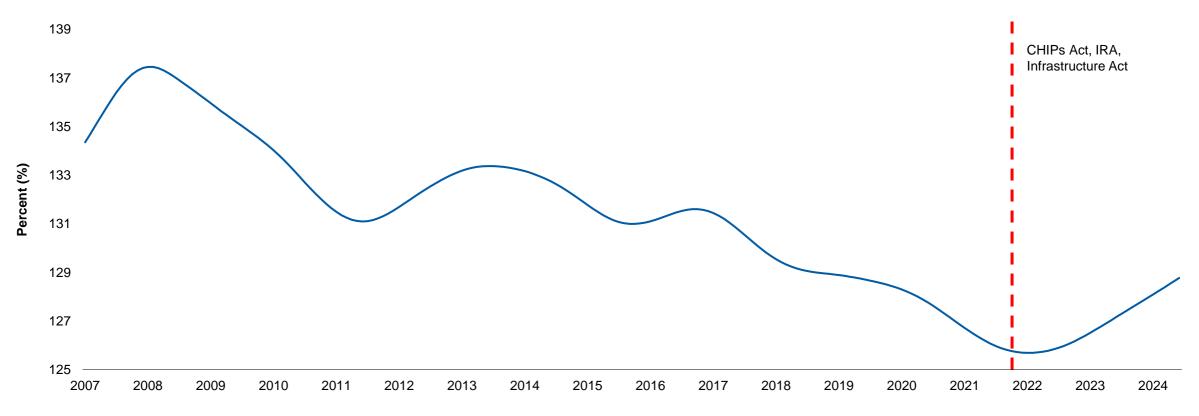
2018

A New Industrial Renaissance in the U.S.

Government policies such as the CHIPS Act, the Inflation Reduction Act (IRA) and the Infrastructure Act are sponsoring growth in many areas of U.S. manufacturing. These trends could offer through-the-cycle structural support to areas of the economy that are traditionally very cyclical.

After Decades of Decline, U.S. Government Policies Have Triggered a Turnaround in Manufacturing Capacity





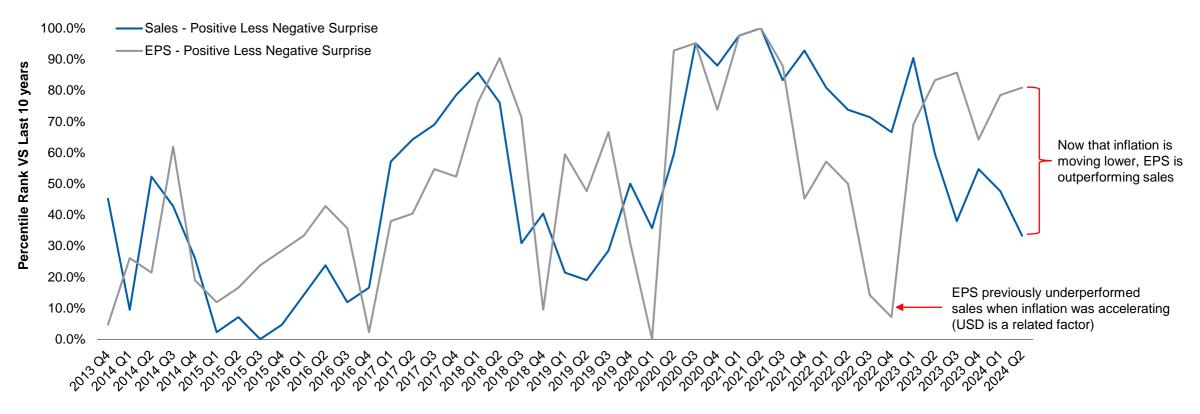
Source: Macrobond, Apollo Global Management, MSIM, as of 9 August 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

Second Quarter Earnings Suggest a Still Healthy Macro Backdrop

Earnings surprise data for the second quarter were solid, suggestive of a still healthy macro backdrop. The net of positive less negative EPS surprise ranks in the top quintile of a ten-year history. Sales surprise ranks lower relative to history, but this gap likely speaks to disinflation, with the opposite having occurred when inflation accelerated.

S&P 500 Surprise Data Were Solid with Disinflation Explaining the EPS vs Sales Gap

Percentile rank of positive surprise less negative surprise vs ten-year history for EPS and Sales, S&P 500



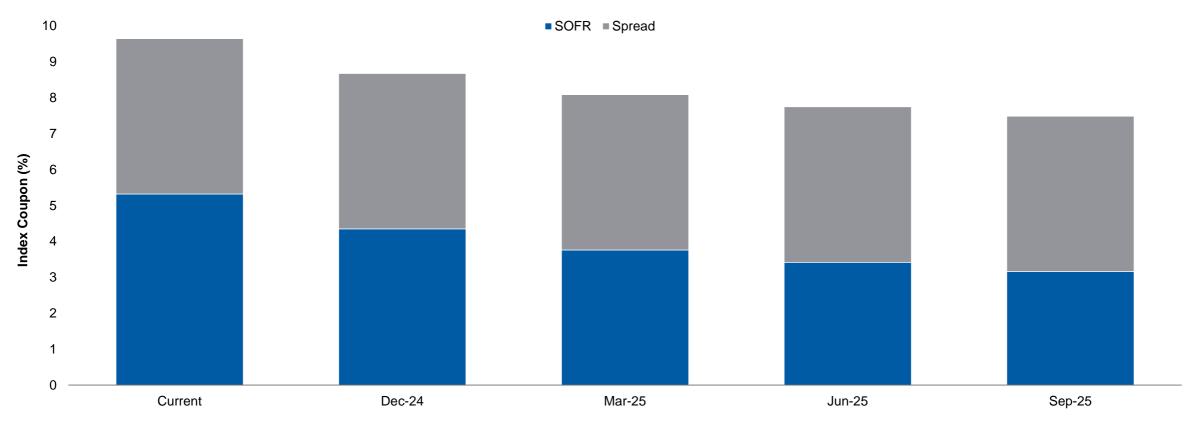
• Source: Bloomberg, MSIM. Data as of 19 August 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. **Past performance is no guarantee of future results**.

Leveraged Loan Coupons Set to Fall

Pricing loans off the forward SOFR curve shows a greater than 2% drop in coupon over the next year. Even if the forward curve appears aggressive in terms of declines in short term rates, this narrative is likely to weigh on asset class flows.

Morningstar LSTA U.S. Leveraged Loan Index Coupon

Assumes current spreads and forward SOFR rates



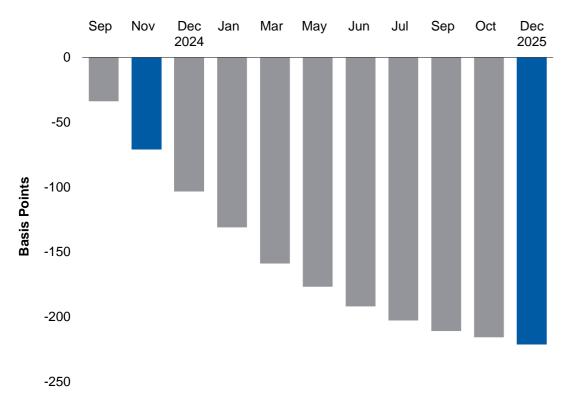
Source: LSTA, Macrobond, Bloomberg, MSIM. Data as of 16 August 2024. The views and opinions expressed are those of the Portfolio Solutions Group at the time of writing/of this presentation and are subject to change at any time due to market, economic, or other conditions, and may not necessarily come to pass. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. SOFR stands for Secured Overnight Financing Rate. **Past performance is no guarantee of future results**.

Moving to Underweight on Duration

The market has priced for 100 basis points (bps) in Fed rate cuts by end of 2024 and over 200 bps by the end of 2025. We think this looks aggressive unless the U.S. economy has a hard landing, but this is not our base case. Bond yields at 4% and below look fully-priced given our soft-landing central scenario.

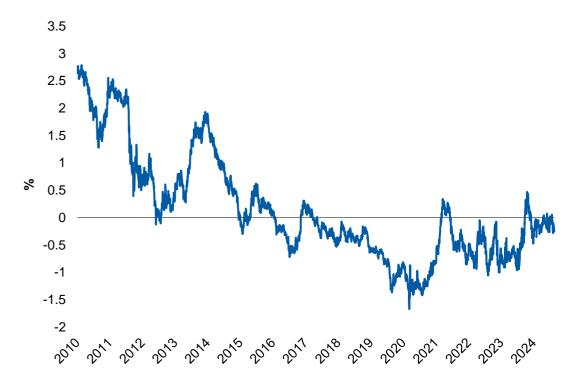
More than 200 bps of Rate Cuts Are Priced in by End 2025

Implied number of Fed cuts priced in



Risk/Reward for Duration Looks Unattractive at Current Levels

10-year Treasury term premium (ACM model)



Source: Bloomberg, MSIM. Data as of 22 August 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. The Adrian, Crump, and Moench (ACM) model provides an approach for extracting term premia from Treasury yields. **Past performance is no guarantee of future results**.

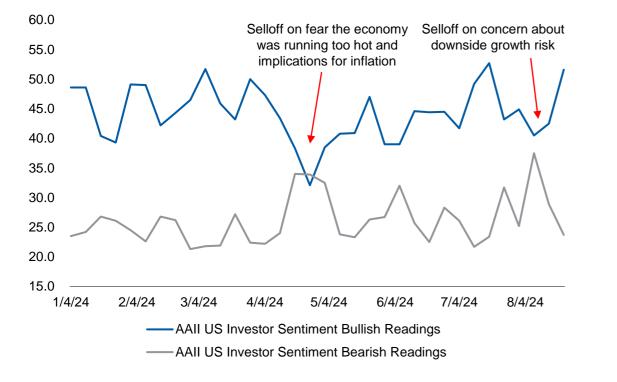
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Equities: Backdrop Still Constructive, but Positioning Should Be Opportunistic

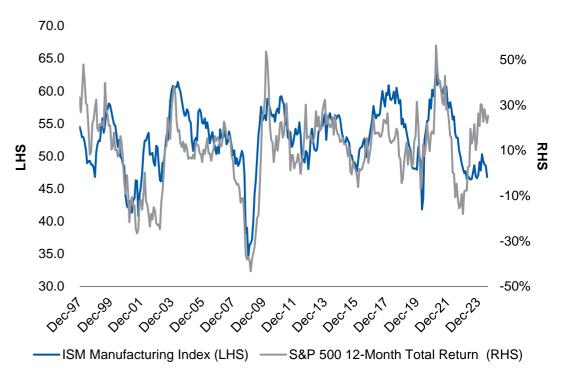
Our central scenario of stable or mildly decelerating growth remains a constructive backdrop for risk assets, but our optimism is constrained to a degree by the absence of excess risk premium in equities. Within this environment, we look to be opportunistic, taking advantage of overshoots both to the upside and the downside.

Sentiment Has Oscillated Between Too Hot and Too Cold Risks

AAII Investor Sentiment survey



Equity Returns Are Generally Positive When Growth Is Positive



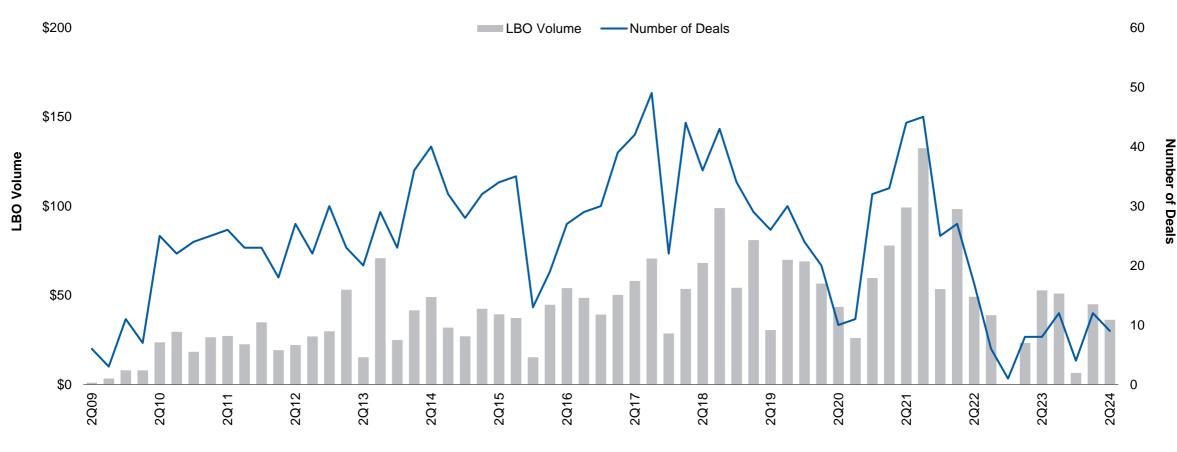
ISM Manufacturing vs S&P 500 12-month total returns

Source: Bloomberg, MSIM. Data as of 23 August 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. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

Private Equity Shows Signs of Recovering Activity

Transaction volumes in private equity are very low but increasing from the recent trough, as the gap between the expectations of buyers and sellers narrows.

Purchase Price Multiples — All Leveraged Buyouts



Sources: Pitchbook, Preqin. 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. LBO stands for Leveraged Buyout

Emerging Opportunity Set in Commercial Real Estate Equity

Commercial real estate valuations have become more attractive in the face of higher interest rates and elevated supply. We expect volumes to pick up this year due to upcoming debt maturities, reinforcing these lower entry points.

Cap Rates Cap Rates vs. Cost of Debt 11% -Retail Residential -Industrial 12 Office CMBS US Index Yield to Worst Average Cap Rate CMBS US Index OAS to Treasury 10% 10 9% 8 8% % 6 7% 4 6% 2 5% 4% ~ <</> ~ Nar.02 Mar.06 0 23 Narioa Nat-20 Marila

Sources: CoStar, Bloomberg. 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. Not to be construed as an investment or research recommendation. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass. Past performance is no guarantee of future results.

1200

1000

800

600

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200

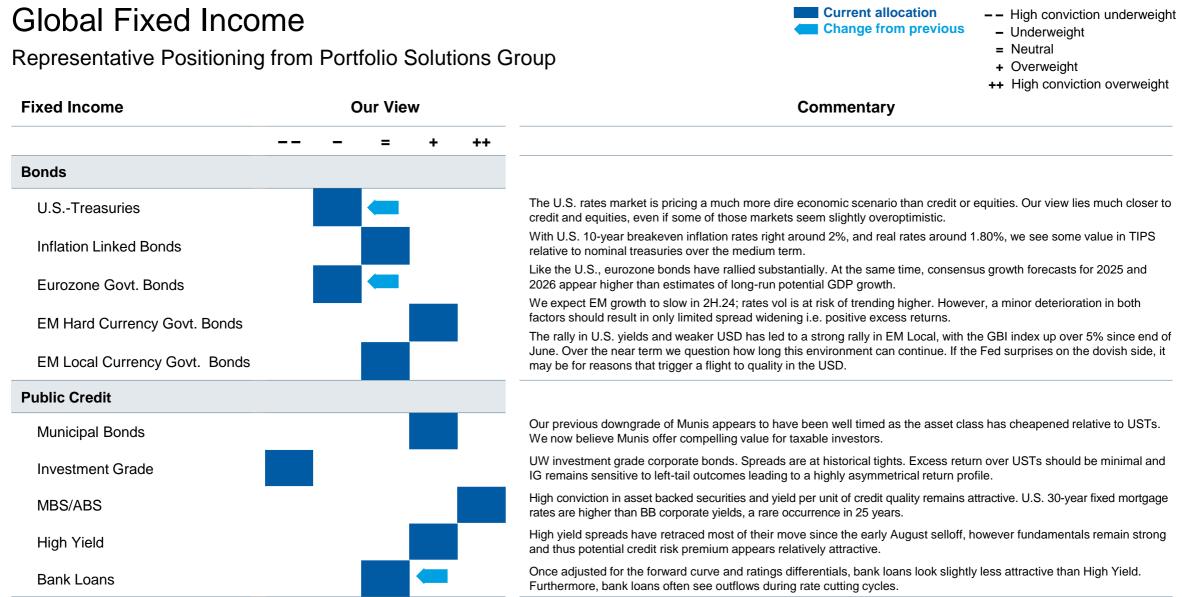
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Current allocation Capital Markets Investment Framework -- High conviction underweight **Change from previous** Underweight = Neutral Representative Allocations from the Portfolio Solutions Group + Overweight ++ High conviction overweight Asset Allocation **Our View** Commentary ++ Bonds With the repricing of further rate cuts and subsequent downward move in longer term yields, we are shifting to a more firmly UW duration position. In the U.S., for example, we believe the 8 rate cuts priced in Duration over the next year (8 Fed meetings) are too many given our view that the economic backdrop is normalizing rather than collapsing, and yields across the curve have room to rise considering. The picture in Europe is not too different. Our preferred OW expressions continues to be within global credit, namely Credit High Yield, EM Debt and ABS. Equities The sell-off in risk assets in early August created a tactical, sentiment-driven opportunity to add to equities. As a result, we briefly increased our OW to equities over the month. However, the speed of the rebound led us to pullback our overall risk level to Neutral by month-end. Risk Level While the repricing of private assets in response to higher financing costs continues, we have increased Alternatives confidence in entry prices for private equity and real estate. We expect fundraising and deployment to recover as M&A rebounds, leading to an opportunity to deploy capital. In private credit, interest levels on Private Markets new loans have moderated, but special situations strategies with flexibility have been able to maintain relatively attractive pricing. Hedge funds delivered attractive risk-adjusted performance in the first half of 2024 and their positioning Hedge Funds suggests confidence in the opportunities for skill-based returns. We remain optimistic with respect to alpha generation. We continue to be Neutral on key commodity markets: geopolitical upside risks are balanced by high Commodities spare capacity in markets such as crude, which limit upside absent physical disruptions. Transition We have increased our short duration weight and are using a barbell approach with other segments of the credit market to create a higher-yielding strategy. Cash/Short Duration

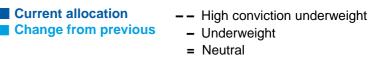
For informational purposes and does not constitute an offer or a recommendation to buy or sell any particular security or to adopt any specific investment strategy. The tactical views expressed above are a broad reflection of our team's views and implementations, expressed for client communication purposes. 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.



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Global Equity

Representative Positioning from Portfolio Solutions Group



- + Overweight
- ++ High conviction overweight

Equity	Our View		Commentary					
	= +	++						
Regional			Neutral U.S. equities as valuations have almost retraced back to YTD highs (~21.3x) and consensus					
Developed Markets			expectations for sales and margin growth are already very optimistic. If we overlay rate cuts in a soft-landing scenario, our expectation is for the index to remain range bound.					
U.S.		_	We remain OW European equities via specific segments of the market where the risk/return skew is favourable due to structural changes (European banks) or due to idiosyncratic events creating an attractive opportunity (French equities).					
Eurozone			Japan's structural tailwind from reflation and corporate governance reforms remain intact. While cyclical tailwinds from yen weakness are diminishing, we do not expect this to turn into a meaningful headwind. Investor sentiment and relative valuations have reset lower amid still resilient corporate fundamentals.					
Japan			The absence of a DM hard landing and easing financial conditions are supportive for EM in general.					
Emerging Markets			Structural concerns persist for China, coupled with lack of policy catalysts and sustainable earnings improvement kept us on the sidelines.					
Style								
Growth vs. Value			Quality is a better representation of our view than either Growth or Value. Growth carries greater concentration and valuation risk, while Value outperformance requires stronger cyclical growth.					
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 with selective cyclical exposure.					
Large Cap vs. Small Cap			The window for small cap outperformance is too narrow – requiring "Goldilocks" growth and inflation					
Dividend			We see balanced risk for Dividend yield style exposures. High dividend yield as an independent style factor does not imply quality, though many dividend focused funds also seek quality factors.					

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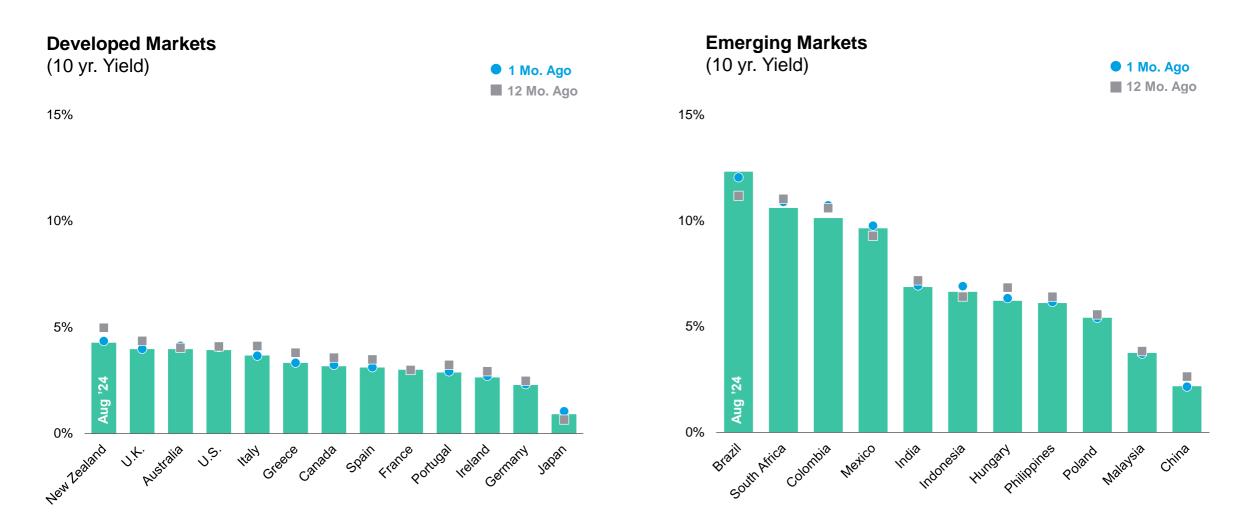
Alternatives

Representative Positioning from Portfolio Solutions Group

Alternative Assets	Commentary
Private Markets	
Private Equity	The industry level repricing represents a potentially compelling entry point into private equity . However, the operating environment suggests that lower valuations are necessary but not sufficient for attractive forward-looking returns. Private equity sponsors also need a competitive tool kit to pursue revenue growth initiatives, margin expansion and suitable capital structures, potentially with organic growth playing a larger roll relative to inorganic growth within an environment of higher debt service costs and lower leverage multiples. We believe high quality small and middle market managers with operational expertise will be well-placed to deliver attractive returns under these conditions.
Private Real Assets	Commercial real estate has continued to reprice meaningfully, with the core real estate benchmark experiencing its sixth consecutive negative quarter. This has been driven by higher debt costs and pockets of elevated supply. A significant amount of commercial real estate debt is expected to mature this year, expected to drive higher transaction volumes with attractive entry valuations. Long-term demand tailwinds in key sectors remain and are expected to combine with improved pricing to represent a compelling opportunity. Private infrastructure is benefiting from the tailwinds of two mega trends; digitization of society and economies, and the energy transition. Investment opportunities are expanding and accelerating due to the developments in generative AI, as the power market is currently inadequate to satisfy the volume and density requirements of generative AI, but also the low tolerance for intermittency that is increasing as renewables grow as a proportion of the overall power mix.
Private Credit	Private loan pricing, terms and defaults are generally now in line with long-term averages, allowing private credit to contribute to overall portfolio construction with return expectations aligned with historical levels. As corporations continue to adjust to higher interest rate expense, the supply of performing but non-conforming opportunities for special situations lenders is growing and offers attractive pricing.
Liquid Alternatives	
Hedge Funds	Bottom-up fundamental security selection and trend following are both benefiting from higher return dispersion and lower cross correlations in asset performance, as well as benefitting from higher cash returns. Portfolio positioning shows hedge funds have relatively high conviction in the current opportunities for skill-based returns.
Commodities	We are neutral on key Commodity Markets : while a rebound in manufacturing activity is supportive of commodity demand, high OPEC spare capacity and generally healthy supply from non-OPEC countries should keep oil prices capped for the time being.

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Sovereign Bond Yields



Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Factset as of 8/31/24. Data provided is for informational use only. See end of report for important additional information.

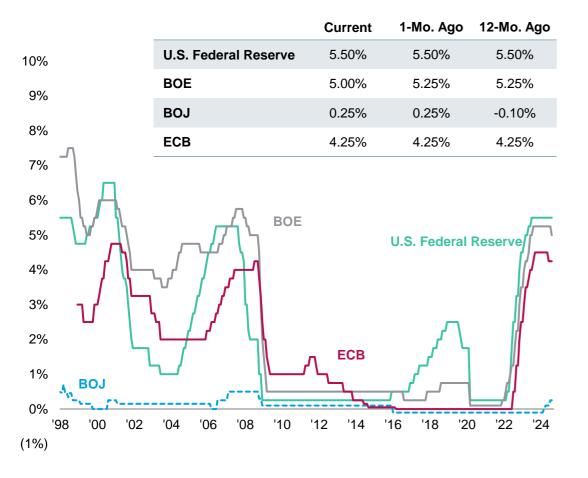
Key Rates (%)

Security	Current	12-Mo. Ago	Average	Minimum	Maximum
1-Week SIFMA	2.92	4.06	3.48	1.90	4.55
Secured Overnight Financing Rate	5.32	5.30	5.32	5.30	5.40
1-Mo LIBOR	5.31	5.44	5.44	5.31	5.48
3-Mo LIBOR	5.28	5.67	5.58	5.28	5.69
2-Yr Treasury	3.92	4.88	4.66	3.87	5.21
5-Yr Treasury	3.71	4.28	4.28	3.62	4.96
10-Yr Treasury	3.92	4.11	4.30	3.78	4.99
30-Yr Treasury	4.21	4.23	4.47	3.95	5.11
2-Yr Japan	0.37	0.03	0.18	0.00	0.47
10-Yr Japan	0.90	0.65	0.82	0.56	1.10
2-Yr German Bund	2.38	3.08	2.84	2.27	3.29
10-Yr German Bund	2.28	2.55	2.45	1.91	2.98
2-Yr UK Gilt	3.70	4.93	4.34	3.53	5.00
10-Yr UK Gilt	3.97	4.42	4.13	3.46	4.69
Bloomberg US Agg	4.42	5.00	4.97	4.34	5.74
Bloomberg Global Agg	3.48	3.95	3.86	3.42	4.42
Bloomberg US Corporate	4.94	5.64	5.50	4.86	6.43
Bloomberg US Long Corporate	5.36	5.70	5.68	5.16	6.60
Bloomberg US Municipal	3.45	3.80	3.68	3.21	4.50
Bloomberg US Long Municipal	4.12	4.52	4.35	3.94	5.18
US High Yield	7.34	8.42	8.13	7.25	9.53
US Loans	9.68	10.33	10.03	9.68	10.60

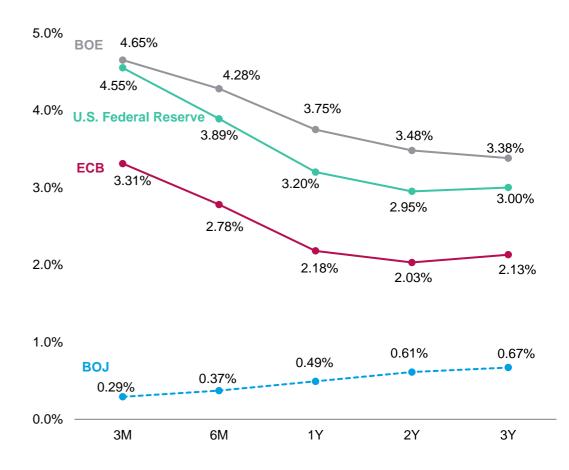
Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Bloomberg, Leveraged Commentary & Data (LCD), and Factset as of 8/31/24. Current represents most recent month. Average, minimum, and maximum measure a 12-month period ending most recent month. 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 High Yield Index. HY index using yield to worst. Morningstar LSTA U.S. Leveraged Loan Index using yield to maturity. See end of report for important additional information.

Monetary Policy

Central Bank Policy Rates



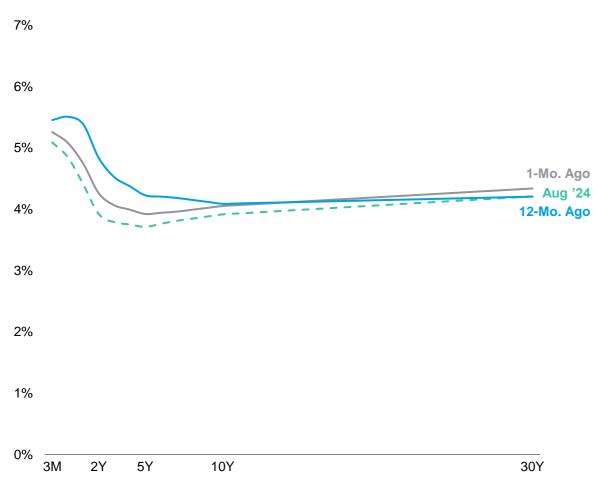
Market Expectations for Future Central Bank Rates



Source: Bloomberg, Factset as of 8/31/24. 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.

U.S. Treasury Yields

U.S. Treasury Yield Curves



Yields & Performance											
	Yield (%)	Total Return (%)									
Current	1-Mo. Ago	12-Mo. Ago	1-Mo.	12-Mo.							
5.09	5.26	5.46	0.48	5.48							
4.85	5.08	5.51	0.52	5.66							
3.92	4.26	4.84	0.89	5.56							
3.79	4.07	4.53	1.04	5.93							
3.71	3.92	4.23	1.16	6.20							
3.92	4.05	4.09	1.38	5.26							
4.21	4.34	4.21	2.41	3.53							
	5.09 4.85 3.92 3.79 3.71 3.92	Yield (%) Current 1-Mo. Ago 5.09 5.26 4.85 5.08 3.92 4.26 3.71 3.92 3.92 4.05	Yield (%) Current 1-Mo. Ago 12-Mo. Ago 5.09 5.26 5.46 4.85 5.08 5.51 3.92 4.26 4.84 3.71 3.92 4.23 3.92 4.05 4.09	Yield (%) Total Ref Current 1-Mo. Ago 12-Mo. Ago 1-Mo. 5.09 5.26 5.46 0.48 0.48 4.85 5.08 5.51 0.52 0.52 3.92 4.26 4.84 0.89 1.04 3.71 3.92 4.23 1.16 1.38							

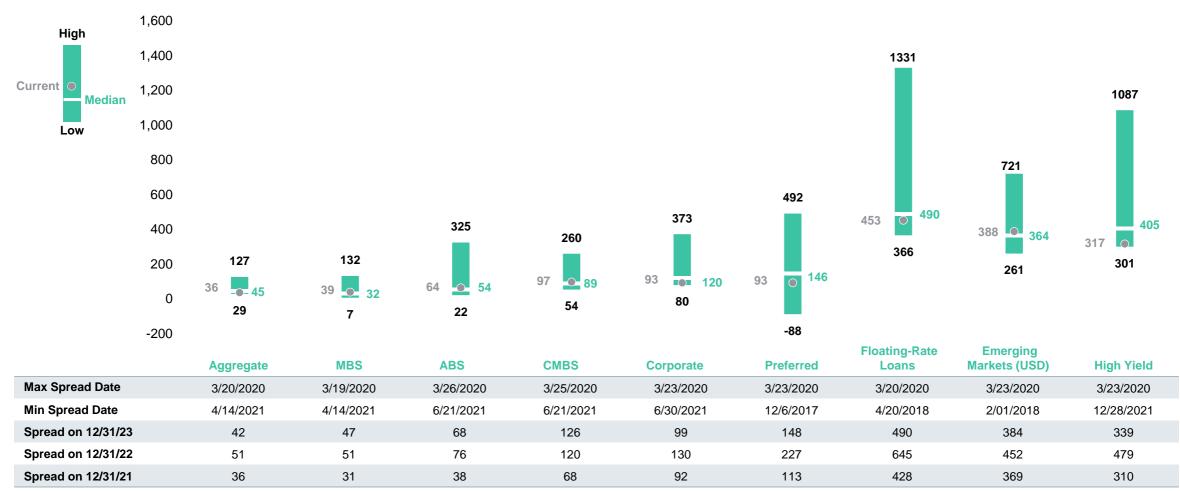
Source: Factset, Morningstar as of 8/31/24. Data provided is for informational use only. Past Performance is not a reliable indicator of future results. See end of report for important additional information.

Characteristics and Performance Analysis

		Averages							Total Returns (%)						
Index	Coupon (%)	Price (\$)	Yield to Worst (%)	Spread (bps)	Maturity (yrs.)	Duration (yrs.)	1-Mo.	3-Мо.	YTD	1Y	3Y	5Y	10Y		
U.S. High Grade															
Bloomberg U.S. Aggregate Index	3.35	93.0	4.42	36	8.4	6.2	1.44	4.79	3.07	7.30	-2.11	-0.04	1.64		
U.S. Treasury	2.88	93.1	3.96	-	7.8	6.1	1.28	4.54	2.60	6.02	-2.53	-0.61	1.17		
U.S. Mortgage Backed Securities	3.24	90.8	4.67	39	7.2	5.8	1.61	5.51	3.27	7.46	-1.70	-0.18	1.28		
U.S. Asset Backed Securities	4.78	100.2	4.65	64	3.8	2.8	0.97	3.03	4.05	7.20	1.43	1.87	2.06		
U.S. Commercial Mortgage Backed Securities	3.27	93.7	4.84	97	4.7	4.2	1.23	4.28	4.88	9.08	-0.97	0.83	2.25		
U.S. Corp. Investment Grade	4.24	94.5	4.94	93	10.8	7.1	1.57	4.66	3.49	9.29	-2.10	0.67	2.60		
Bloomberg Municipal Bond Index	4.57	102.9	3.45	-	13.6	6.2	0.79	3.27	1.30	6.09	-0.47	1.02	2.43		
Bloomberg Taxable Municipal Bond Index	4.35	94.6	4.77	-	14.5	7.9	1.27	5.00	3.82	8.78	-2.82	0.16	3.03		
ICE BofA US Inflation-Linked Treasury Index	0.98	93.7	1.87	-	7.7	4.7	0.79	3.43	3.56	6.10	-1.59	1.93	2.13		
ICE BofA Preferred Index (Fixed Rate)	5.29	93.6	5.76	93	_	5.1	2.81	3.97	7.66	13.23	0.43	2.61	4.44		
U.S. High Yield															
ICE BofA US High Yield Index	6.32	95.5	7.34	317	4.8	3.1	1.59	4.58	6.29	12.48	2.54	4.27	4.56		
Morningstar LSTA U.S. Leveraged Loan Index	S+3.51	96.8	9.68	453	4.5	-	0.63	1.67	5.78	9.86	6.44	5.69	4.72		
Emerging Markets															
J.P. Morgan EM Bond Index (EMBI) Global Diversified	5.45	86.3	7.88	388	-	6.7	2.32	4.87	6.67	13.42	-1.70	0.41	2.90		
J.P. Morgan Corp. EM Bond Index (CEMBI) Broad Diversified	5.10	95.6	6.13	219	_	4.4	1.69	4.17	7.18	12.22	0.42	2.67	3.78		
J.P. Morgan Govt. Bond Index-EM (GBI-EM) Global Diversified	5.52	-	6.26	-	-	5.2	3.07	4.28	1.50	6.00	-1.67	0.11	-0.29		
Global Developed Markets															
Bloomberg Global Aggregate Ex-U.S. Index	2.24	96.3	2.67	35	8.6	7.1	3.13	5.85	0.79	6.44	-5.83	-2.53	-1.13		
FTSE World Government Bond Index	2.45	-	3.32	-	-	7.1	2.30	5.19	1.06	5.68	-5.65	-2.63	-0.64		
ICE BofA European Union Government Bond Index	2.08	94.2	2.82	52	8.9	7.3	2.72	4.99	0.87	7.18	-6.79	-2.61	-1.28		
ICE BofA Developed Mkts HY Ex-Sub Fincl Index (USD Hedged)	6.04	95.4	7.09	353	3.7	3.0	1.53	4.29	6.34	12.71	2.82	4.29	4.70		
Bloomberg Euro-Aggregate Corporates (EUR)	2.39	95.7	3.46	117	5.1	4.4	0.30	2.69	2.57	7.30	-1.84	-0.75	1.05		
Bloomberg Pan-European High Yield Euro (EUR)	4.59	95.8	6.23	346	3.7	3.1	1.17	2.75	5.31	11.46	1.68	2.56	3.51		

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Bloomberg, J.P. Morgan, ICE BofA Data Indices, LLC, Factset, and Leveraged Commentary & Data (LCD), as of 8/31/24. 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 Mtks 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).

Spread Analysis (bps)



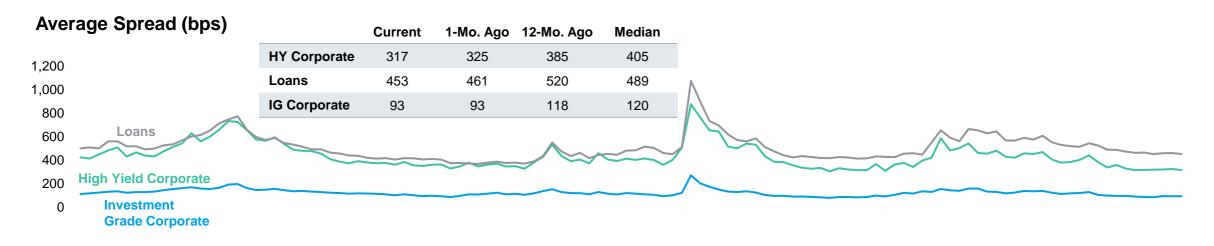
Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Factset and Leveraged Commentary & Data (LCD) as of 8/31/24. Spread history measures past 10 years. Data provided is for informational use only. See end of report for important additional information. All fixed-income spreads are in basis points and measure option-adjusted yield spread relative to comparable maturity U.S. Treasuries using daily data. Aggregate represented by Bloomberg US Aggregate Index. MBS represented by Bloomberg U.S. Mortgage Backed Securities (MBS) Index. ABS represented by Bloomberg U.S. Asset Backed Securities (ABS) Index. CMBS represented by Bloomberg U.S. Corporate represented by Bloomberg U.S. Corporate Investment Grade Index. Preferred represented by ICE BofA Fixed Rate Preferred Securities Index. Floating-Rate Loans represented by Morningstar LSTA U.S. Leveraged Loan Index. Loan Index spread represents the three-year discounted spread over SOFR (Secured Overnight Financing Rate). Emerging Markets(USD) represented by J.P. Morgan Emerging Markets Bond Index. (EMBI) Global Diversified. High Yield represented by ICE BofA US High Yield Index.

Corporate Bond Market Update

	Averages						Total Returns (%)						
	Coupon (%)	Price (\$)	Yield to Worst (%)	Spread (bps)	Maturity (yrs.)	Duration (yrs.)	1-Мо.	3-Мо.	YTD	1Y	3Y	5Y	
J.S. High Grade													
Bloomberg U.S. Corp. Investment Grade Index	4.24	94.5	4.94	93	10.8	7.1	1.57	4.66	3.49	9.29	-2.10	0.67	
AAA Index	3.27	86.4	4.47	34	17.5	10.4	2.03	5.86	1.72	6.74	-4.87	-1.30	
AA Index	3.59	91.0	4.56	49	13.3	8.3	1.71	4.93	2.55	7.48	-3.36 -2.22	-0.59	
A Index	4.10	94.8	4.79	78	10.6	7.1	1.57	4.64	3.24	8.67		0.37	2
BBB Index	4.48	94.9	5.14	114	10.5	6.8	1.55	4.61	3.90	10.20	-1.71	1.20	
I.S. High Yield													
ICE BofA U.S. High Yield Index	6.32	95.5	7.34	317	4.8	3.1	1.59	4.58	6.29	12.48	2.54	4.27	
BB Index	5.72	98.2	6.00	182	5.1	3.3	1.54	4.27	5.67	11.80	1.91	4.18	
B Index	6.86	97.8	7.23	300	4.6	2.8	1.52	4.29	5.94	12.01	2.94	3.92	
CCC Index	7.21	80.6	13.42	947	4.3	2.9	1.96	6.65	9.65	16.15	3.54	5.23	
Morningstar LSTA U.S. Leveraged Loan Index	S+3.51	96.8	9.68	453	4.5	-	0.63	1.67	5.78	9.86	6.44	5.69	
BBB Index	S+2.03	100.2	7.29	197	4.8	-	0.62	1.78	5.14	8.10	5.93	4.49	
BB Index	S+2.71	99.6	8.12	284	4.9	-	0.62	1.77	5.31	8.84	6.48	4.80	
B Index	S+3.80	97.9	9.78	460	4.5	-	0.76	1.81	6.13	10.64	6.90	6.18	
CCC Index	S+4.63	84.1	17.31	1183	3.5	-	-0.05	0.58	6.40	10.45	3.66	5.18	
D Index	-	26.0	-	-	-	-	-10.39	-8.51	-20.54	-26.77	-29.86	-26.37	•

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 8/31/24. 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.

Corporate Bond Market Update



Annual Default Rate



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Municipal Bond Market Update

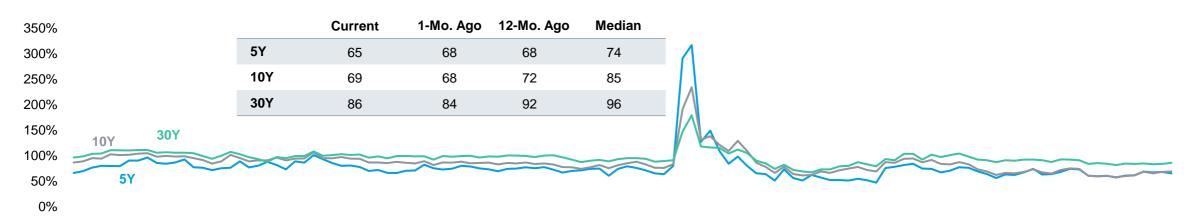
		Averages						Total Returns (%)							
	Coupon (%)	Price (\$)	Yield To Worst (%)	Maturity (yrs.)	Duration (yrs.)	1-Mo.	3-Мо.	YTD	1Y	3Y	5Y	10Y			
Bloomberg Municipal Bond Index	4.57	102.9	3.45	13.6	6.2	0.79	3.27	1.30	6.09	-0.47	1.02	2.43			
AAA Index	4.49	103.7	3.30	13.2	6.5	0.85	3.38	0.65	5.58	-0.65	0.74	1.94			
AA Index	4.60	103.9	3.31	13.1	6.0	0.79	3.20	1.01	5.63	-0.52	0.88	2.20			
A Index	4.55	101.1	3.68	13.9	6.0	0.72	3.19	1.98	6.95	-0.16	1.37	2.87			
BBB Index	4.56	98.2	4.17	17.3	7.1	0.91	3.91	3.22	8.68	-0.21	1.76	3.62			
5-Year Index	4.71	106.4	2.90	5.0	3.6	1.29	3.40	1.52	5.03	-0.03	1.01	1.71			
10-Year Index	4.57	106.0	3.20	10.0	5.6	0.91	3.25	0.12	4.63	-0.45	1.04	2.50			
22+ Year Index	4.58	98.9	4.12	26.7	9.9	0.66	3.76	1.71	8.34	-1.89	0.53	2.92			
Bloomberg High Yield Municipal Bond Index	4.64	65.6	5.29	19.8	6.6	1.18	4.79	6.52	12.38	0.53	2.85	4.51			
Hospital	5.30	75.5	5.78	20.5	5.9	1.60	7.07	10.08	15.90	0.01	1.37	3.97			
IDR/PCR	4.14	37.4	5.66	20.3	6.5	1.19	3.59	4.95	10.41	-0.11	2.89	5.83			
Tobacco	2.29	19.2	6.15	28.3	9.6	0.77	4.33	1.73	11.60	-1.33	3.37	7.44			
Puerto Rico	3.56	56.2	4.60	19.5	7.2	0.70	2.25	4.19	10.66	1.20	4.43	4.45			

Past performance is no guarantee of future results.

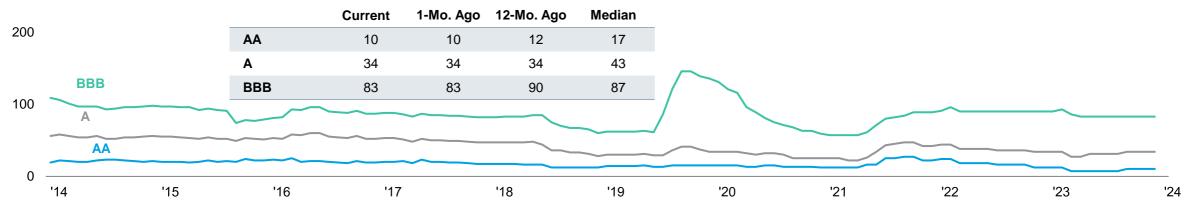
It is not possible to invest directly in an index. Source: Bloomberg, Morningstar as of 8/31/24. Coupon and Yield To Worst figures are based on average market prices while Price is based on an average of par value. Data provided is for informational use only. See end of report for important additional information.

Municipal Bond Market Update

AAA Muni-to-Treasury Yield Ratios



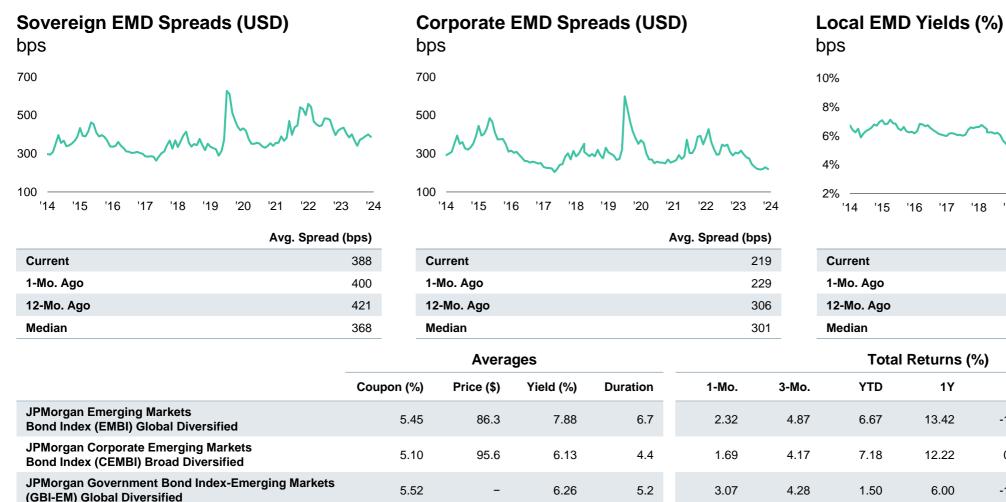
Credit Quality Spreads vs. AAA (bps)

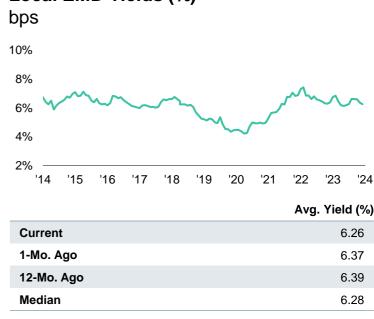


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It is not possible to invest directly in an index. Source: Bloomberg as of 8/31/24. Data provided is for informational use only. See end of report for important additional information. All spreads are in basis points and measure option-adjusted yield spread relative to comparable maturity U.S. Treasuries.

Emerging Markets Bond Market Update





3Y

-1.70

0.42

-1.67

5Y

0.41

2.67

0.11

1Y

13.42

12.22

6.00

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It is not possible to invest directly in an index. Source: J.P. Morgan, Morningstar as of 8/31/24. 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.

10Y

2.90

3.78

-0.29

Asset Class Return Analysis (%)

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD 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	EMD (Corp. Bonds) 7.18
	Investment Grade 7.46	MBS 1.51	EMD (Hard Currency) 10.19	Global Agg Ex-U.S. 10.5 1	MBS 0.99	EMD (Hard Currency) 14.42	Investment Grade 9.89	Bank Loan 5.20	Municipal -8.53	Bank Loan 13.32	EMD (Hard Currency) 6.67
	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	High Yield 6.29
	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	Bonds) Bonds) Cui		EMD (Hard Currency) 10.45	Bank Loan 5.78
	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 3.49
	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 3.27
	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	Treasury 2.60
	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	EMD (Local Currency) 1.50
	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	Municipal 1.30
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. 0.79

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 8/31/24. 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 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 Corporate Emerging Market Bond Index (CEMBI) Broad Diversified.

Performance: Market Barometer (%)

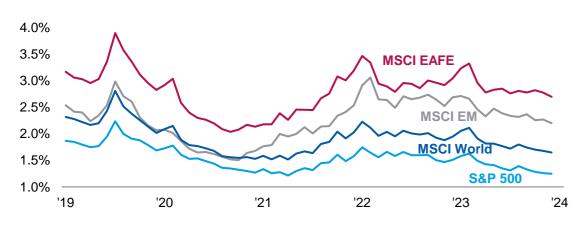


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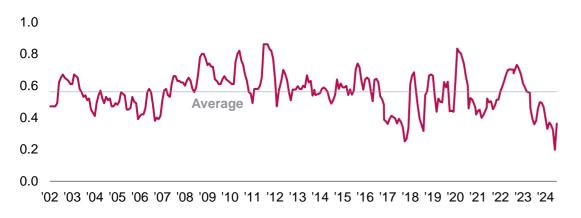
It is not possible to invest directly in an index. Source: Morningstar as of 8/31/24. Data provided is for informational use only. See end of report for important additional information. Returns over 1 year are annualized. Large Cap Value represented by Russell 1000 Value Index. Large Cap Core represented by Russell 1000 Index. Large Cap Growth represented by Russell 1000 Growth Index. Mid Cap Value represented by Russell Mid Cap Index. Mid Cap Growth represented by Russell Mid Cap Growth Index. Small Cap Value represented by Russell 2000 Value Index. Mid Cap Growth represented by Russell 2000 Index. Small Cap Value represented by Russell 2000 Index. Small Cap Growth represented by Russell 2000 Growth Index. Small Cap Cap Growth represented by Russell 2000 Index. Small Cap 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.

Dividend Yields and Volatility Analysis

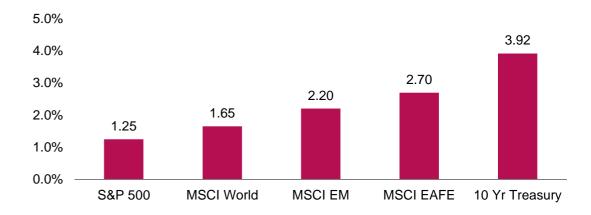
Historical Yields



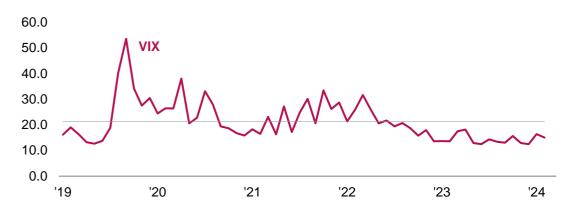
Correlation of S&P 500 Stocks



Current Yields



CBOE Market Volatility Index (VIX)

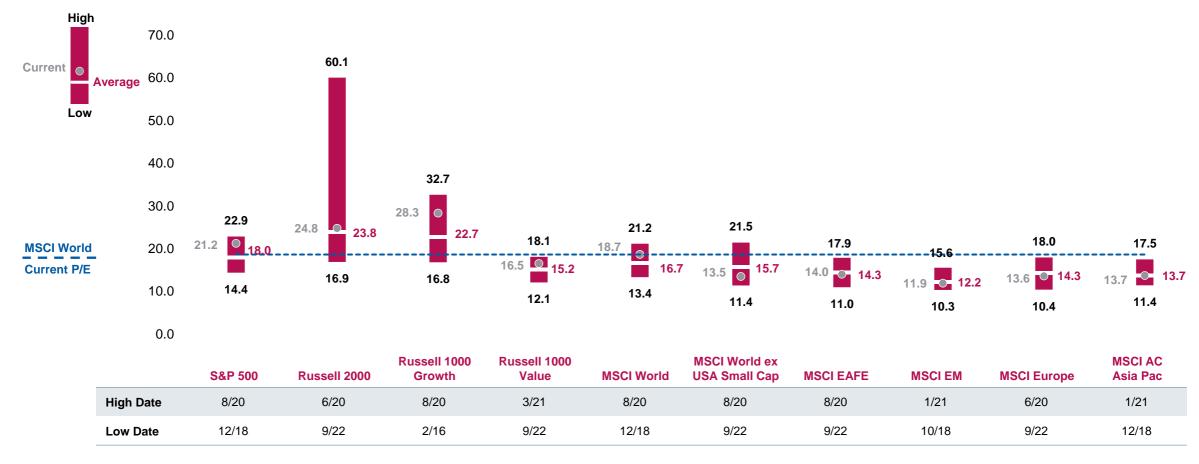


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It is not possible to invest directly in an index. Source: FactSet and Ned Davis Research as of 8/31/24. Correlation of S&P 500 Stocks is measured by the median 63-day rolling correlation of one day returns data provided is for informational use only. See end of report for important additional information.

Valuation Analysis

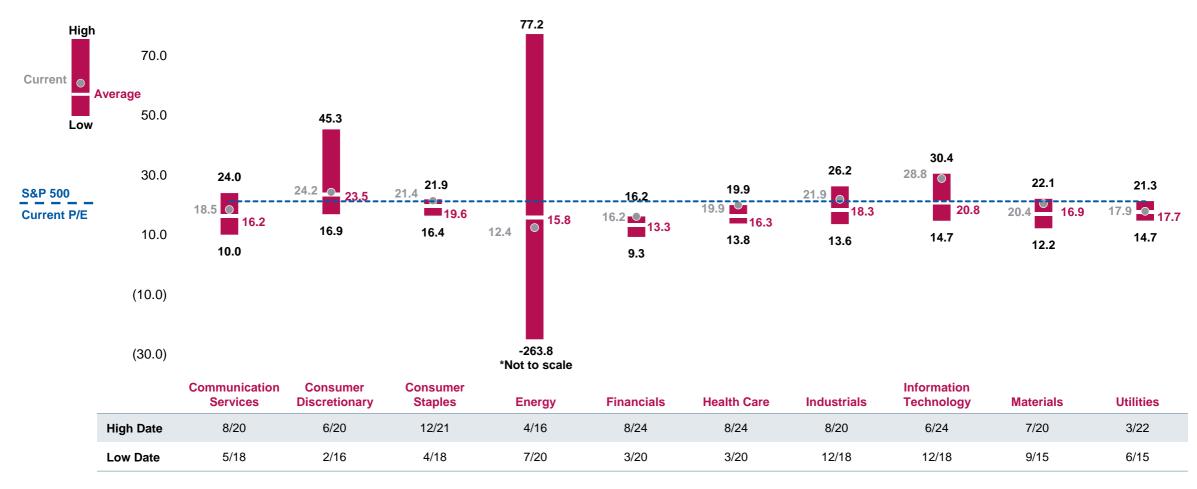
Regions/Styles: Current NTM P/E vs. 10-Year High, Low, Average



Source: FactSet as of 8/31/24. 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.

Valuation Analysis

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

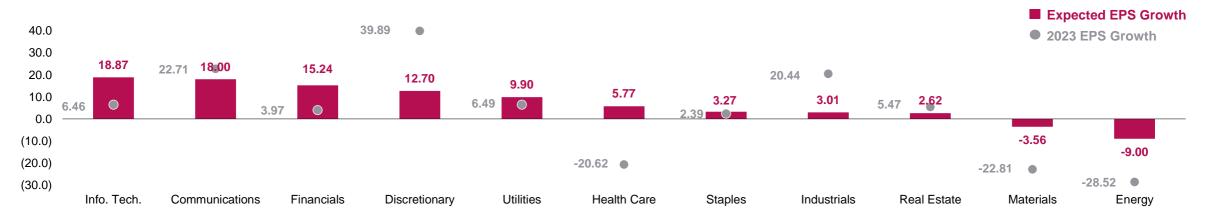


Source: FactSet as of 8/31/24. NTM P/E is market price per share divided by expected earnings per share over the next twelve months. The Real Estate sector is excluded from this 10-year chart since the sector was created on August 31, 2016. Data provided is for informational use only. See end of report for important additional information. Forecasts/estimates are based on current market conditions, subject to change, and may not necessarily come to pass.

Corporate Earnings Growth

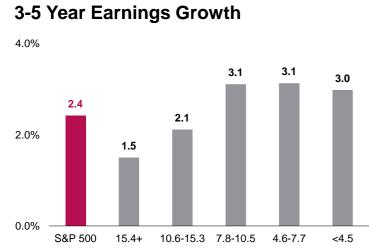


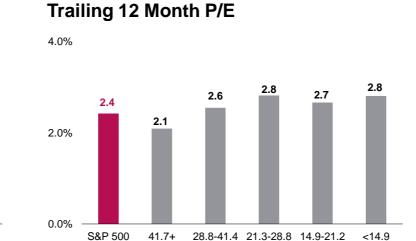
S&P 500 Sectors



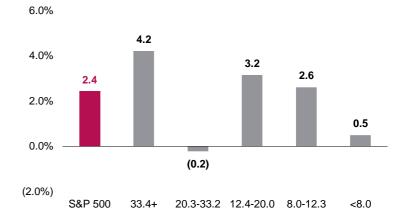
Source: FactSet as of 8/31/24. Expected EPS Growth is defined as the expected % change in the EPS growth from the beginning of the current calendar year though the end of the calendar year. 2023 EPS Growth is defined as the % change in EPS from the beginning of the year through the end of the year. Data 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.

S&P 500 Index: 1-Month Return Analysis

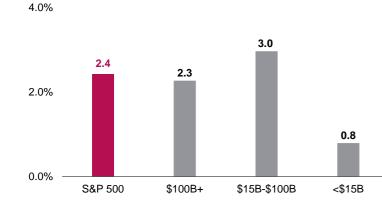




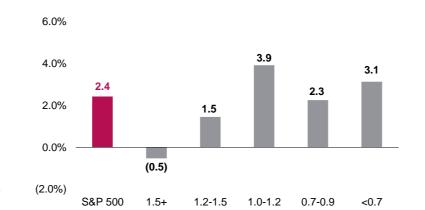
Return On Equity



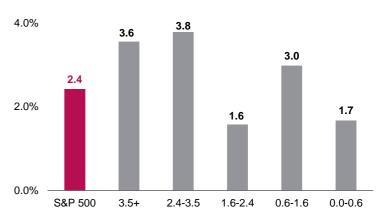
Market Cap







Dividend Yield

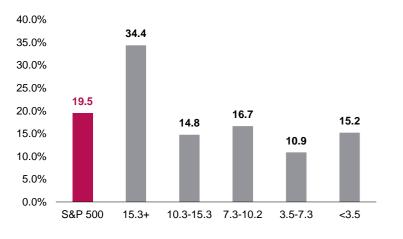


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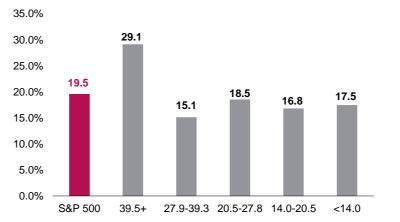
It is not possible to invest directly in an index. Source: FactSet as of 8/31/24. Data provided is for informational use only. See end of report for important additional information.

S&P 500 Index: YTD Analysis

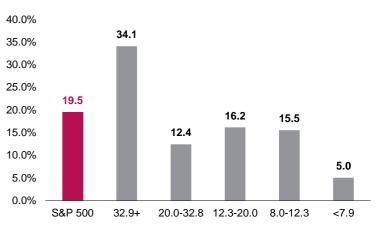
3-5 Year Earnings Growth



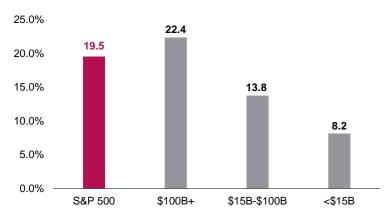
Trailing 12 Month P/E



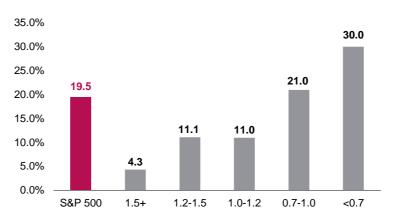
Return On Equity



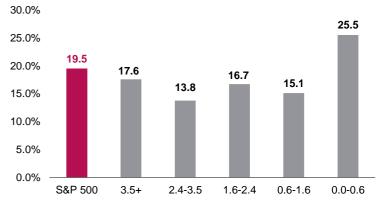
Market Cap



Beta



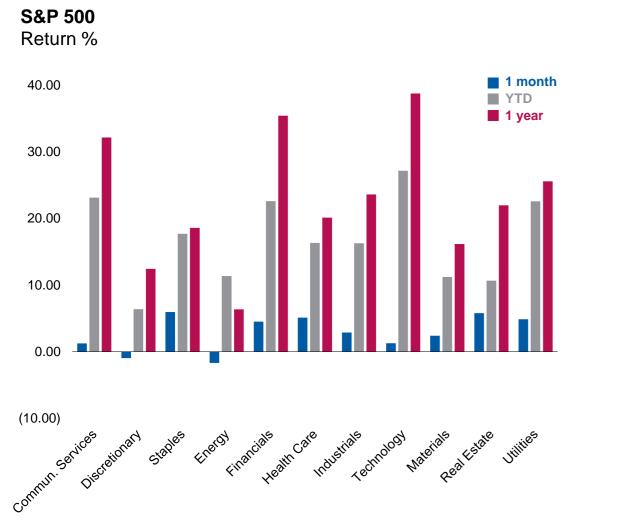
Dividend Yield



Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: FactSet as of 8/31/24. Data provided is for informational use only. See end of report for important additional information.

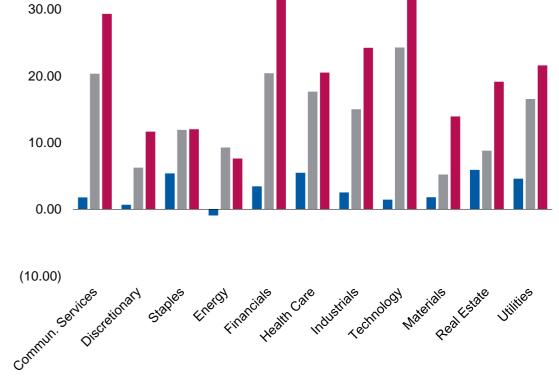
Index Sectors: Return Analysis





40.00





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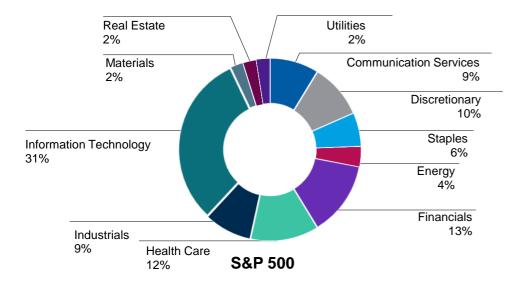
1 month

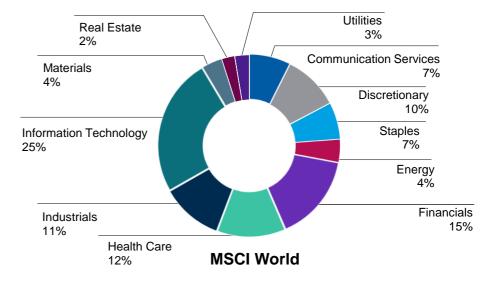
YTD

📕 1 year

Current Characteristics and Sector Weights

	S&P 500	R2000	R1000G	R1000V	MSCI World	MSCI World ex USA Small Cap	MSCI EAFE	MSCI EM	MSCI Europe	MSCI Asia Pac
Number of Holdings	503	1971	394	872	1429	2309	741	1328	417	1395
Maximum Market Cap	\$3,481.75B	\$13.14B	\$3,481.75B	\$1,026.41B	\$3,359.38B	\$9.18B	\$454.30B	\$727.06B	\$454.30B	\$727.06B
Minimum Market Cap	\$6.32B	\$0.01B	\$0.90B	\$0.17B	\$1.88B	\$0.09B	\$1.88B	\$0.11B	\$1.88B	\$0.11B
Dividend Yield	1.25	1.30	0.55	1.97	1.65	2.62	2.70	2.20	2.85	2.11
NTM PE	21.24	24.79	28.33	16.54	18.66	13.50	14.02	11.94	13.60	13.71
Price to Book	4.90	2.07	13.13	2.76	3.50	1.47	2.01	1.86	2.23	1.80
Price to Cash Flow	17.48	14.20	26.50	12.43	15.12	9.22	11.39	8.81	10.23	11.70
Price to Sales	2.94	1.28	5.60	1.81	2.30	0.94	1.44	1.44	1.44	1.46
Est 3-5 Yr EPS Growth	15.47	13.53	20.14	10.19	14.52	12.16	11.64	17.49	12.28	14.47
5Yr. Div Growth Rate	4.44	6.25	5.40	1.16	2.71	4.90	0.64	2.62	-0.25	0.96





Source: FactSet as of 8/31/24. 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.

Asset Class Return Analysis (%)

		1-Mo.	3-Мо.	YTD	1Y	3Y	5Y	10Y	2023	2022	2021	2020	2019
	S&P 500	2.43	7.39	19.53	27.14	9.38	15.92	12.98	26.29	-18.11	28.71	18.40	31.49
	Russell 1000 Defensive	3.09	8.12	16.88	23.19	7.19	12.81	12.15	20.23	-16.43	26.93	13.93	30.47
	Russell 1000 Dynamic	1.65	6.45	20.35	30.03	9.43	18.11	12.99	33.34	-21.94	25.57	27.69	32.35
U.S.	Russell 2500	-0.26	5.55	9.67	17.37	1.87	10.49	8.76	17.42	-18.37	18.18	19.99	27.77
Equities	Russell 1000 Growth	2.08	7.11	21.12	30.75	8.87	19.08	16.03	42.68	-29.14	27.60	38.49	36.39
	Russell 1000 Value	2.68	6.92	15.08	21.15	7.25	11.16	8.85	11.46	-7.54	25.16	2.80	26.54
	Russell Mid Cap	2.03	6.13	12.14	20.16	3.52	11.24	9.58	17.23	-17.32	22.58	17.10	30.54
	Russell 2000	-1.49	7.51	10.39	18.47	0.60	9.68	8.03	16.93	-20.44	14.82	19.96	25.52
	CBOE S&P 500 Buywrite BXM	2.91	5.92	11.98	13.55	5.28	6.43	5.94	11.82	-11.37	20.47	-2.75	15.68
	MSCI World	2.64	6.58	16.72	24.43	6.90	13.11	9.57	23.79	-18.14	21.82	15.90	27.67
	MSCI EAFE	3.25	4.56	11.96	19.40	4.13	8.61	5.20	18.24	-14.45	11.26	7.82	22.01
	MSCI EM	1.61	5.94	9.55	15.07	-3.06	4.79	2.56	9.83	-20.09	-2.54	18.31	18.44
Global	MSCI AC Asia Pac	1.72	6.17	11.81	17.69	-0.21	6.45	4.79	11.45	-17.22	-1.46	19.71	19.36
Equities	MSCI ACWI	2.54	6.51	15.97	23.44	5.77	12.14	8.78	22.20	-18.36	18.54	16.25	26.60
_quiioo	MSCI Europe	3.94	3.79	12.34	19.79	4.80	9.41	5.15	19.89	-15.06	16.30	5.38	23.77
	MSCI World Small Cap	0.49	5.29	8.98	16.14	0.50	9.04	7.17	15.76	-18.76	15.75	15.96	26.19
	MSCI World Ex USA Small Cap	1.87	4.44	8.59	14.76	-1.97	6.82	5.05	12.62	-20.59	11.14	12.78	25.41
	FTSE 100	3.21	5.63	15.02	21.23	7.98	8.55	3.63	14.38	-7.01	17.36	-8.73	22.03
	FTSE All Small	2.17	6.79	14.52	23.11	-1.19	10.25	5.29	12.57	-23.06	22.15	10.77	22.63
	STOXX Europe 600	3.87	3.78	12.32	19.97	4.20	9.45	5.29	19.87	-16.14	16.09	6.83	24.53
	Nikkei 225 Average	2.19	8.56	12.68	20.22	2.90	8.02	7.62	22.05	-19.49	-4.69	23.99	21.35
	S&P 500 Comm. Services	1.24	1.85	23.11	32.13	2.50	13.66	9.33	55.80	-39.89	21.57	23.61	32.69
Sectors	S&P 500 Cons Disc	-0.97	5.59	6.37	12.43	1.60	10.76	11.97	42.41	-37.03	24.43	33.30	27.94
000013	S&P 500 Cons Staples	5.94	7.79	17.68	18.58	8.49	10.21	9.62	0.52	-0.62	18.63	10.75	27.61
	S&P 500 Energy	-1.70	-0.92	11.35	6.35	29.10	15.37	3.45	-1.33	65.72	54.64	-33.68	11.81
	S&P 500 Financials	4.51	10.28	22.58	35.39	8.07	13.55	11.47	12.15	-10.53	35.04	-1.69	32.13
	S&P 500 Health Care	5.10	9.95	16.31	20.11	6.91	13.72	11.37	2.06	-1.95	26.13	13.45	20.82
	S&P 500 Industrials	2.86	6.89	16.26	23.60	9.80	13.68	11.24	18.13	-5.48	21.12	11.06	29.37
	S&P 500 Info Tech	1.25	8.38	27.14	38.73	16.58	26.50	22.02	57.84	-28.19	34.53	43.89	50.29
	S&P 500 Materials	2.40	3.65	11.21	16.15	5.49	13.11	8.66	12.55	-12.27	27.28	20.73	24.58
	S&P 500 Real Estate	5.79	15.71	10.64	21.95	0.41	5.69	7.95	12.36	-26.13	46.19	-2.17	29.01
	S&P 500 Utilities	4.86	5.81	22.55	25.55	7.01	7.51	9.50	-7.08	1.57	17.67	0.48	26.35

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Asset Class Return Analysis (%)

Higher	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	YTD 2024
A l	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 21.12
	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 19.53
	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 15.97
	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	Value 15.08
	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	Mid-Cap 12.14
	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	International 11.96
	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	Small-Cap 10.39
	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	Emerging Markets 9.55
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 8.59

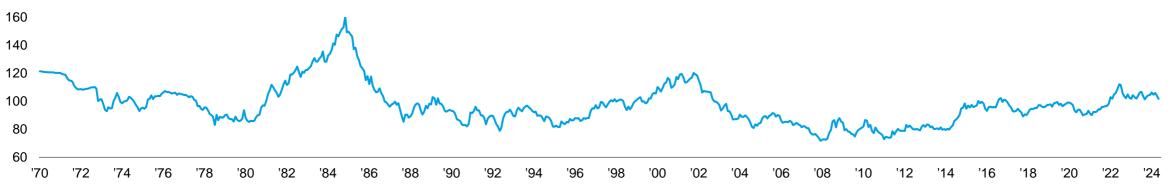
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It is not possible to invest directly in an index. In general, Foreign securities are subject to currency, political, economic and market risks. The risks of investing in emerging market countries are greater than investments in foreign developed countries. Investors should carefully review the risks of each asset class prior to investing. Source: Morningstar as of 8/31/24. 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.

Developed Market Currency Performance and Yields

	Spot Returns vs. USD (%)						Spot Ret	urns vs. El	JR (%)		Local Interest Rates (%)	
Currency	1-Mo.	YTD	1Y	3Y	5Y	1-Mo.	YTD	1Y	3Y	5Y	1Y	
U.S. Dollar (USD)	-	-	-	-	-	-2.24	-0.20	-1.95	2.17	-0.10	4.21	
Euro (EUR) *	2.29	0.20	1.99	-2.12	0.10	-	-	-	-	-	2.76	
British Pound (GBP)	2.32	3.09	3.72	-1.52	1.54	0.03	2.89	1.70	0.61	1.43	4.36	
Japanese Yen (JPY)	3.33	-3.18	-0.01	-8.96	-6.13	1.02	-3.37	-1.96	-6.99	-6.22	0.36	
Australian Dollar (AUD)	3.91	-0.56	4.76	-2.45	0.14	1.58	-0.77	2.72	-0.33	0.04	4.18	
Canadian Dollar (CAD)	2.50	-2.16	0.39	-2.12	-0.28	0.20	-2.36	-1.57	0.00	-0.38	3.60	
New Zealand Dollar (NZD)	5.34	-1.18	5.07	-3.85	-0.16	2.98	-1.39	3.03	-1.77	-0.26	4.15	
Norwegian Krone (NOK)	3.23	-4.12	0.42	-6.33	-2.98	0.92	-4.32	-1.53	-4.30	-3.08	4.13	
Swedish Krona (SEK)	4.66	-1.59	6.92	-5.51	-0.86	2.31	-1.79	4.84	-3.47	-0.96	2.36	
Danish Krone (DKK)	2.33	0.14	1.90	-2.22	0.09	0.04	-0.06	-0.08	-0.10	-0.01	2.32	
Swiss Franc (CHF)	3.75	-0.80	4.10	2.59	3.12	1.42	-1.00	2.07	4.81	3.02	0.64	

U.S. Dollar Index



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Emerging Market Currency Performance and Yields

	Spot Returns vs. USD (%)						Spot Ret	urns vs. El	JR (%)		Local Interest Rates (%)	
Currency	1-Mo.	YTD	1Y	3Y	5Y	1-Mo.	YTD	1Y	3Y	5Y	1Y	
Asia, excluding Japan												
Chinese Renminbi (CNY)	1.96	0.06	2.85	-3.03	0.16	-0.33	-0.15	0.85	-0.93	0.06	1.41	
Malaysian Ringgit (MYR)	6.29	6.30	7.35	-1.29	-0.55	3.91	6.09	5.26	0.85	-0.65	3.09	
Indian Rupee (INR)	-0.17	-0.78	-1.29	-4.52	-3.17	-2.41	-0.99	-3.22	-2.45	-3.27	6.68	
Indonesian Rupiah (IDR)	5.21	-0.38	-1.46	-2.64	-1.70	2.85	-0.58	-3.37	-0.53	-1.80	6.21	
Philippine Peso (PHP)	3.96	-1.38	0.84	-3.95	-1.50	1.63	-1.58	-1.13	-1.87	-1.60	6.01	
Singapore Dollar (SGD)	2.62	1.20	3.61	1.05	1.25	0.32	0.99	1.59	3.24	1.15	3.09	
South Korean Won (KRW)	3.06	-3.59	-1.06	-4.61	-1.94	0.75	-3.79	-2.98	-2.54	-2.04	3.01	
Taiwanese Dollar (TWD)	2.75	-4.06	-0.45	-4.67	-0.37	0.45	-4.26	-2.39	-2.60	-0.47	1.33	
Thai Baht (THB)	5.32	0.85	3.46	-1.61	-2.01	2.96	0.64	1.45	0.52	-2.11	2.15	
Latin America												
Brazilian Real (BRL)	-0.19	-14.23	-12.58	-3.31	-6.11	-2.42	-14.40	-14.28	-1.21	-6.21	11.20	
Chilean Peso (CLP)	3.05	-4.76	-6.57	-5.45	-4.73	0.74	-4.95	-8.39	-3.40	-4.83	5.26	
Colombian Peso (COP)	-2.52	-6.96	-1.64	-3.32	-3.83	-4.70	-7.15	-3.56	-1.22	-3.93	8.52	
Mexican Peso (MXN)	-5.16	-13.80	-14.32	0.67	0.43	-7.29	-13.97	-15.99	2.85	0.32	10.70	
Peruvian New Sol (PEN)	-0.84	-1.26	-1.41	2.88	-1.97	-3.06	-1.46	-3.33	5.11	-2.07	4.62	

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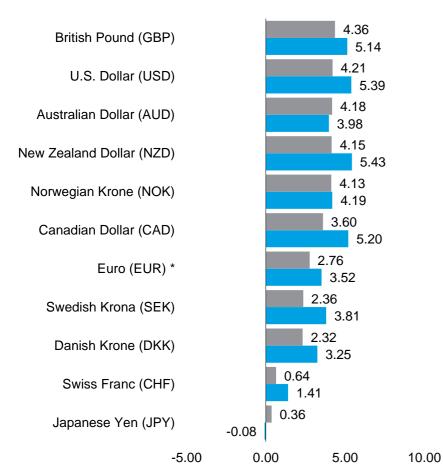
Emerging Market Currency Performance and Yields

	Spot Returns vs. USD (%)						Spot Re	turns vs. E	UR (%)		Local Interest Rates (%)	
Currency	1-Mo.	YTD	1Y	3Y	5Y	1-Mo.	YTD	1Y	3Y	5Y	1Y	
Europe												
Czech Koruna (CZK)	4.07	-1.16	-1.79	-1.62	0.84	1.74	-1.36	-3.71	0.51	0.74	3.32	
Hungarian Forint (HUF)	2.69	-2.43	-0.83	-5.87	-3.25	0.39	-2.63	-2.76	-3.83	-3.35	5.40	
Polish Zloty (PLN)	2.75	1.82	6.71	-0.29	0.56	0.45	1.61	4.63	1.87	0.46	3.73	
Romanian Leu (RON)	2.32	0.17	1.24	-2.40	-0.92	0.03	-0.03	-0.73	-0.28	-1.02	5.74	
Russian Ruble (RUB)	-5.18	-1.38	5.98	-6.86	-5.98	-7.31	-1.58	3.92	-4.84	-6.07		
Turkish New Lira (TRY)	-2.81	-13.31	-21.75	-37.51	-29.76	-4.99	-13.49	-23.28	-36.15	-29.83	45.04	
Middle East and Africa												
Ghanaian Cedi (GHS)	-0.70	-23.87	-27.16	-27.19	-18.95	-2.93	-24.02	-28.57	-25.61	-19.03	17.90	
Israeli Shekel (ILS)	3.69	-0.73	4.71	-4.06	-0.54	1.36	-0.94	2.67	-1.98	-0.64	3.86	
Kenyan Shilling (KES)	0.19	21.94	13.01	-5.14	-4.24	-2.05	21.69	10.81	-3.08	-4.34	16.82	
Moroccan Dirham (MAD)	1.73	1.13	4.09	-2.83	-0.24	-0.54	0.92	2.06	-0.73	-0.34	2.71	
Nigerian Naira (NGN)	0.16	-43.99	-51.67	-36.41	-25.71	-2.09	-44.11	-52.61	-35.03	-25.79	25.10	
South African Rand (ZAR)	2.46	3.00	6.65	-6.60	-3.08	0.16	2.79	4.57	-4.58	-3.18	7.97	
Ugandan Shilling (UGX)	0.16	1.56	-0.11	-1.71	-0.17	-2.08	1.35	-2.05	0.42	-0.27	14.00	
Zambian Kwacha (ZMK)	-0.19	-1.87	-22.92	-15.27	-12.97	-2.43	-2.07	-24.42	-13.43	-13.06	19.00	

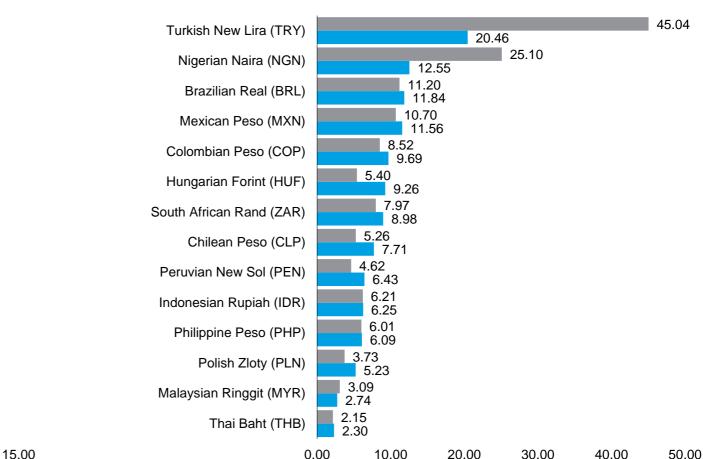
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Local Sovereign Currency Yields

Developed Market Local Interest Rates % (1 Year)







Emerging Market Local Interest Rates % (1 Year)

Current 1 Yr Prior

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Commodities Return Analysis (%)

Index	1-Mo.	3-Мо.	YTD	1Y	3Y	5Y
Bloomberg Commodity Index	0.05	-5.47	0.95	-4.39	3.70	7.02
Bloomberg Sub Agriculture	1.28	-9.31	-9.68	-13.74	1.92	10.43
Coffee	8.74	12.86	40.47	77.81	16.09	21.59
Corn	0.40	-13.96	-21.12	-23.30	-4.42	4.57
Cotton	1.88	-6.59	-12.59	-20.55	1.19	8.27
Soybean	-1.78	-13.92	-19.57	-24.54	2.58	10.15
Soybean Oil	-0.31	-7.30	-12.25	-30.21	-3.12	14.51
Sugar	2.76	7.50	2.48	-15.16	8.05	15.57
Wheat	0.66	-23.60	-18.13	-16.60	-14.93	-2.35
Bloomberg Sub Energy	-4.29	-8.01	-4.56	-18.45	1.21	-1.02
Brent Crude	-3.70	-1.74	9.02	0.69	20.21	15.38
Heating Oil	-6.69	-4.87	-1.03	-10.65	27.49	15.61
Natural Gas	-2.94	-24.16	-37.95	-56.27	-41.04	-30.79
Unleaded Gas	-5.81	-2.28	6.39	-7.09	23.96	18.76
WTI Crude Oil	-3.60	-0.53	11.44	1.07	15.26	4.08

Index	1-Mo.	3-Мо.	YTD	1Y	3Y	5Y
Bloomberg Sub Industrial Metals	3.40	-8.76	5.05	6.87	-0.34	7.21
Aluminum	7.27	-8.71	1.32	9.14	-4.33	4.90
Copper	0.32	-8.05	9.96	12.68	0.61	11.36
Nickel	0.95	-15.23	0.65	-17.75	-4.29	-1.18
Zinc	8.50	-2.98	8.24	19.54	2.61	7.69
Bloomberg Sub Precious Metals	1.93	3.81	20.40	25.38	9.64	9.10
Gold	2.64	7.04	20.42	27.86	10.65	9.25
Platinum	-5.09	-10.59	-6.52	-2.99	-1.08	0.42
Silver	-0.29	-5.39	19.95	16.81	6.02	8.37
Bloomberg Sub Livestock	0.36	3.63	12.58	2.70	5.83	1.22
Lean Hogs	8.76	10.74	18.94	4.98	0.22	-3.25
Live Cattle	-3.92	0.77	11.16	2.90	9.44	4.02

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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 18.44
	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 10.83
	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	Fixed Income Arbitrage 8.10
	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 1 5.89	Currency 8.44	Multi-Strategy 6.92
	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	Event Driven 6.90
	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	Equity Market Neutral 5.73
	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	Managed Futures 4.68
	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 4.31
	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	Convertible Arbitrage 3.77
	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	Commodity 0.90
↓ 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 -0.51

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Morningstar as of 7/31/24. *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	0.87	0.70	0.86	0.37	0.38	0.79	0.60	0.40
International	0.89	1.00	0.80	0.78	0.40	0.45	0.81	0.62	0.45
Emerging Markets	0.71	0.80	1.00	0.64	0.38	0.43	0.71	0.58	0.50
Small Cap	0.86	0.84	0.72	1.00	0.28	0.30	0.77	0.64	0.38
U.S. Aggregate	0.55	0.57	0.53	0.46	1.00	0.85	0.49	0.16	-0.08
Municipal	0.56	0.63	0.61	0.51	0.85	1.00	0.54	0.28	0.01
High Yield	0.83	0.83	0.72	0.83	0.59	0.69	1.00	0.80	0.51
Bank Loan	0.62	0.62	0.62	0.68	0.23	0.38	0.81	1.00	0.50
Commodities	0.41	0.47	0.47	0.40	-0.05	0.09	0.48	0.49	1.00

5 Years ended August 31, 2024

10 Years ended August 31, 2024

Past performance is no guarantee of future results.

It is not possible to invest directly in an index. Source: Morningstar as of 8/31/24. 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 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.
High Yield Bond	4,346	5,845	8,792
Intermediate Core Bond	4,211	9,720	67,873
Multisector Bond	2,431	6,804	26,960
High Yield Muni	1,633	3,552	3,831
Global Bond-USD Hedged	1,530	5,394	14,957
Foreign Large Blend	1,471	434	2,392
Muni National Interm	1,269	2,315	4,671
Nontraditional Bond	1,030	1,796	4,484
Corporate Bond	901	1,485	2,650
Ultrashort Bond	856	737	-5,099

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

	1 Mo.	3 Mo.	12 Mo.
Short-Term Bond	-1,338	-2,509	-23,841
Global Allocation	-1,360	-5,635	-23,053
Foreign Large Growth	-1,540	-2,733	-19,769
Small Blend	-2,085	-1,892	-6,790
Mid-Cap Value	-2,478	-6,291	-23,076
Large Value	-2,608	-10,418	-63,722
Mid-Cap Growth	-2,962	-8,686	-28,024
Moderate Allocation	-4,923	-10,691	-34,956
Large Growth	-12,265	-27,297	-109,129
Large Blend	-16,506	-29,637	-80,408

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

	1 Mo.	3 Mo.	12 Mo.
Large Blend	37,490	86,726	278,147
Small Blend	10,964	11,923	28,183
Intermediate Core Bond	5,108	10,184	46,419
Large Growth	4,668	29,716	84,023
Foreign Large Blend	4,400	15,729	50,752
Large Value	4,335	9,405	22,776
Corporate Bond	4,333	8,523	13,928
TradingLeveraged Equity	4,291	-217	-5,588
Intermediate Government	3,775	8,356	29,520
Ultrashort Bond	3,642	14,136	41,419

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

	1 Mo.	3 Mo.	12 Mo.
TradingMiscellaneous	-309	-143	709
Pacific/Asia ex-Japan Stk	-345	-316	-875
Commodities Broad Basket	-418	-39	-437
Communications	-584	-498	-45
Diversified Emerging Mkts	-657	1,481	6,446
Natural Resources	-816	-744	-3,850
Miscellaneous Region	-938	-960	-1,469
Mid-Cap Value	-1,421	292	1,895
Europe Stock	-1,964	-897	-1,409
China Region	-2,184	-1,428	-4,501

Source: Morningstar as of 7/31/24. 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	YTD 2024
Lower	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 19.53
	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	International 11.96
	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	Small-Cap 10.39
	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	Asset Allocation 9.67
	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	Emerging Markets 9.55
	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	High Yield 6.29
	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	Bank Loan 5.78
	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	US Agg 3.07
	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	Municipal 1.30
	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	Commodities 0.95

Past performance is no guarantee of future results. It is not possible to invest directly in an index. Source: Morningstar as of 8/31/24. 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 Capital US Aggregate Bond 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.



JIM CARON Chief Investment Officer Managing Director



SEMMELROTH

ERIC ZHANG Executive Director Executive Director



SCHUYLER HOOPER Executive Director



GREG WATERMAN Vice President



UMAR MALIK Vice President



CHRIS CHIA Vice President

Asset Allocation Committee

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

MARK BAVOSO

Senior Portfolio Manager, Global Multi-Asset team

JUSTIN BOURGETTE Portfolio Manager and Head of Investment Strategy for the High Yield team

CRAIG BRANDON Portfolio Manager and Co-Head of the Municipals team

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GREG FINCK Portfolio Manager and Co-Head of the Mortgage and Securitized team

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ANDREW SLIMMON Senior Portfolio Manager and Head of Applied Equity Advisors

ANDREW SZCZUROWSKI Portfolio Manager and Co-Head of the Mortgage and Securitized team

STEVEN TURNER Head of Investment Selection, Portfolio Solutions Group

Glossary of Terms

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 fixedrate, 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. $\ensuremath{\textbf{Bloomberg}}$ 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.

Glossary of Terms and About Risk

Index Definitions (cont.)

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.

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

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

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

Terms

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.

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. Governmentsponsored 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. The London Interbank Offered Rate or LIBOR, is used throughout global banking and financial industries to determine interest rates for a variety of financial instruments (such as debt instruments and derivatives) and borrowing arrangements. The ICE Benchmark Administration Limited, the administrator of LIBOR, is expected to cease publishing certain LIBOR settings on December 31, 2021, and the remaining LIBOR settings on June 30, 2023. The transition process may involve, among other things, increased volatility or illiquidity in markets for instruments that currently rely on LIBOR, such as floating-rate debt obligations. 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.

Risk Considerations

Diversification does not eliminate the risk of loss.

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

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

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

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

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

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