

Morningstar Markets Observer

Q4 2025

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Market Overview

Market Dashboard

Emerging-market stocks led the way in the third quarter to nearly match developed international stocks' 25.8% year-to-date return. US stocks also did well, but their 16.3% year-to-date return still lags international stocks from most regions. On the fixed-income side, municipal bonds moved into positive territory for the year notching a 3.1% third-quarter return. Commodities rebounded in the third quarter, too, as gold continued to hit all-time highs.

| Equities | Dividend Yield | YTD | 3 Mo | 1 Yr | 3 Yrs | 5 Yrs | 10 Yrs | P/E | |
|-------------------------------------|-----------------------|------|------|------|-------|-------|--------|--------------------|--|
| Morningstar US Large Cap | 1.0 | 16.3 | 9.0 | 20.1 | 27.2 | 16.8 | 16.1 | 29.7 | |
| Morningstar US Small Cap | 1.4 | 8.8 | 8.0 | 9.2 | 16.3 | 12.3 | 9.7 | 19.6 | |
| Morningstar Developed-Markets ex-US | 2.8 | 25.8 | 5.7 | 16.4 | 21.4 | 11.2 | 8.4 | 17.8 | |
| Morningstar Emerging Markets | 2.3 | 24.6 | 9.5 | 14.8 | 17.6 | 7.9 | 8.3 | 14.5 | |
| Fixed Income | Yield to Maturity | | | | | | | Interest Rates (%) | |
| Morningstar US Core Bond | 4.4 | 6.1 | 2.0 | 2.9 | 4.9 | -0.5 | 1.8 | 2 Yr Treasury | |
| Morningstar US Corporate Bond | 4.8 | 6.9 | 2.6 | 3.6 | 7.1 | 0.3 | 3.1 | 5 Yr Treasury | |
| Morningstar US High-Yield Bond | 6.9 | 7.2 | 2.4 | 7.3 | 11.0 | 5.5 | 6.2 | 10 Yr Treasury | |
| Morningstar US Municipal Bond | 4.0 | 2.4 | 3.1 | 1.4 | 4.9 | 0.9 | 2.4 | 20 Yr Treasury | |
| Morningstar Emerging-Markets Bond | 5.7 | 9.3 | 4.2 | 6.2 | 9.7 | 1.5 | 3.9 | Prime Rate | |
| Broad Commodities | | | | | | | | Commodities (USD) | |
| Bloomberg Commodity | | 9.4 | 3.6 | 8.9 | 2.8 | 11.5 | 4.0 | Brent Crude Oil | |
| | | | | | | | | | |

| Fundamental Measures | | | | | | | | |
|----------------------|-----|-----|------|--|--|--|--|--|
| P/E | P/B | P/S | P/C | | | | | |
| 29.7 | 6.3 | 4.6 | 22.5 | | | | | |
| 19.6 | 2.4 | 1.6 | 11.9 | | | | | |
| 17.8 | 1.9 | 1.5 | 10.2 | | | | | |
| 14.5 | 1.9 | 1.7 | 10.3 | | | | | |
| | | | | | | | | |

| interest rates (%) | Current | 1 Yr Ago |
|--------------------|---------|----------|
| 2 Yr Treasury | 3.6 | 3.7 |
| 5 Yr Treasury | 3.7 | 3.6 |
| 10 Yr Treasury | 4.2 | 3.8 |
| 20 Yr Treasury | 4.7 | 4.1 |
| Prime Rate | 7.3 | 8.0 |
| Commodities (USD) | | |
| Brent Crude Oil | 67 | 71 |
| Gold | 3,825 | 2,630 |

3-Month Return (%)

QM05



1-Year Return (%)

Return (%)



5-Year Return (%)

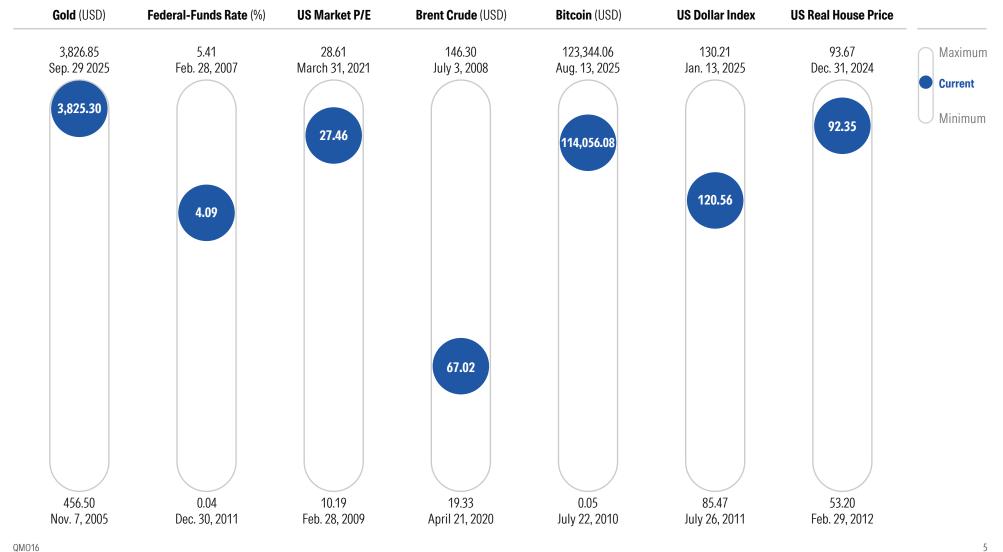


Source: Morningstar. Data as of Sept. 30, 2025. ©2025 Morningstar. All Rights Reserved.



Market Thermometer

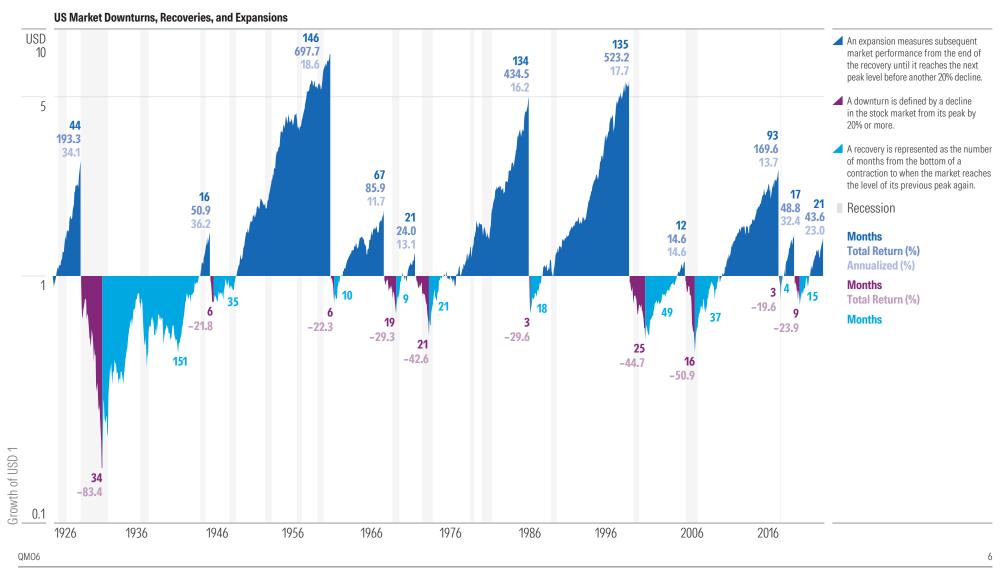
Gold and bitcoin were two of several market segments that reached new highs in 2025. The federal-funds rate fell from its recent peak after a 25-basis-point rate cut in September. Still, most market indicators sit near the top of their 20-year historical range, with only Brent Crude trading closer to its 20-year trough than peak due to excess supply.



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US Market Surges in Third Quarter

US stocks posted strong gains in 2025's third quarter, led by continued momentum for most of the Magnificent Seven—Alphabet, Amazon.com, Apple, Meta Platforms, Microsoft, Nvidia, and Tesla—pushing cumulative US market returns past 40% since the most recent market bottom. Small caps also participated in the rally, signaling broader market strength. This expansion remains resilient 36 months on from the last broad contraction.



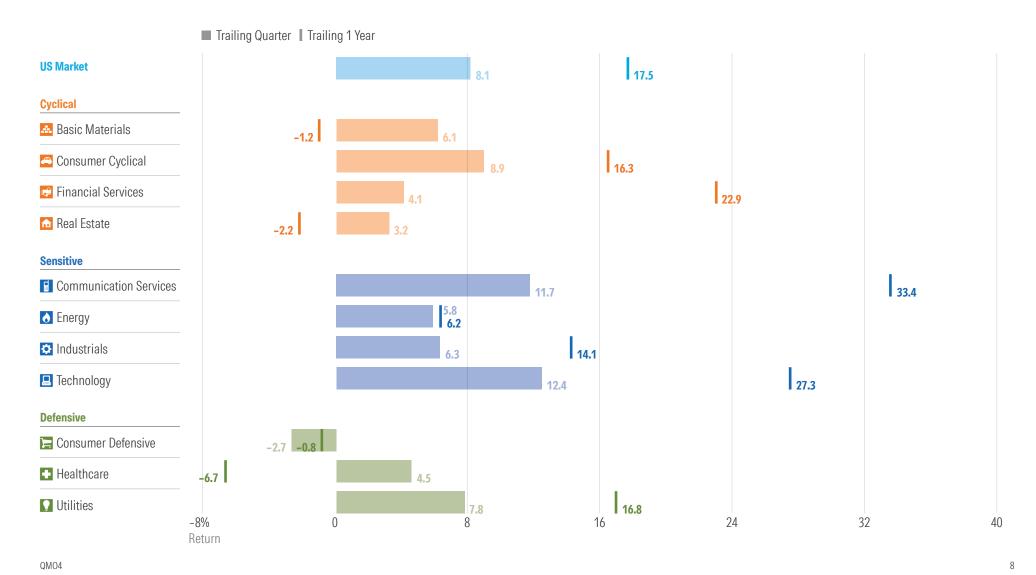
Trailing 12-Month Performance of Major Asset Classes

Developed-market stocks in the US and abroad have gone on a tremendous run following early April's broad selloff. Emerging-market stocks aren't far behind their developed-market counterparts, though, with growth supported by strong performance in all key regions. US bonds and commodities lagged as rate and input volatility weighed on each segment, respectively.



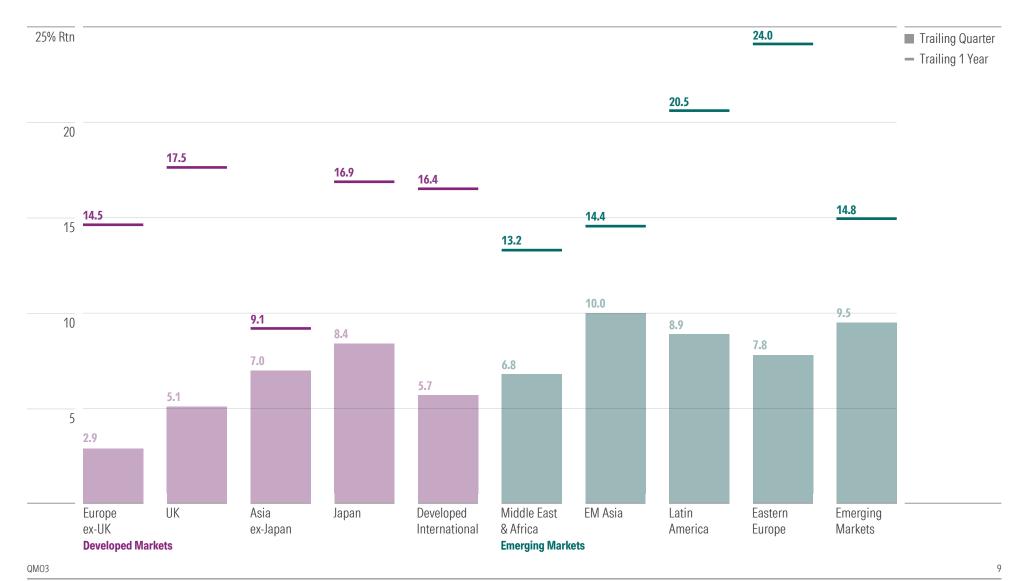
US Equity Sector Performance

The stock market kept up its momentum in the third quarter with 10 of 11 sectors finishing in positive territory. Technology was the top performer for the second straight quarter with communication services not far behind. Both sector indexes benefited from the rapid growth of many artificial intelligence-related companies. Consumer defensive was the lone sector to finish the quarter in the red due to weak third-quarter earnings.



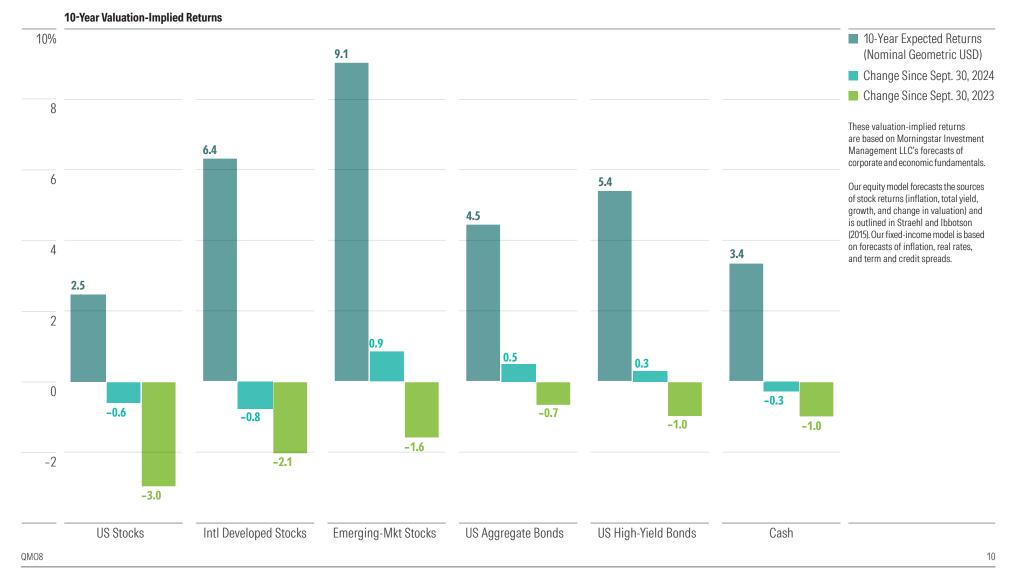
International Stock Market Performance

International markets enjoyed another strong quarter thanks to US dollar depreciation and macroeconomic tailwinds in Europe. Japan's 8.4% quarterly gain was the most of any international developed market, while the UK's 17.5% trailing one-year gain led all international developed markets through September. Emerging markets saw robust growth in the third quarter, with all regions gaining at least 6.8% for the quarter. Eastern Europe and Latin America both returned more than 20% over the last year.



Valuation-Implied Returns: Short-Term Moderation, Longer-Term Improvement

Valuation-implied returns serve as a useful measure for cross-asset-class comparisons. US and international developed market stocks have seen large declines in VIRs over the past two years due to ballooning valuations. Emerging-market stocks have the highest VIR and have also seen the largest gain over the past 12 months. Fixed-income VIRs have declined over the past two years despite recent US aggregate and high-yield bond gains.



Performance of Risk-Based Portfolios

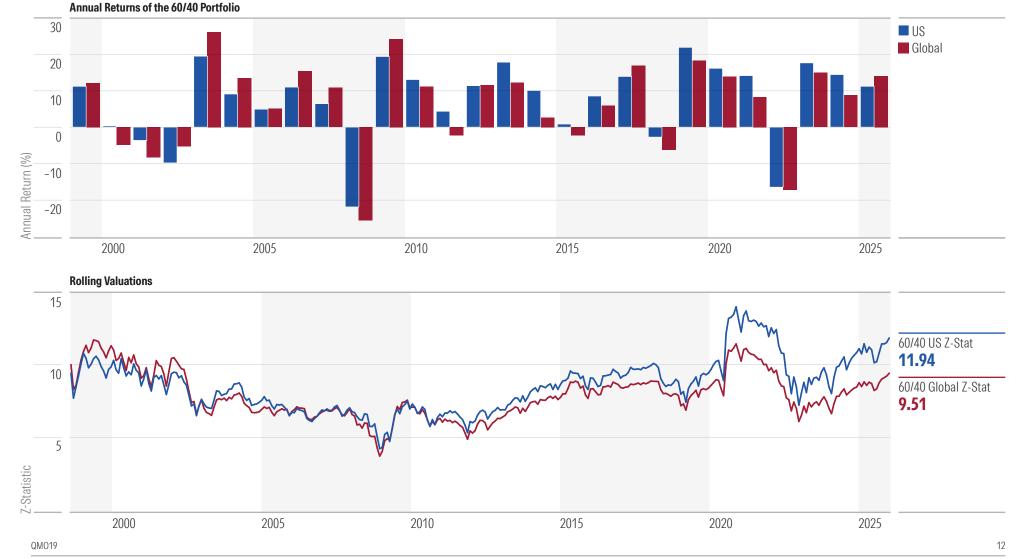
The aggressive, moderate, and conservative risk-based portfolio all posted gains in the last three months and ended the quarter at all-time highs. Investor enthusiasm surrounding Al-related stocks supported strong equity performance in the portfolios while spread compression bolstered fixed-income returns. Still, stock returns trounced bond returns, contributing to the conservative portfolio's significant performance deficit to the other two portfolios.





The 60/40 Portfolio Performance

The standard 60/40 portfolio had another strong quarter, with both US and global portfolios reaching double-digit returns this year. Positive returns from both stocks and bonds bolstered performance. But as valuations creep toward the higher levels seen in 2020 and 2021, it raises questions for whether recent strong performance can endure.



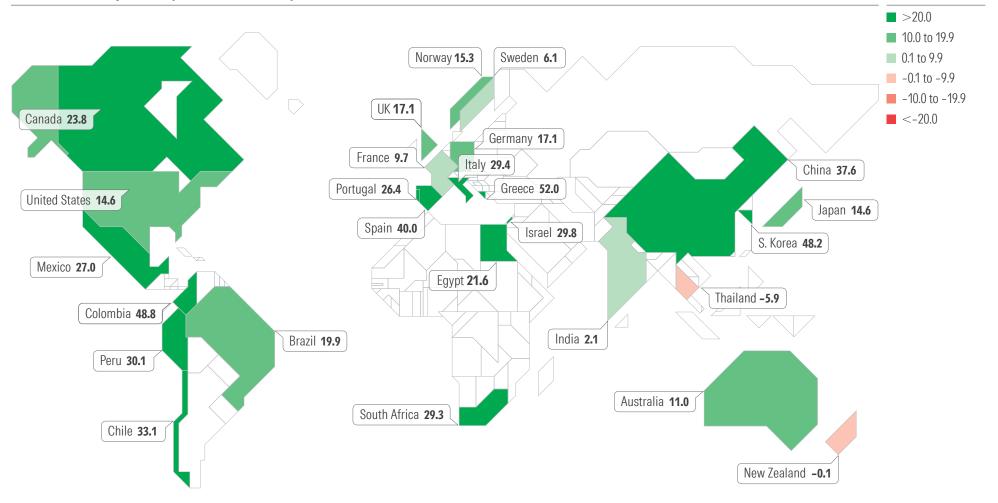
Equities



Global Market Barometer

Global equity markets have had a solid run in 2025 through September, rebounding from a rocky start to the year. European markets—including Greece and Spain—led the way, alongside Latin American standouts like Colombia and Chile. In the Asia-Pacific region, South Korea and China also posted strong returns, while Thailand and New Zealand lagged.

YTD Returns of Morningstar Country Indexes in Base Currency (%)



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Equity Market Performance Decomposition

Several regions including Europe delivered strong USD returns due to the continued depreciation of the US dollar. Broad sales declines, potentially due to tariff-related global trade impacts, were offset by margin increases. Relentless artificial intelligence infrastructure spending helped expand energy and utility P/E multiples, while policy uncertainty weighed on healthcare valuations.

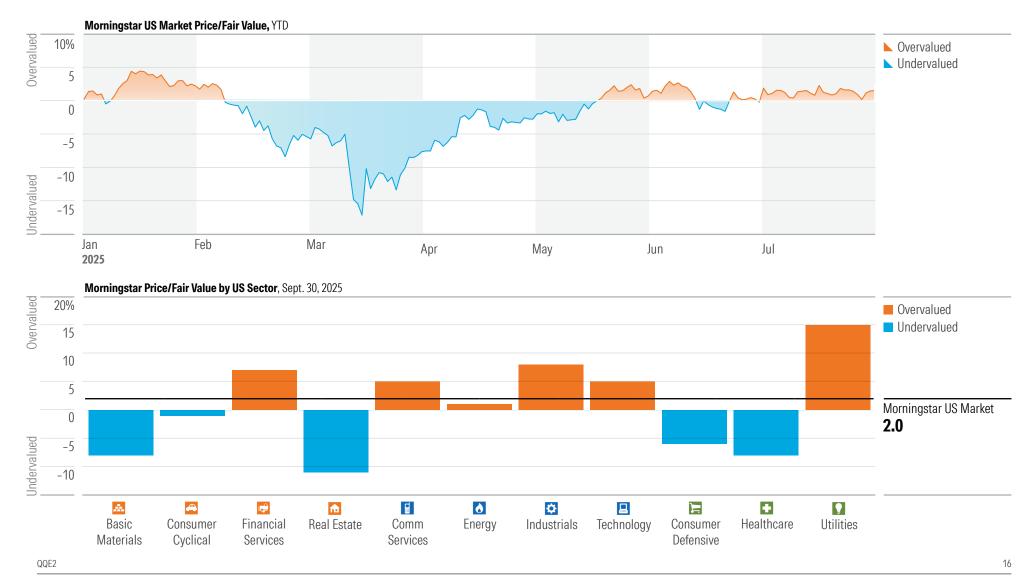
2025 YTD Return Decomposition

| | USD Return (%) | \approx Total Yield (%) | + ΔP/E(%) | + Δ Margins (%) | + Δ Sales (%) | + Δ Currency (%) | + Other (%) |
|--|----------------|---------------------------|-----------|----------------------|---------------|------------------|-------------|
| Countries/Regions | | | | | <u> </u> | | |
| Europe ex UK | 27.9 | 3.0 | 12.5 | -1.7 | -1.4 | 12.8 | 2.8 |
| EM | 27.5 | 2.2 | 5.8 | 14.4 | -0.4 | 2.6 | 2.9 |
| Europe | 27.5 | 3.1 | 13.4 | -3.1 | -0.2 | 11.5 | 2.8 |
| AC Asia ex JP | 26.8 | 1.9 | 6.2 | 13.0 | 1.3 | 1.6 | 2.8 |
| Jnited Kingdom | 26.3 | 3.5 | 15.5 | -3.1 | 0.2 | 7.2 | 2.9 |
| EAFE | 25.1 | 2.9 | 12.9 | 5.4 | -8.2 | 9.7 | 2.5 |
| lapan | 20.7 | 2.4 | 15.6 | -3.8 | -1.6 | 6.2 | 1.8 |
| AC World | 18.4 | 2.4 | 5.3 | 8.6 | -1.5 | 2.5 | 1.1 |
| World | 17.4 | 2.4 | 5.7 | 7.7 | -1.7 | 2.5 | 0.9 |
| JSA | 14.6 | 2.2 | 3.0 | 8.2 | 0.7 | 0.0 | 0.5 |
| Developed-Market Sector Communication Services | | 2.5 | 1.4 | 19.0 | -0.6 | 1.2 | 2.5 |
| | | | | | | | |
| Industrials | 23.1 | 2.2 | 7.0 | 9.4 | -1.5 | 4.1 | 1.9 |
| Financial | 22.9 | 3.2 | 7.6 | 8.2 | -1.3 | 3.4 | 1.8 |
| Utilities | 22.0 | 2.9 | 14.6 | 5.0 | -5.0 | 3.2 | 1.3 |
| Information Technology | 21.8 | 1.6 | 1.7 | 4.8 | 11.1 | 0.9 | 1.8 |
| Materials | 19.6 | 2.7 | 7.7 | 10.9 | <u>-7.6</u> | 4.6 | 1.3 |
| | | 4.0 | 23.3 | -12.1 | -6.9 | 2.5 | -0.6 |
| | 11.1 | 4.9 | 25.5 | | | | |
| Energy | | 1.8 | 13.9 | -6.8 | -3.7 | 2.3 | 0.0 |
| Energy Consumer Discretionary Consumer Staples | | | | - 6.8 2.1 | -3.7 -2.0 | 2.3 | 0.0 -0.5 |



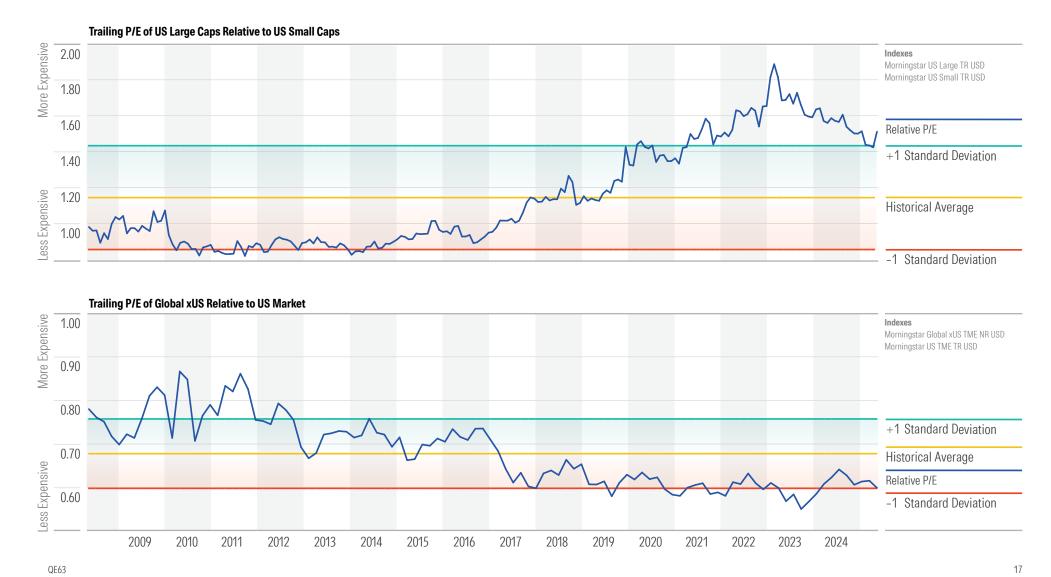
Morningstar Price/Fair Value

The median stock in the Morningstar US Market Index remained overvalued through most of the third quarter of 2025, despite a brief dip in early August. Among sectors, utilities remained the priciest as of September 2025, followed by industrials and financial services. In contrast, the real estate, healthcare, basic materials, and consumer defensive sectors appear undervalued.



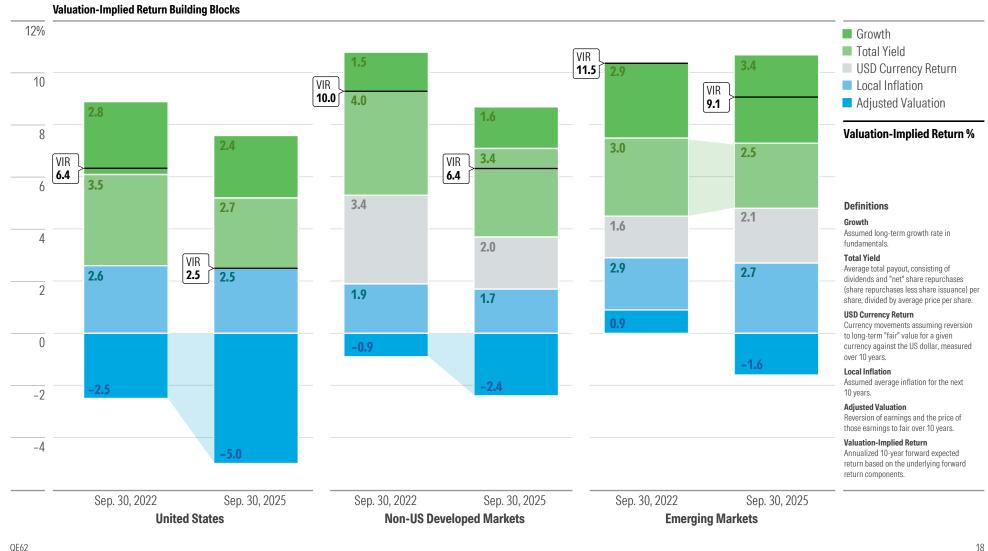
What's Cheap? Breaking Down Valuation Disparities in Global Markets

Relentless investor demand for large technology companies, especially Al-related firms, has driven the valuation of US large-cap stocks much higher than their small-cap counterparts. This is largely a US phenomenon, though, causing global stocks to appear undervalued compared with US stocks.



Understanding Sources of Forward-Looking Returns

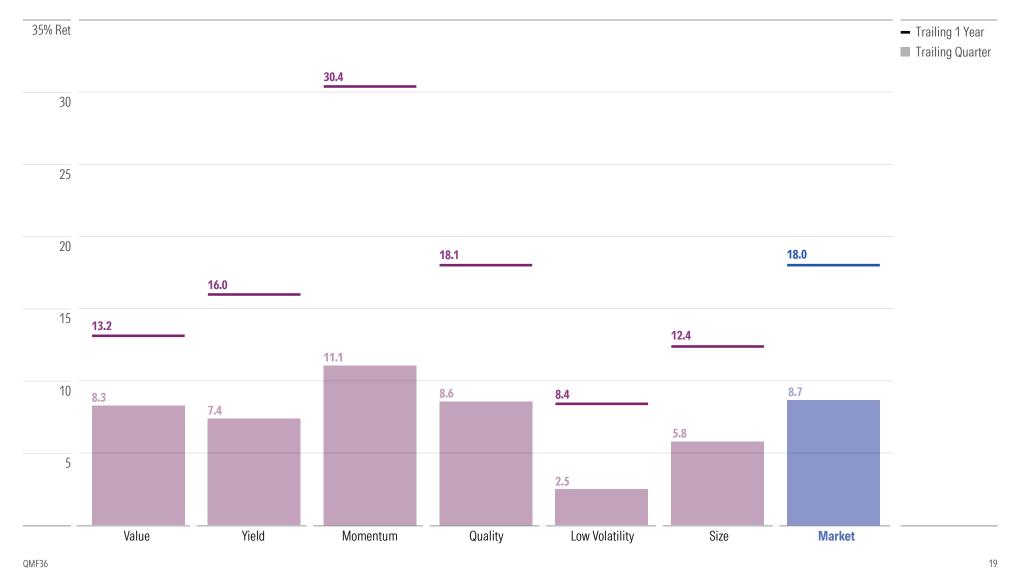
Valuation-implied returns have declined for each of the three broad regions since September 2022. Emerging-markets stocks currently have the highest valuation-implied return, driven by positive expected growth and currency returns. Conversely, US stocks have the lowest valuation-implied return because of an expected reversion of P/E multiples back to fair value.





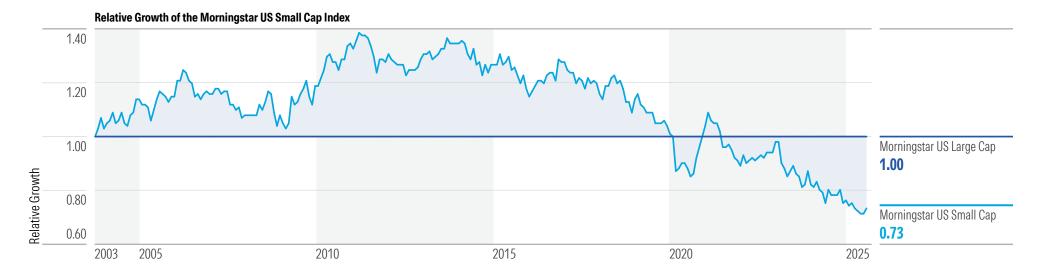
Factor Index Performance

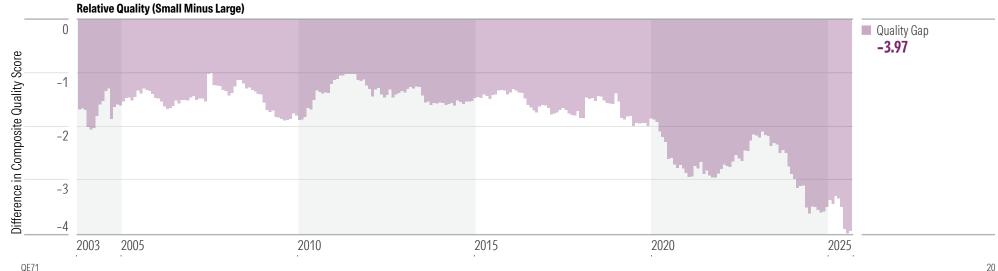
Momentum remains the best-performing risk factor thanks to resilient market sentiment, and the Morningstar US Low Volatility Factor Index continues to lag other Morningstar factor indexes over both the trailing year and quarter. Broad market tailwinds meant that the low-volatility index still delivered positive returns, though, and no other factor did as poorly. The size factor even delivered positive returns despite small-cap US stocks severely lagging large-caps.



Private Markets Squeeze Small-Cap Stocks

The Morningstar US Large Cap Index outpaced the Morningstar US Small Cap Index by 6.2% annualized for the last 10 years through August 2025. This severe underperformance corresponds with a striking decline in small-cap fundamentals relative to the large-cap index. One theory is that record private equity and venture capital funding is reshaping the market—keeping promising companies private, intensifying competition in some industries, and taking more public firms private.



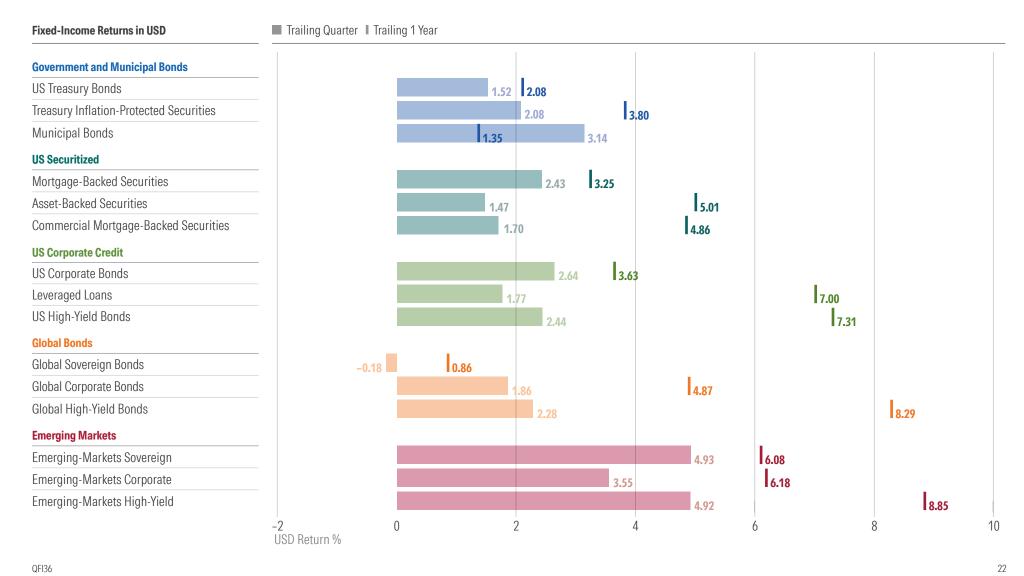




Fixed Income

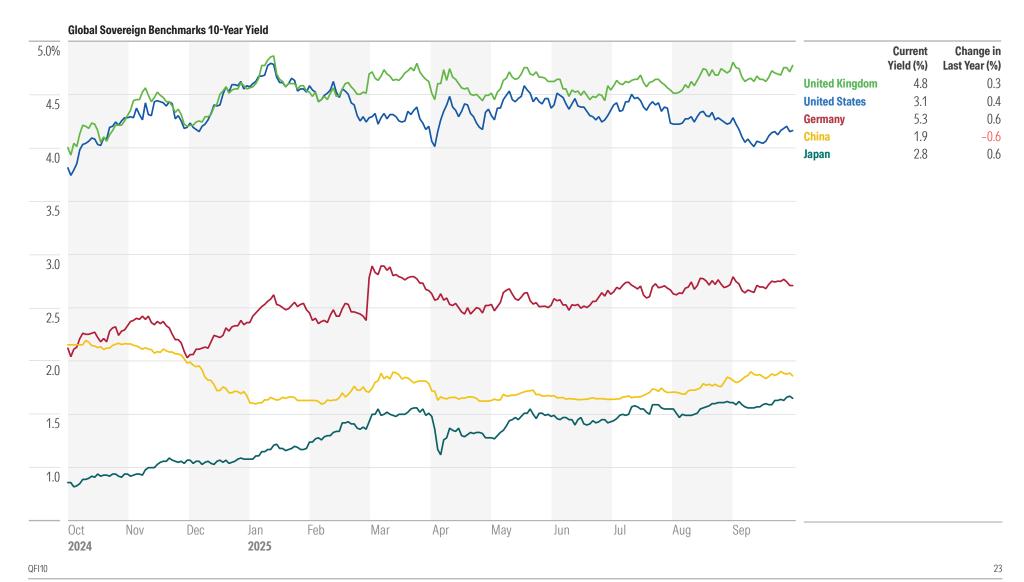
Emerging-Market Debt Shone in 2025's Third Quarter

Falling yields lifted bond prices, and most major fixed-income sectors posted positive returns. Investors who took moderate credit and duration risk were rewarded. Emerging-market bonds led the way, buoyed by improving fundamentals and a weakening US dollar. Municipal bonds also rebounded after a sluggish start to the year, supported by lower short-term rates and strong investor demand.



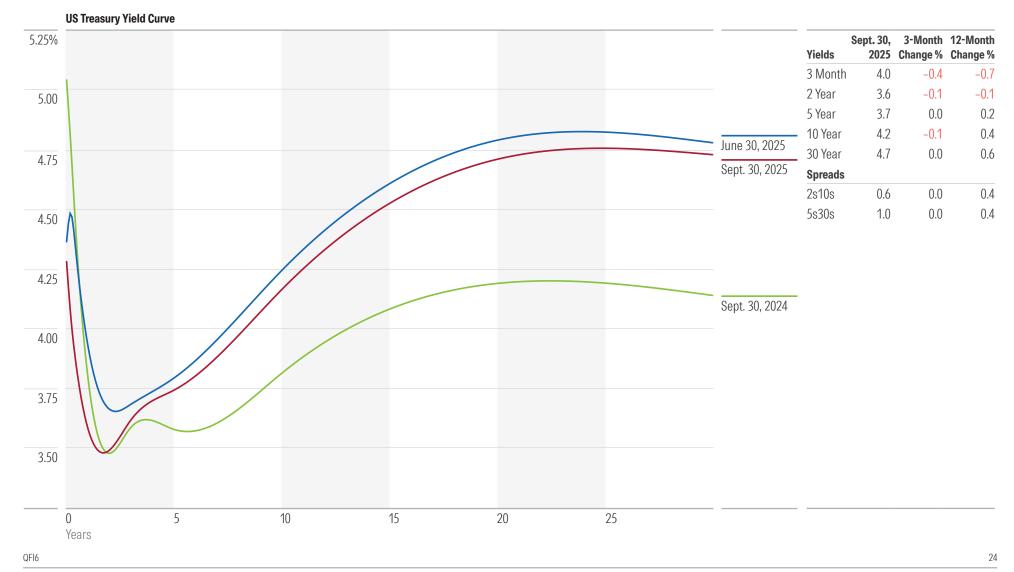
Long-Term Yields Reach New Heights

Until 2025's third quarter, most sovereign 10-year yields had been on a steady climb during the year amid increasing volatility and growing economic uncertainty. But the third quarter saw diverging trends in global yields and varied outcomes for government bonds due to specific country-level issues, including differing inflation pressures, fiscal health, and monetary policy decisions.



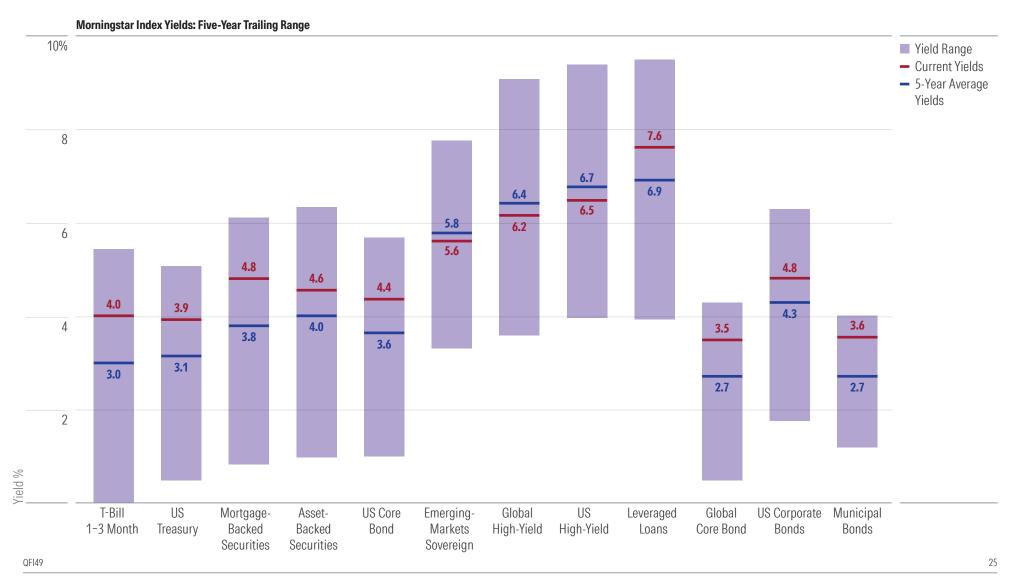
Yields Fall, but Term Premium Persists

After the US Treasury yield curve steepened in the first half of 2025, yields moved lower in the third quarter. The Federal Reserve's September rate cut pulled short-term rates down, while softer labor market data contributed to declines across maturities. Still, elevated long-term yields suggest investors continue to demand greater compensation for holding longer-duration debt—a reflection of a higher term premium.



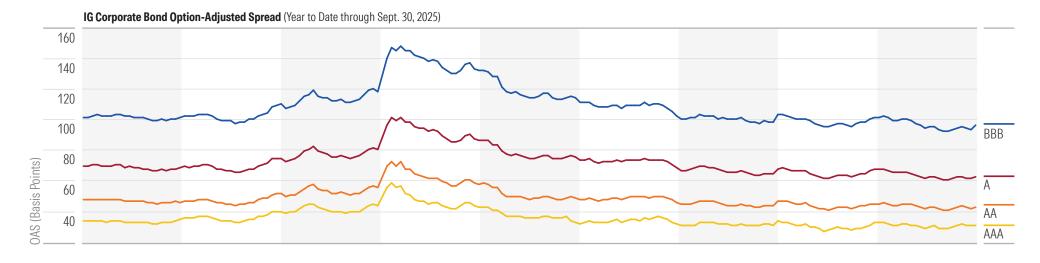
Bond Yields Remain Elevated Despite Fed Cuts

Yields edged lower following the Federal Reserve's September 2025 rate cut and growing expectations for further easing. Still, most fixed-income sectors continue to offer yields above their five-year averages, making bonds an appealing option for yield-focused investors. Leveraged loans, high-yield bonds, and emerging-markets debt stand out with the highest current yields.



Credit Spreads Remain Tight

Corporate credit spreads, an indicator of the broader economy's health and investors' confidence in credit markets, tightened through the third quarter of 2025 after a brief widening earlier in the year. Spreads remained at historical tight levels at the end of the quarter, signaling rich valuations. Against a backdrop of market uncertainty, this limits the sector's appeal for investors seeking more favorable risk-adjusted returns.

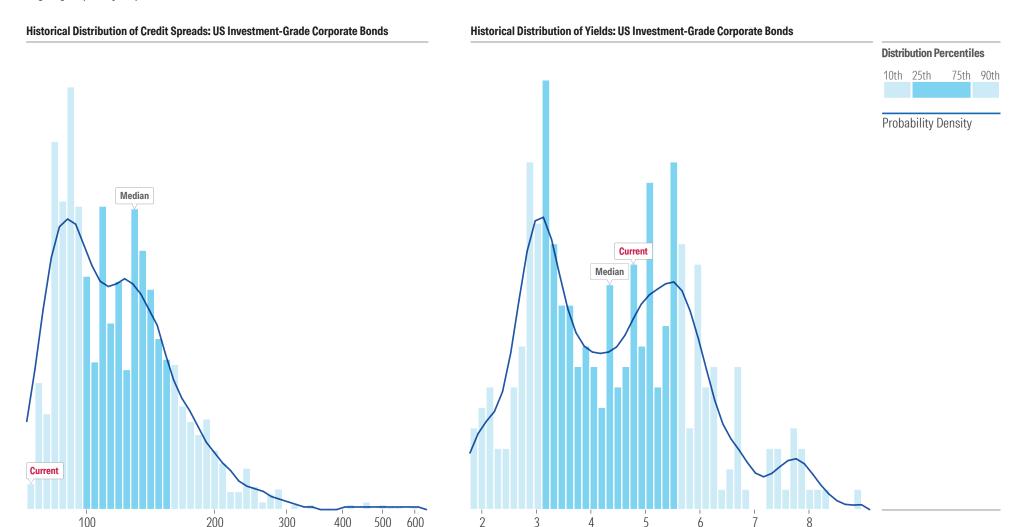






Corporate Credit Spreads Are Tight, but Yields Stay Appealing

Credit spreads on US investment-grade corporate bonds sit near the low end of their historical range, reflecting strong fundamentals and steady demand. Yet overall yields remain relatively attractive, thanks to elevated Treasury rates. This mix limits further spread compression but offers appealing income potential for investors seeking high-quality exposure.

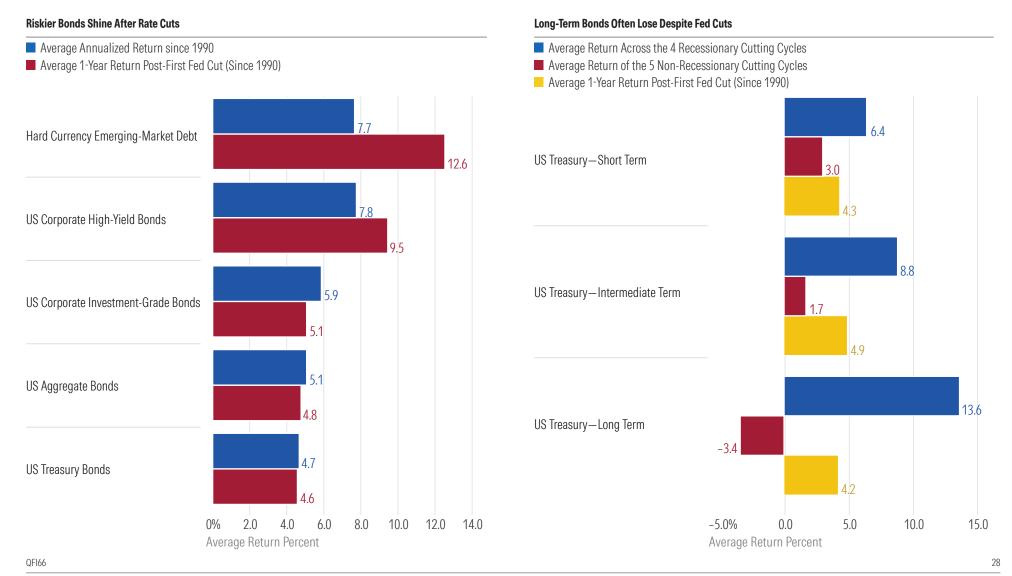


Effective Yield (%)

Option-Adjusted Spread (bps, log scale)

Fixed-Income Assets Often Benefit After Fed Cuts, but Long-Term Bonds Face Risks

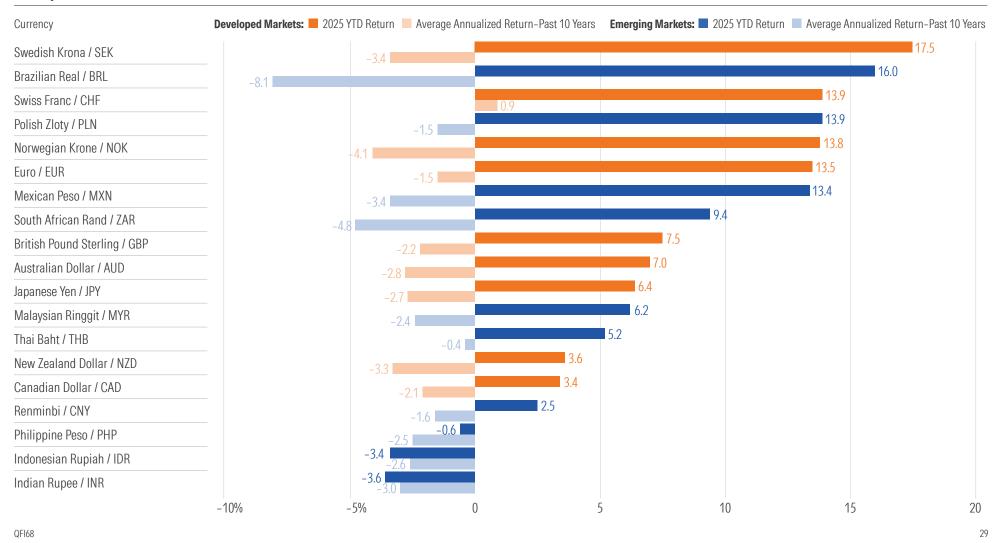
Historically, US fixed-income assets posted positive returns in the year following the first Federal Reserve rate cut. Riskier segments (such as high-yield and emerging-market debt) led the way. But outcomes hinge on recession risk: in soft landings, long-term Treasuries often lost value despite rate cuts, as market forces—like supply-demand, sentiment, and fiscal stance—overrode policy.



US Dollar Weakness Lifted Foreign Currency Returns

The US dollar declined in 2025 through September versus most major developed- and emerging-markets currencies. That's a sharp reversal from the trend over the previous decade ending December 2024. For US investors, this depreciation has significantly boosted year-to-date returns on non-US assets, particularly those denominated in the Swedish krona and the Brazilian real.

Currency Returns versus US Dollar

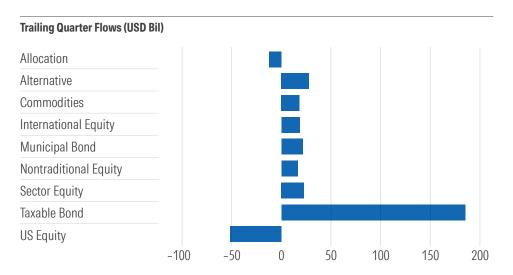


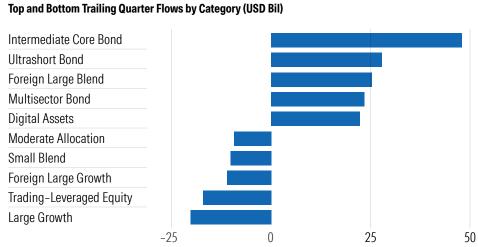


Funds 0 0 0 0 0 0 (. . . .

Top- and Bottom-Performing Morningstar Categories

The equity precious-metals Morningstar Category surged in 2025's third quarter, nearly doubling the return of the next-best performer, China region. On the flip side, consumer defensive and India equity were the only categories to post negative returns. From a flows perspective, taxable-bond funds saw the largest inflows, while US equity and allocation funds remained in outflows.





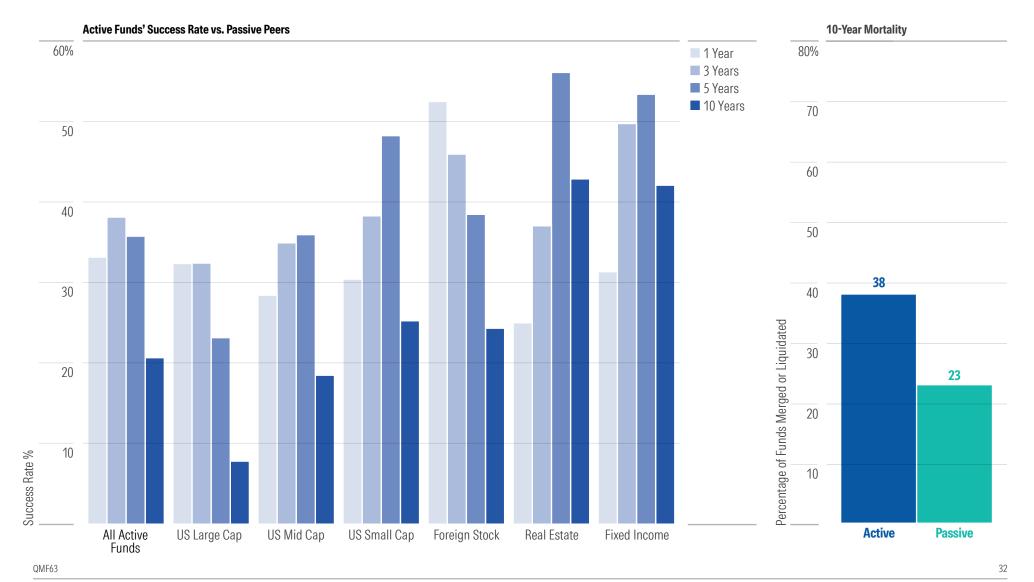
| | | Return (%) | 1 | | | | Return (%) |) | | |
|--|----------------------|---------------------|--------------------|-----------------------------|---|----------------------|---------------------|--------------------|-----------------------------|----------------|
| Top-Performing Morningstar Categories | US Category Group | Trailing Quarter | Trailing 1 Year | Quarterly Flow (USD Mil) | Bottom-Performing Morningstar Categories | US Category Group | Trailing Quarter | Trailing 1 Year | Quarterly Flow (USD Mil) | |
| Equity Precious Metals | Sector Equity | 50.4 | 92.4 | 2,418 | Consumer Defensive | Sector Equity | -3.4 | -4.1 | -797 | >20 |
| China Region | International Equity | 26.8 | 27.6 | 3,868 | India Equity | International Equity | -3.1 | -9.3 | 1,297 | ■ 10 to 19.9 |
| Digital Assets | Alternative | 25.0 | 69.0 | 22,310 | Equity Market Neutral | Alternative | 0.6 | 4.2 | -116 | 0 to 9.9 |
| Technology | Sector Equity | 22.0 | 30.7 | 11,188 | Ultrashort Bond | Taxable Bond | 1.8 | 4.9 | -462 | -9.9 to 0 |
| Natural Resources | Sector Equity | 21.6 | 13.3 | 261 | Short Government | Taxable Bond | 1.9 | 3.7 | 196 | ■ -19.9 to -10 |
| Communications | Sector Equity | 19.9 | 34.9 | 1,284 | Muni National Short | Municipal Bond | 2.0 | 3.0 | -392 | <-20 |
| Pacific/Asia ex-Japan Stk | International Equity | 17.9 | 18.7 | 290 | Short-Term Inflation-Protected | Taxable Bond | 2.2 | 5.4 | -264 | |
| Industrials | Sector Equity | 17.2 | 24.4 | 7,144 | Global Bond-USD Hedged | Taxable Bond | 2.2 | 3.5 | -4,830 | |
| Diversified Emerging Mkts | International Equity | 15.3 | 15.9 | 1,105 | Short-Term Bond | Taxable Bond | 2.3 | 4.7 | -659 | |
| Diversified Pacific/Asia | International Equity | 15.1 | 15.5 | -259 | Muni Single State Short | Municipal Bond | 2.3 | 2.6 | -200 | |

QMF10



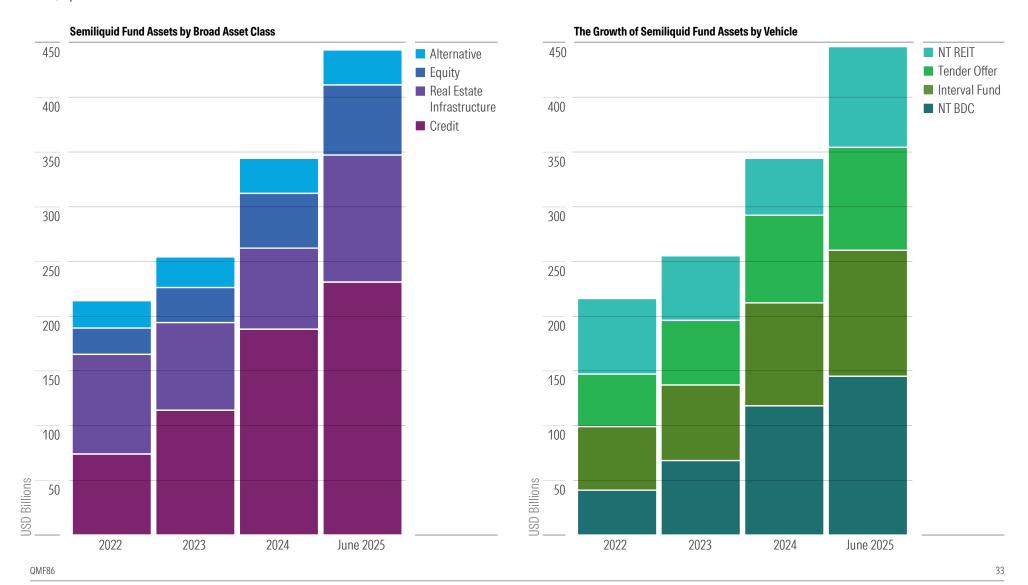
Success Rarely Persists for Active Funds

Active managers continue to lag passive peers. In the 12 months through June 2025, active funds outperformed passive funds in just one of six broad US categories, while just one in three active funds across all categories beat the passive composite. Over the past decade, the picture is even starker: active funds outperformed just 21% of the time and were far more likely to be liquidated.



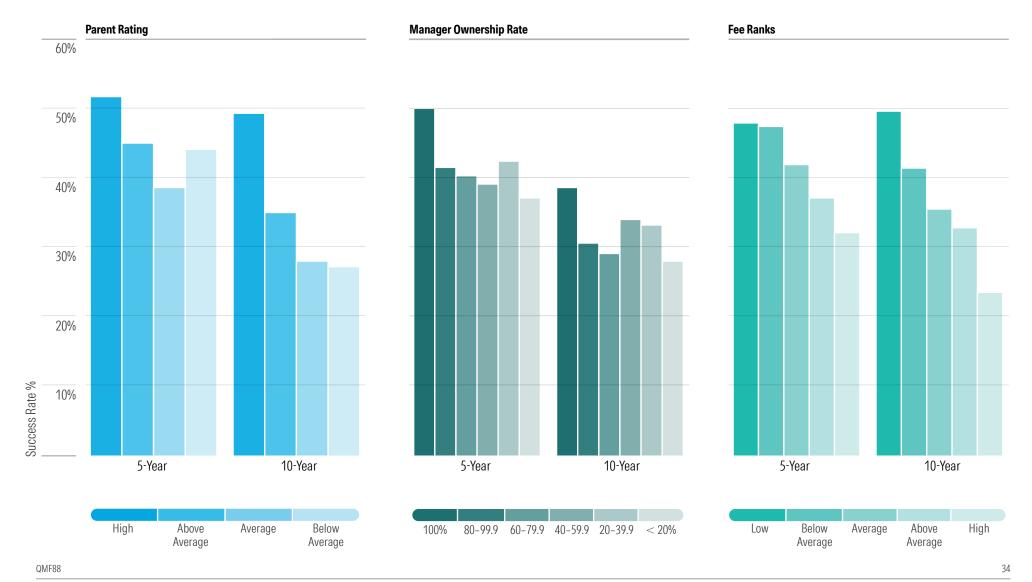
How Semiliquid Vehicles and Asset Classes Stack Up

Semiliquid vehicle assets climbed to USD 450 billion by the end of June 2025, up 16% since the end of 2024 and 77% since the end of 2022. Nontraded business-development companies remain the fastest-growing semiliquid vehicle, offering direct exposure to private credit through loans. Their assets reached \$145 billion by the end of June, up 23% from the end of 2024.



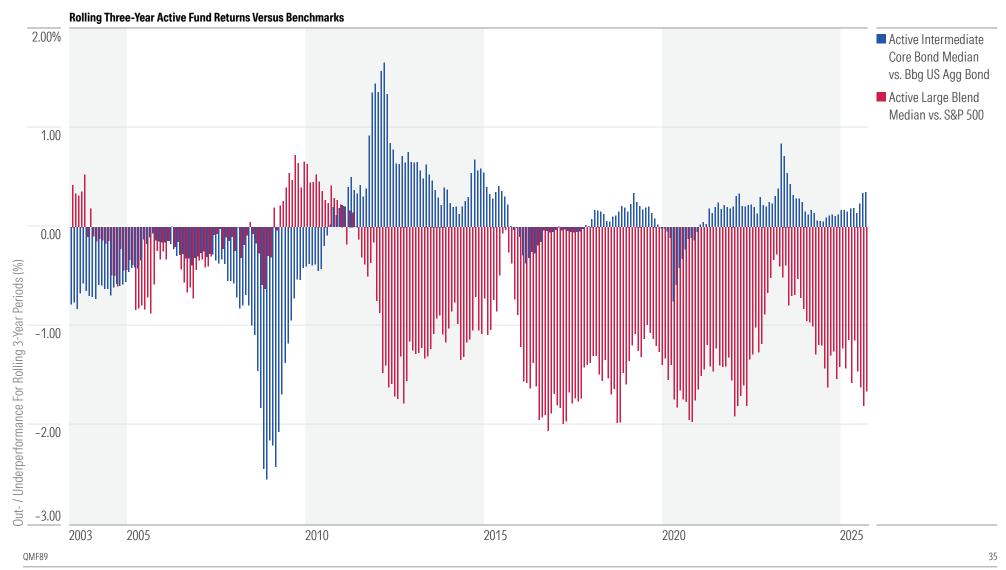
Indicators For Asset Manager Success

Certain firm-level traits correlate with better fund outcomes. Before evaluating a strategy, investors can look to three key indicators: A High or Above Average Parent Pillar rating from Morningstar's Manager Research team, strong manager ownership, and low fees. Indeed, over the past five- and 10-year periods, funds from firms with these characteristics have shown significantly higher success rates in beating their benchmarks on a risk-adjusted basis.



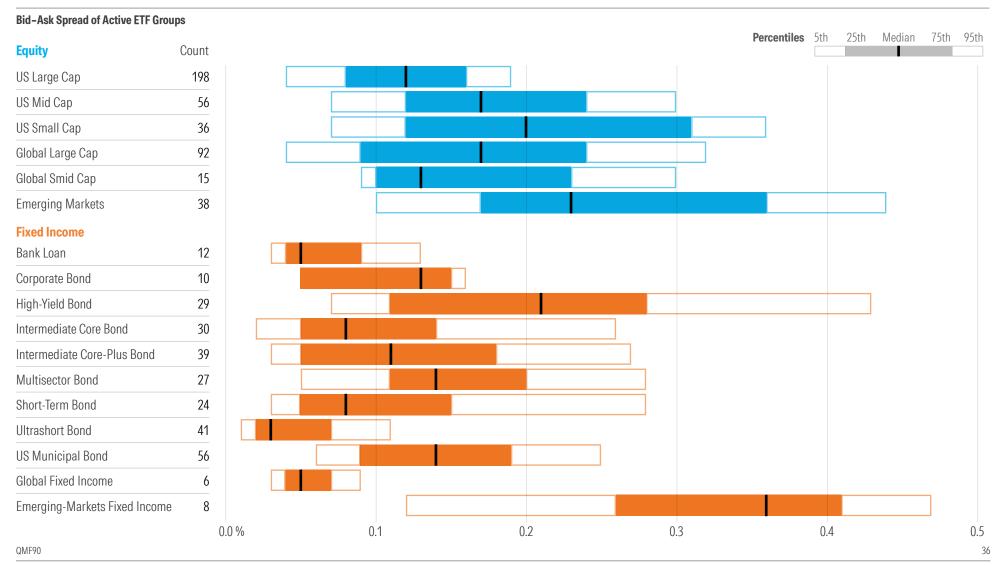
Active Bond Versus Stock Fund Outperformance

The typical active bond manager has consistently fared better than their equity counterparts. Over the past 25 years through July 2025, the typical actively managed fund in the intermediate core bond Morningstar Category beat the Bloomberg US Aggregate Bond Index in 54% of rolling three-year periods. For the median large-blend option versus the S&P 500, that figure drops to just 13%.



Active ETFs May Be Cheap, but Trading Them Might Not Be

Some baskets are easier—and cheaper—for market makers to assemble than others. That helps explain why US large-cap active ETFs had a tighter median spread of 0.12%, compared with 0.20% for their small-cap counterparts (as of Sept. 19, 2025). The difference is even starker in fixed income: emerging-markets bond active ETFs posted spreads more than 7 times wider than the 0.05% median spread seen for bank-loan ETFs. It's important to look beyond expense ratios when selecting funds.



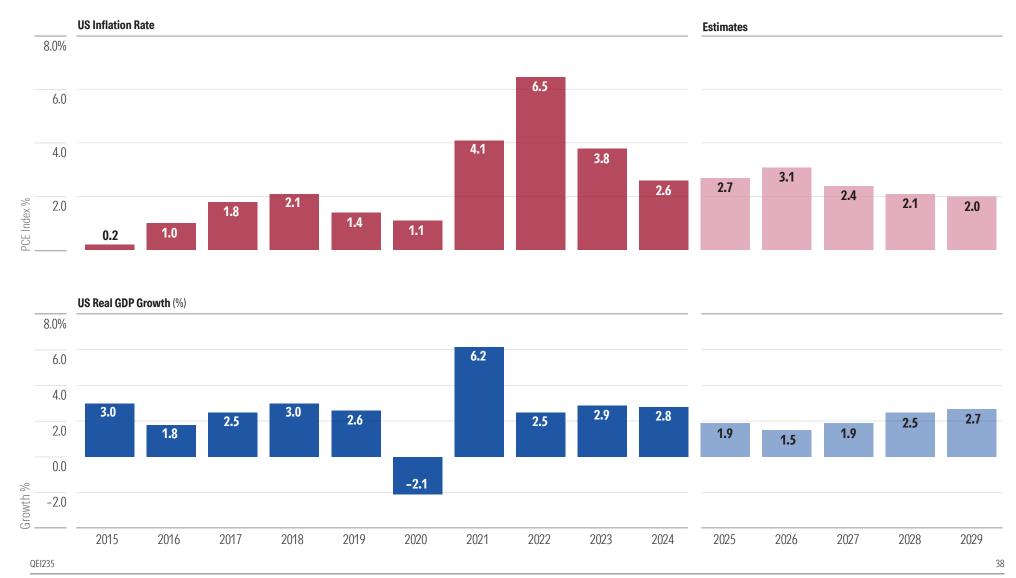


Economic Indicators



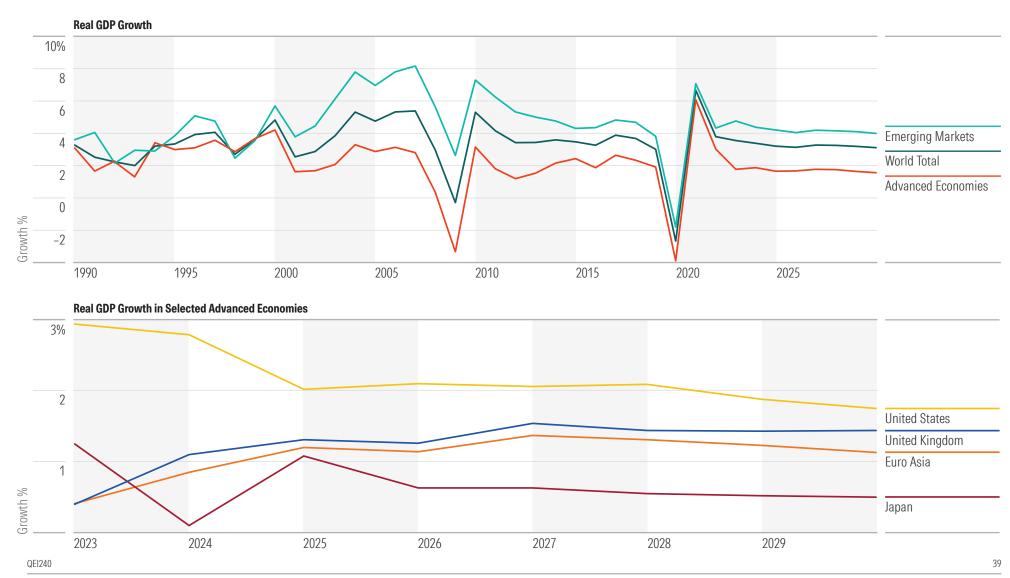
Tariffs to Still Weigh on US GDP Growth and Push Up Inflation

While little of the tariffs have been passed on to consumers yet, we expect that to change over the next year. We expect US GDP growth to trough in 2026, owing to the impact of tariffs, along with a separate downward impulse to consumption growth from more-cautious households. Inflation will peak in 2026, but then drop off as the slack created by weak GDP growth generates disinflationary pressure.



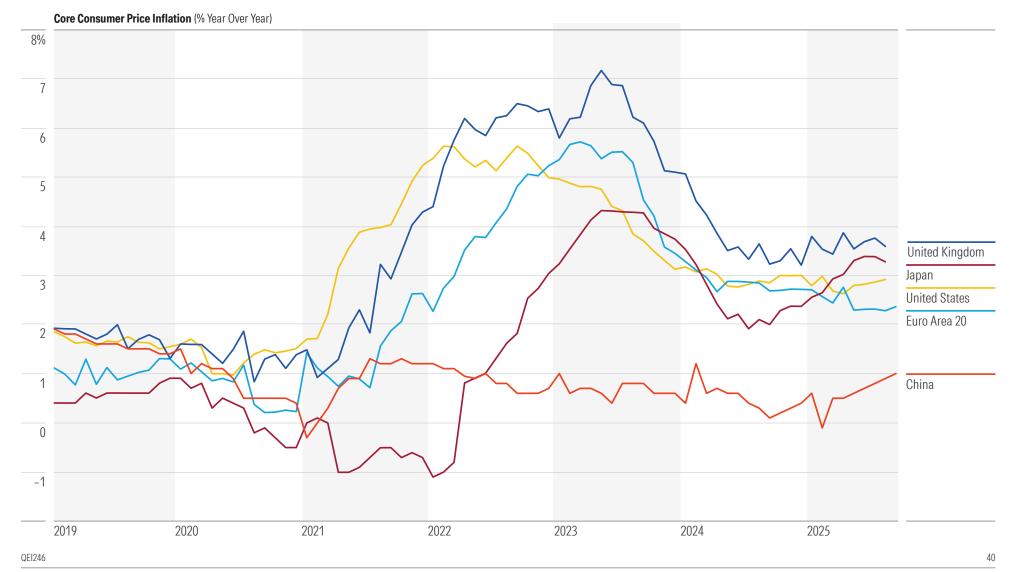
Global GDP Growth to Be Lower Than Prepandemic Decade

The International Monetary Fund expects global real gross domestic product growth to tick down very slightly despite the surge in US tariffs. Global GDP growth is forecast to slow from 3.3% in 2024 to 3.2% in 2025, and 3.1% in 2026. This is because US tariffs haven't been met with retaliation, nor have they increased trade tensions between non-US countries. Still, US GDP growth advantage versus other advanced economies is expected to diminish compared with the gap seen in recent years.



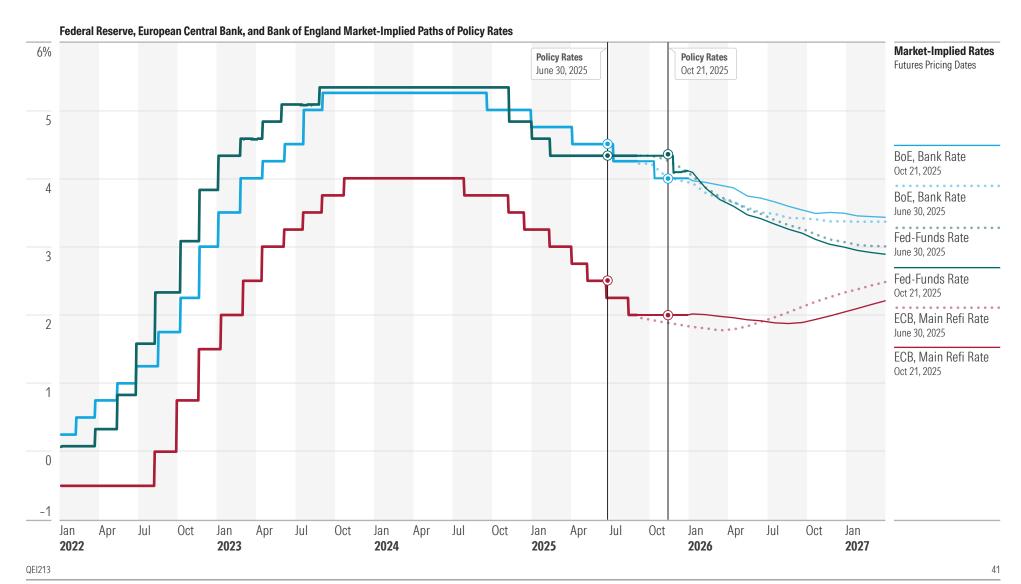
Inflation Progress Was Already Stalling a Bit Before Tariffs

Progress in bringing inflation down has stalled a bit for major economies. Housing inflation has been falling over the past year in the US, partially offsetting renewed acceleration in other categories. Tariff hikes will likely delay a return to 2% inflation for the US until 2027 or later. China remains an outlier among major economies, with inflation running very low owing to slower economic growth and industrial overcapacity.



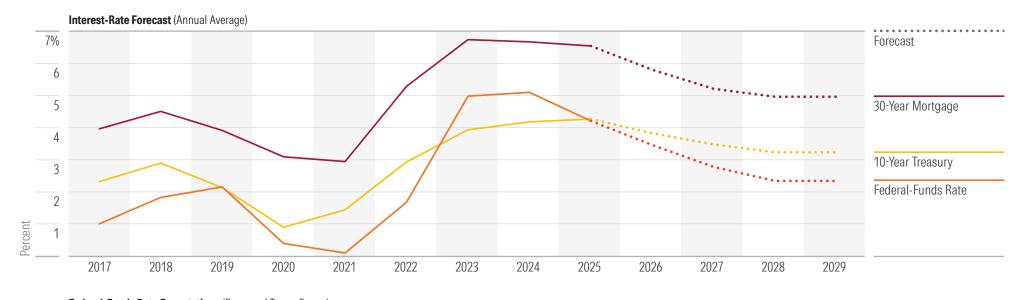
US Short-Term Interest Rates to Drift Closer to Peers

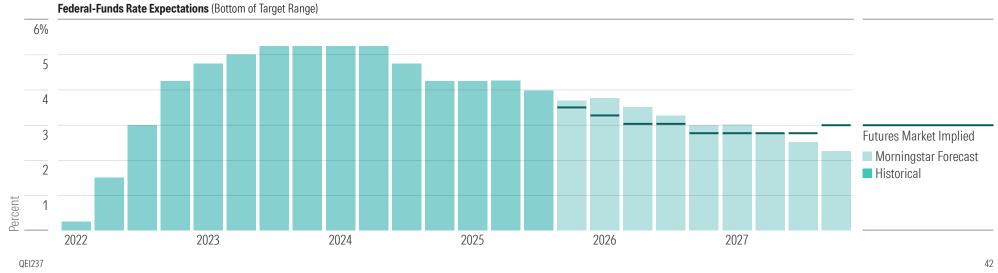
Market expectations for major central banks policy rates have been fairly stable in recent months. The Fed is set to continue cutting with recent data showing deteriorating US labor market conditions. Other central banks are likely to deploy fewer or no rate cuts, and that will push US short-term interest rates closer to other major advanced economies.



Lower Interest Rates Likely Needed to Combat Recession Risk

Our projections for the federal-funds rate are roughly in line with market expectations in 2026. Although we expect more cuts than the market in 2027 and likewise a lower terminal rate. This should help push longer-term interest rates down further. We expect the 10-year Treasury yield to drop to 3.25% by 2028.

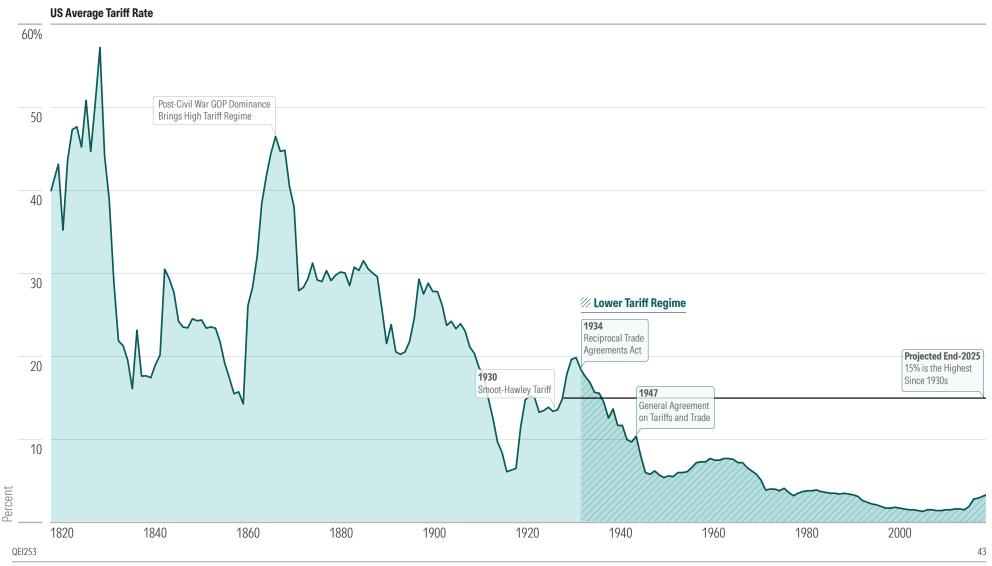






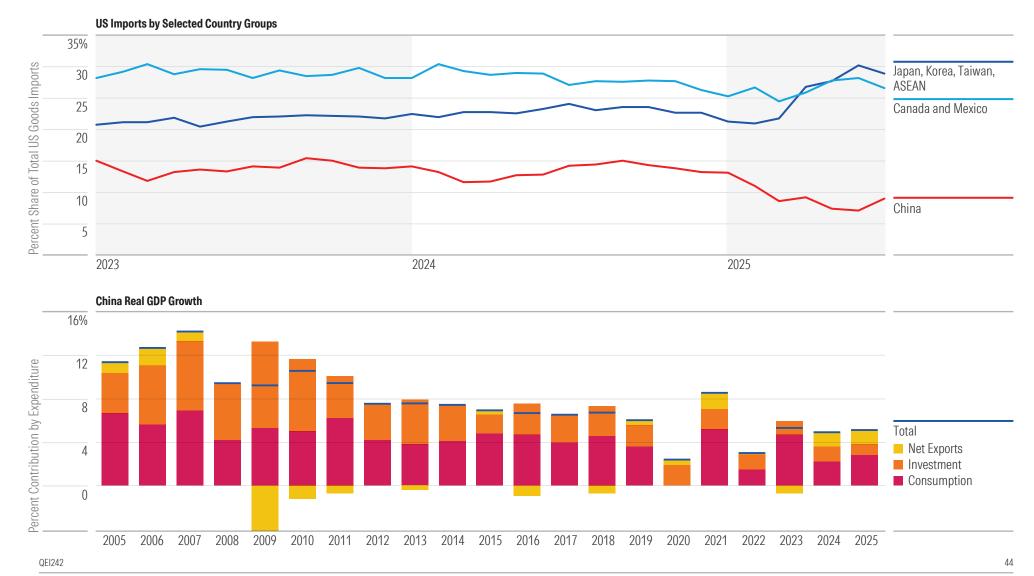
Trump Tariffs End the Free-Trade Era

Low tariff rates have been the standard for the US and most other major economies since the end of World War II. We expect average US tariff rates (in terms of customs revenue divided by imports) to stand at about 15% at the end of 2025, the highest since the 1930s. However, the US and global economy are vastly more interconnected than in that bygone era. US imports as a share of GDP averaged 3.7% in the 1930s, compared with 14% in 2024.



Exports Continuing to Bolster China's Growth, Despite US Tariffs

Net exports have contributed solidly to China's real GDP growth so far in 2025, as they did in 2024. This helps offset decelerating investment expenditure, weighed down by falling housing construction. China's exporters have shrugged off US tariffs by gaining market share in non-US markets. We've also seen China's East Asian trading partners increase their share of US imports at China's expense since the tariffs hit; plausibly reflecting transshipment of China's exports to dodge the tariffs.

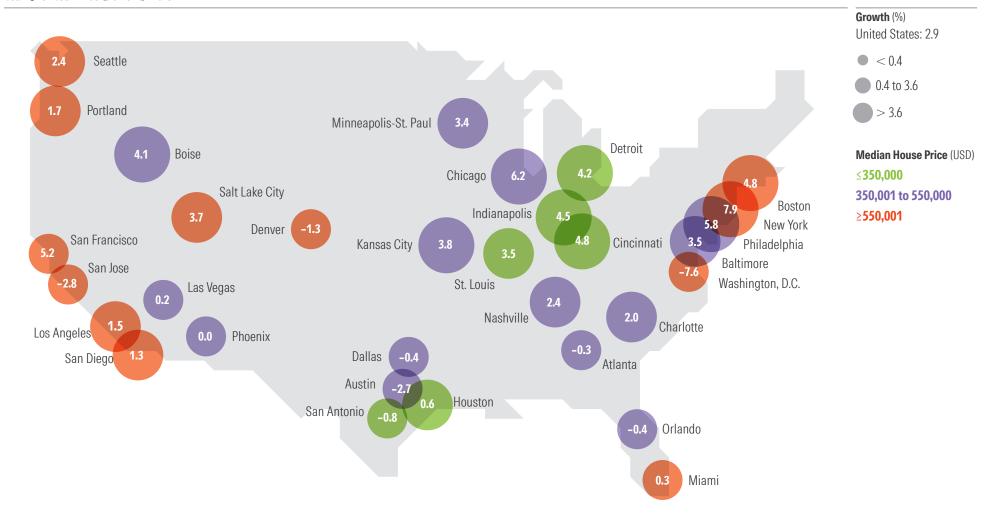


US Home Price Appreciation Still Running Strong

After a dip in 2022, housing price growth has been solid since mid-2023, and it stood at 2.9% year over year as of 2025's second quarter. Geographically, the gains are fairly broad-based. Price growth has been weaker, or negative, in certain sunbelt markets where supply has overtaken demand thanks to vigorous building.

Year-Over-Year Price Growth 02 2025

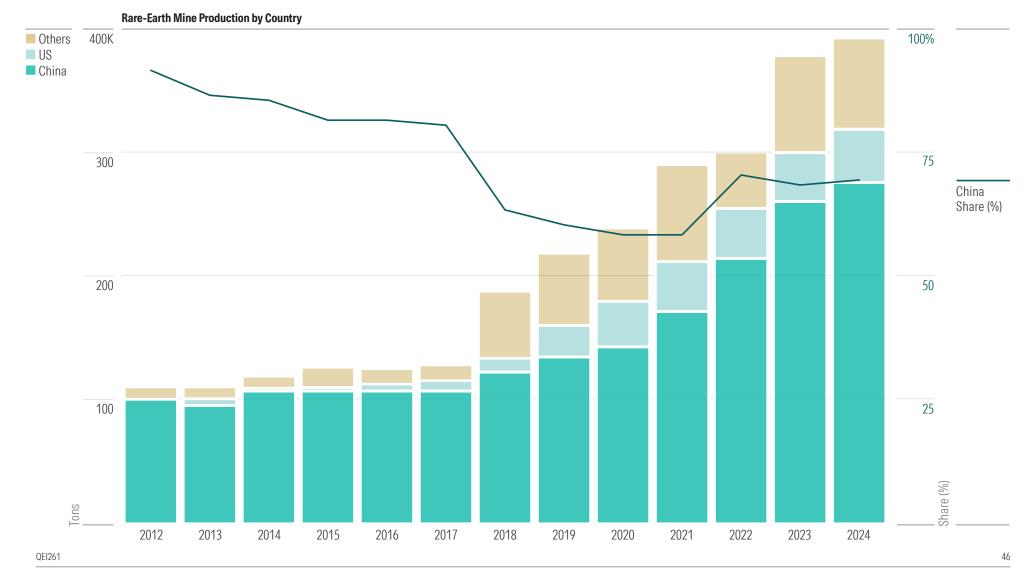
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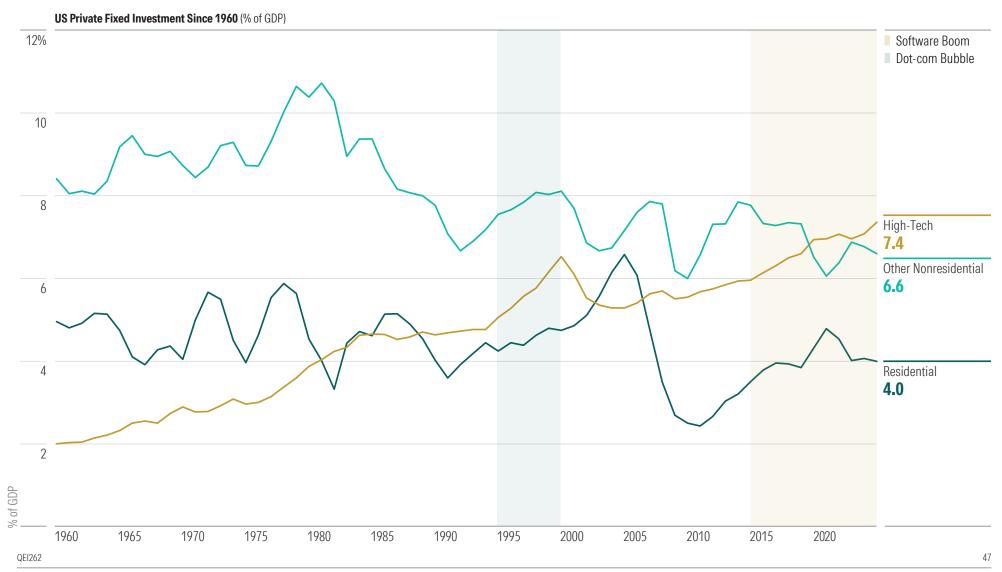
China Dominates Rare-Earth Metals, But Alternative Supply Could Be Found

China has announced net export controls for rare-earth metals. It remains to be seen how strict these controls will be, but a major reduction in supply would be alarming given China's current stranglehold on global supply. China accounts for around 70% of global mine production of rare-earth metals by volume, and 90% of processing volumes. Still, other countries have plenty of ability to expand their mine supply, and there are few barriers preventing them from boosting processing volumes.



Artificial Intelligence Marks Continuation of Secular Uptrend in Tech Spending

It's likely still too early for Al to provide the supply side of the US economy with a significant productivity boost. Still, Al is helping propel the demand side of the economy via investment and stock market wealth. But the Al boom is not a step change, merely a continuation of the upward trend in tech-related investment that began in the mid-2010s. The share of US GDP spent on high-tech investment is now well in excess of the dot-com-bubble peak.



Index and Disclosure

Index Definitions

The **Morningstar Style Index** family consists of 16 indexes that track the US equity market by capitalization and investment style to create an integrated system. The indexes were built using a comprehensive and nonoverlapping approach based on the methodology of Morningstar Style Box.

The **Morningstar Sector Index** family consists of 14 indexes—three Super Sector and 11 Sector indexes that track the US equity market using a consumption-based analysis of economic sectors in a comprehensive, nonoverlapping structure. The sector indexes are consumer defensive, healthcare, utilities, basic materials, consumer cyclical, financial services, real estate, communications services, energy, industrials, and technology.

The **Morningstar Global Equity indexes** offer a consistent view of global investment opportunities by applying the same rules for every market around the world. Covering 97% of stocks by market capitalization, the indexes encompass 45 countries in both developed and emerging markets. The index family is designed to work as an integrated system, allowing for meaningful global views across market capitalization and regions.

The **Morningstar Target Risk Index** family is designed to meet the needs of investors who would like to maintain a target level of equity exposure. The index family provides global equity market risk levels that are scaled to fit five equity market risk profiles: aggressive, moderately aggressive, moderately conservative, and conservative.

The **S&P 500 index** includes 500 leading companies and captures approximately 80% coverage of available market capitalization.

The **Russell 2000 Index** measures the performance of the 2,000 smallest companies in the Russell 3000 Index.

The **MSCI EAFE Index** captures the returns of large- and mid-cap equities across developed markets in Europe, Australasia, and the Far East, excluding the US and Canada.

The **MSCI Emerging Markets Index** captures the returns of large- and mid-cap equities across 23 emerging-markets countries. The index covers approximately 85% of the free float-adjusted market capitalization in each country.

The **Bloomberg Commodity Index** represents 20 commodities, which are weighted for economic significance and market liquidity.

The **Bloomberg US Aggregate Bond Index** is a broad-based benchmark that measures the investment grade, US-dollar-denominated, fixed-rate taxable-bond market. The index includes Treasuries, government-related and corporate securities, MBS (agency fixed-rate and hybrid ARM pass-throughs), ABS and CMBS (agency and nonagency).

The **Bloomberg US 5-10 Year Corporate Bond Index** measures the investment return of US-dollar-denominated, investment-grade, fixed rate, taxable securities issued by industrial, utilities, and financial companies with maturities between five and 10 years.

The **BofA Merrill Lynch US High Yield Master II Index** tracks the performance of US-dollar-denominated below-investment-grade corporate debt publicly issued in the US domestic market. Qualifying securities must have a below-investment-grade rating (based on an average of Moody's, S&P, and Fitch).

The **Bloomberg Municipal Bond Index** measures the broad market for investment-grade, tax-exempt bonds with a maturity of at least one year.

The **JP Morgan EMBI Global Diversified Index** tracks the performance of dollardenominated sovereign bonds issued by a selection of emerging-market countries.



The index limits the weights of countries with larger debt stocks by only including a specified portion of these countries' eligible current face amounts of debt outstanding.

The **London Fix Gold PM Index** is the price of gold per ounce at 15:00 GMT determined by the five members of the London Gold Pool.

The **Bloomberg Livestock Index** reflects the returns of an unleveraged investment in futures contracts on livestock commodities. The index consists of two commodity futures (lean hogs and live cattle).

The **Bloomberg Grains Index** reflects the returns of an unlevered investment in futures contracts on grains commodities. The index consists of three commodity futures (corn, soybeans, and wheat).

The **Bloomberg Precious Metals Index** reflects the returns of an unleveraged investment in futures contracts on precious-metals commodities. The index consists of two commodity futures (gold and silver).

The **Bloomberg Industrial Metals Index** reflects the returns of an unleveraged investment in futures contracts on industrial metals commodities. The index consists of four commodity futures (copper, aluminum, zinc, and nickel).

The **Bloomberg Energy Index** reflects the returns of an unleveraged investment in futures contracts on energy commodities. The index consists of five commodity futures (natural gas, WTI crude oil, Brent crude oil, unleaded gasoline, and heating oil).

The **Morningstar Long-Only Commodity Index** is a fully collateralized commodity futures index that is long all 20 eligible commodities and uses a dollar-weighted open interest weighting scheme.

The Brent Crude Oil Index tracks the spot price of Brent crude oil.

The **Morningstar US Market Index** covers the top 97% market capitalization of the US equity markets.

The **Morningstar Developed Ex US Index** captures the performance of the stocks located in the developed countries across the world. Stocks in the index are weighted by their float capital, which removes corporate cross ownership, government holdings, and other locked-in shares.

The **Morningstar Emerging Markets Index** captures the performance of the stocks located in the emerging countries across the world. Stocks in the index are weighted by their float capital, which removes corporate cross ownership, government holdings, and other locked-in shares.

The **Morningstar Core Bond Index** is a broad investment-grade index that includes the largest, most important sectors of the investment-grade US bond market. The index is composed of the Morningstar US Government Bond, US Corporate Bond, and US Mortgage Bond indexes.

The **Morningstar Intermediate US Government Bond Index** includes US Treasury and US government agency bonds with maturities between four and seven years. The Morningstar Intermediate Corporate Bond Index includes US corporate bonds with maturities of between four and seven years.

The **Morningstar US Corporate Bond Index** includes US corporate bonds with maturities of more than one year and at least USD 500 million outstanding.

The **Morningstar Short-Term Core Bond Index** includes all bonds in the Morningstar Core Bond Index that have maturities between one and four years.

The **Morningstar Emerging Markets Composite Bond Index** includes the most liquid sovereign and corporate bonds issued in US dollars by the governments and corporations of the most prominent emerging markets.



The **Morningstar US Mortgage Bond Index** tracks approximately 98% of the fixed-rate mortgages issued by Ginnie Mae, Fannie Mae, and Freddie Mac.

The **Morningstar Long-Term US Government Bond Index** includes US Treasury and US government agency bonds with maturities of seven years or longer.

The **Morningstar Long-Term Corporate Bond Index** includes US corporate bonds with maturities of seven years or longer.

The **Bloomberg US Corporate High Yield Index** represents the universe of fixed-rate, non-investment-grade debt.

The **Bloomberg US Corporate High Yield ex-Energy Index** represents the universe of fixed-rate, non-investment-grade debt not in the energy sector.

The **Bloomberg US Treasury 7-10 Year Bond Index** measures the performance of US Treasury securities that have a remaining maturity of at least seven years and less than 10 years.

The **Bloomberg US Treasury 20+ Year Bond Index** represents the performance of US Treasury securities that have a remaining maturity of greater than 20 years.

The **Bloomberg Emerging Markets Local Currency Broad Bond Index** represents the performance of the sovereign, local-currency bond markets of emerging-market countries. The Barclays Municipal Bond Index is representative of the broad market for investment-grade, tax-exempt bonds with a maturity of at least one year.

The **Citigroup WGBI Non-USD 5+ Year Bond Index** measures the performance of fixed-rate, local-currency, investment-grade sovereign bonds. It comprises debt from over 20 countries.

The **S&P/LSTA Leveraged Loan Index** tracks the universe of syndicated leveraged loans.

The **MSCI China A Local Currency Index** captures large- and mid-cap equities listed on the Shanghai and Shenzhen exchanges.

Disclosures

Past performance is no guarantee of future results. This is for illustrative purposes only and not indicative of any investment. The information, data, analyses, and opinions presented herein do not constitute investment advice, are provided solely for informational purposes, and therefore are not an offer to buy or sell a security or invest in a specific asset class or strategy. An investment cannot be made directly in an index. The data assumes reinvestment of all income and does not account for taxes or transaction costs. Diversification does not eliminate the risk of experiencing investment losses. Holding a portfolio of securities for the long term does not ensure a profitable outcome, and investing in securities always involves risk of loss.

Risk and return are measured by standard deviation and compound annual return, respectively. Standard deviation measures the fluctuation of returns around the arithmetic average return of the investment. The higher the standard deviation, the greater the variability (and thus risk) of the investment returns.

Stocks are not guaranteed and have been more volatile than the other asset classes.

Small-company stocks are more volatile than large-company stocks and are subject to significant price fluctuations, business risks, and are thinly traded.

Government bonds and Treasury bills are guaranteed by the full faith and credit of the United States government as to the timely payment of principal and interest. Bonds in a portfolio are typically intended to provide income and/or diversification. US



government bonds may be exempt from state taxes and income is taxed as ordinary income in the year received. With government bonds, the investor is a creditor of the government.

With **corporate bonds**, an investor is a creditor of the corporation and the bond is subject to default risk. Corporate bonds are not guaranteed.

High-yield corporate bonds exhibit significantly more risk of default than investment grade corporate bonds.

Only insured **municipal bonds** are guaranteed as to the timely payment of principal and interest by issuer. However, insurance does not eliminate market risk. A municipal-bond investor is a creditor of the issuing municipality and the bond is subject to default risk. Municipal bonds may be subject to the alternative minimum tax and state and local taxes, and federal taxes would apply to any capital gains distributions.

International bonds are not guaranteed. With international bonds, the investor is a creditor of a foreign government or corporation. International investments involve special risks such as fluctuations in currency, foreign taxation, economic and political risks, liquidity risks, and differences in accounting and financial standards.

International stocks involve special risks such as fluctuations in currency, foreign taxation, economic and political risks, liquidity risks, and differences in accounting and financial standards. Liquidity is typically lower in emerging markets than in developed markets. The risk of principal and return may be significantly greater than that of other developed international markets.

Sector investments are narrowly focused investments that typically exhibit higher volatility than the market in general. Sector investments will fluctuate with current market conditions and may be worth more or less than the original cost upon liquidation.

Growth and value stocks: Although value stocks have outperformed growth stocks, please keep in mind that each type of stock carries unique risks, which include, but are not limited to, economic risk, market risk, company risk, and strategy risk.

Gold/commodities investments will be subject to the risks of investing in physical commodities, including regulatory, economic and political developments, weather events, natural disasters, and market disruptions. Exposure to the commodities markets may subject the investment to greater volatility than investments in more traditional securities, such as stocks and bonds.

Holders of **preferred stock** are usually guaranteed a dividend payment, and their dividends are always paid out before dividends on common stock. In event that the company fails, there's a priority list for a company's obligations, and obligations to preferred stockholders must be met before those to common stockholders. On the other hand, preferred stockholders are lower on the list of investors to be reimbursed than bondholders are.

Mutual funds are sold by prospectus, which can be obtained from your financial professional or the company and which contains complete information, including investment objectives, risks, charges, and expenses. Investors should read the prospectus and consider this information carefully before investing or sending money.

Holding **exchange-traded funds** does not ensure profitable outcomes, and investing involves risk, including the loss of the entire principal. Since each ETF is different, investors should read the prospectus and consider this information carefully before investing. The prospectus can be obtained from your financial professional or the ETF provider and contains complete information, including investment objectives, risks, charges, and expenses. ETF risks include, but are not limited to, market risk, market trading risk, liquidity risk, imperfect benchmark correlation, leverage, and any other risk associated with underlying securities. There is no guarantee that any fund will achieve its investment objective. In addition to ETF expenses, brokerage costs apply. Fees are charged regardless of profitability and may result in depletion of assets.



Credit/default risk: Debt securities are subject to credit/default risk, which is the risk associated with the issuer failing to meet its contractual obligations either through a default or credit downgrade.

Interest-rate risk: Debt securities have varying levels of sensitivity to changes in interest rates. In general, the price of a debt security tends to fall when interest rates rise and rise when interest rates fall. Securities with longer maturities and mortgage securities can be more sensitive to interest rate changes.

This publication contains certain forward-looking statements which involve known and unknown risks, uncertainties, and other factors that may cause the actual results to differ materially from any future results expressed or implied by those projected statements. Past performance does not guarantee future results.

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